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On Losing Grip and Keeping Sight: How Tangible and Intangible Resources Affect Attitudes, Behaviors, and Outcomes in Negotiations

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Index of Publications

This thesis is subdivided into five chapters. In Chapter 1, I outline the general rational for the thesis, discuss its contribution to theory and application, and suggest ideas for future research. Chapter 2 includes an original research article, which has been published in the *Journal of Personality and Social Psychology*. Chapter 3 contains an original research article that was invited for revision and resubmission at the *Journal of Personality and Social Psychology*. Chapter 4 includes a review article that has been published in *The In-Mind,* the German outlet of an international peer-reviewed online-journal. Chapter 5 comprises an original research article that was submitted to the *Journal of Business Ethics*, where it is currently under review. All included articles have been submitted to international and national peer-reviewed journals, with two articles being published and two articles being under review.

The author of the present thesis is the first author of two articles. As is usually the case in social psychological research, projects cannot be realized without the help of co-authors. The following paragraph lists the co-authors of each project. All publications are presented in the originally published or submitted form except for changes in format and layout.

Content	**Has been published or submitted as:**
Chapter 2	Trötschel, R., Loschelder, D. D., Höhne, B. P., & Majer, J. M. (2015). Procedural Frames in Negotiations: How Offering My Resources Versus Requesting Yours Impacts Perception, Behavior, and Outcomes. *Journal of Personality and Social Psychology, 108*(3), 417.
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Index of Abbreviations

ANOVA	Analysis of Variance
BC CI	Bias Corrected Confidence Interval
BCa CI	Bias Corrected and accelerated Confidence Interval
DFB	Deutscher Fussball Bund
	(German Soccer Federation)
FIFA	Fédération Internationale de Football Association
	(French for International Federation of Football Associations)
I	Interaction
M	Mean
MAMA	Motivated-Adjustment Model of Anchoring
SAP	Standard Anchoring Paradigm
SD	Standard Deviation
SEM	Standard Error of the Mean
WTA	Willingness to Accept
WTP	Willingness to Pay

Chapter 1: General Rationale

General Abstract

For over half a century, psychological research has been studying negotiations in detail. For a similarly long time, various researchers have been hypothesizing on and agreeing that, in negotiations, resources play a fundamental role in parties' behaviors and outcomes. Paradoxically, empirical findings that provide insights into the effects of resources are scarce. The current research seeks to shed light on the overwhelming consensus that resources may shape negotiations. Specifically, in a series of four original research articles, we systematically examine the overarching question of how tangible and even intangible resources affect parties' attitudes, behaviors, and outcomes. Resources in negotiations can be characterized as all the tangible and intangible aspects of the negotiation that are related to the negotiators' interests. Thus, the central activity of the bargaining relationship is the allocation of tangible resources, while intangibles are simultaneously involved. Consistent with this basic idea, we assume that whether parties focus on catching hold of obtaining their adversaries' tangible resources or on losing grip of their own tangibles impacts their concession behavior and outcomes. Parties with a focus on losing their own tangible resources should experience more loss aversion, concede less, and should achieve better outcomes than parties who focus on catching hold of obtaining their counterpart's tangibles. It follows that what should be essential in the ongoing negotiation process should apply to the first move at the bargaining table as well. When first-movers lead responders to focus on catching hold of tangible resources, the well-documented anchoring effect should occur, benefitting the first-mover. Contrarily, when the first-mover induces a focus on the resource the responder is about to lose, responders should be motivated to adjust their counterproposal far away from the opening anchor. Responders' motivation to adjust should leverage the anchoring effect in negotiations. Further, we outline the very special role of money in negotiations, that is perceived as likely the most important tangible resource. Ultimately, we address the important role of intangible resources, in addition to that of tangible resources, and suggest that the intangible resource of professional experience is related to the negotiator's attitudes towards unethical bargaining tactics.

Overall, the findings of these research projects suggest that not only tangible but also intangible resources do in fact have the fundamental impact on negotiators' behavior and outcomes that has been hypothesized for a long time. Parties who focus on losing grip of their

own tangible resources concede less and are better off at the end of the negotiations than parties who focus on catching hold of their counterparts' resources. We report evidence for this basic finding, from the first move at the bargaining table to the final agreement. Our findings help to better understand the key role of money in negotiations and to highlight the "mythical" components of this legendary resource. In addition to our findings on tangible resources, our study reveals a strong negative relationship between negotiators' intangible resource of professional experience and their tendency to endorse unethical bargaining tactics. We conclude that losing tangible resources and keeping sight of intangible resources may have profound effects on parties' negotiation attitudes, behaviors, and outcomes. We discuss theoretical contributions and practical implications, and suggest areas of future research.

Introduction

In November 2015, Barack Obama, then the president of the United States, was in charge of negotiations regarding a request made by TransCanada, a Canadian oil company, to construct a 1,179-mile oil pipeline, with a capacity of 800,000 barrels of carbon-heavy petroleum per day, to the Gulf coast. In other words, TransCanada requested territorial usage rights for Canadian oil. After an ongoing project span of seven years, President Obama made a bold statement for climate protection policy: He rejected the Canadian request to construct the Keystone XL pipeline on U.S. territory in favor of a more independent oil supply (Davenport, 2015). Although potentially important tangible resources such as future jobs, major benefits for the economy, and an oil supply that would be more independent of the Middle East were directly linked to the usage rights at stake, Mr. Obama rejected the Canadian request. Certainly, political negotiations are highly complex and influenced by a variety of psychological and contextual factors. However, in retrospect, the crucial question emerges: What made the president of the U.S. reject this request?

In their seminal work on the social psychology of bargaining, Rubin and Brown (1975) emphasize the allocation of tangible resources and the resolution of more intangible issues as the central activities of a bargaining relationship. More recent research defines resources in negotiations as all tangible and intangible elements in a conflict that are linked to one or more parties' interests and, thus, could potentially help in the reaching of an agreement (Trötschel, Höhne, Peifer, Majer, & Loschelder, 2014). Either definition primarily highlights the key role that tangible resources play in negotiations. However, the role of intangible resources as central

elements of the negotiation process should also be taken into account. The management literature has already widely recognized that, besides important tangible resources, "… a high level of social capital, built on a favorable reputation, relevant previous experience, and direct personal contacts, often assists entrepreneurs in gaining access to venture capitalists, potential customers, and others" (Baron & Markman, 2000; p. 106). A prior national survey of chief executives in the UK revealed that know-how and reputation were ranked as those intangible resources with the largest impact on business success (Hall, 1992). Thus, it appears very reasonable to assume that, in negotiations, tangible resources in particular, but also intangible resources such as professional experience or reputation, can be utilized to crucially impact negotiators' bargaining success.

With respect to tangible and intangible resources in negotiations, Rubin and Brown (1975) hypothesized that parties would primarily focus on the allocation of tangible resources, even when crucial intangible resources are involved. For instance, in a negotiation on the construction of an oil pipeline, parties would focus primarily on tangible resources, such as money, usage rights, infrastructure, factory plants, shares, workforce, goods, etc. (e.g., Pruitt & Carnevale, 1993), instead of the potentially involved intangible resources, such as professional experience, reputation, self-esteem, face-saving, honor, principle, prestige, etc. (e.g., Rubin & Brown, 1975). While, for decades, bestselling negotiation text- and guidebooks have assumed the importance of resources in negotiations (Barry, Saunders, & Lewicki, 2009; Rubin & Brown, 1975; Ury & Fisher, 1981), empirical psychological research has steered clear of this call. Given this research lacuna, systematically investigating tangible and intangible resources seems to be essential in order to better understand how and why resources contribute to parties' negotiation behavior and outcomes.

In the Keystone XL negotiation, several tangible resources were obviously at stake, and yet other intangible resources may also have shaped Mr. Obama's decision not to concede and to reject the Canadian request. Throughout this thesis, I will constantly refer to this initial example in order to elucidate how tangible and intangible resources affect behaviors and outcomes in negotiations. I am fully aware that the president of the United States rejecting the Canadian request resulted in an impasse. Indeed, this example shows the most extreme consequences of an impasse. In the current research, we explicitly focus on examining a wider range of parties' concession behaviors and their quality of final outcomes. Having said this, I can only speculate on the potential circumstances that led Mr. Obama to reject the Canadian request and to break up negotiations. However, the findings within this thesis will provide some

first empirical insights into the underlying mechanisms that may account for Mr. Obama's attitude, behavior, and outcome.

In order to examine the intriguing question of how tangible and intangible resources shape negotiation processes, I will outline two complementary perspectives that guided our research: The primary perspective highlights the key role that parties' focus on tangible resources plays throughout the negotiation process. The second perspective sheds light on one of the most important intangible resources at the bargaining table – professional experience. Studying both tangible and intangible resources in negotiations may offer some first empirical insights on the key role that resources play in negotiations and may potentially refine theory and research in a widely unexplored area.

Aims of the Thesis

All research starts with a question (Kosslyn & Rosenberg, 2001), and the present thesis has the overarching aim of examining the broader question of how tangible and intangible resources shape negotiations. In order to hone in on this question in more detail, we begin by empirically investigating how framing exchange processes for tangible resources direct the parties' focus onto tangibles and how this focus, in turn, impacts behaviors and outcomes during the negotiation process (1). We further specifically examine how and why the framing of opening proposals regarding tangible resources moderates well-established anchoring effects from the very beginning of the negotiation process to the final agreement (2). We then acknowledge the essentiality of money as the most central tangible resource in negotiations and take a closer look at how money impacts negotiation behavior. By reviewing theory and research on the characteristics of money with respect to its singularity, we derive practical implications for both buyers and sellers on how to handle this very special tangible resource (3). Ultimately, we focus on how negotiators' intangible resources, such as their professional experience, is linked to their attitudes towards unethical bargaining behavior (4).

The publications within this thesis seek to shed light on the question of how resources shape negotiations by empirically and theoretically addressing the respective sub-questions. In the following, I summarize the contribution of each publication with respect to the formulated research questions. Subsequently, I discuss the empirical findings with regard to their theoretical and practical implications. Finally, I close with an outlook on potential areas of future research.

(1) Procedural Frames in Negotiations

Negotiation is a give-and-take process, but being in control
of the process is the only way to be successful at it.
— Celso Cukierkorn

Over four decades ago, Rubin and Brown (1975) had already hypothesized that negotiators would primarily focus on tangible resources. Whereas negotiation researchers refrained from systematically investigating this specific assumption, or similar ones, regarding the impact of resources, social dilemma researchers have revealed very important findings. Brewer and Kramer (1986) found that the decision framing of a social dilemma as either a public goods dilemma (decisions on giving up a common resource) or as a commons dilemma (decisions on taking from a common resource) impacted decision makers' cooperation behavior. Those participants who made decisions using a public goods frame – decisions on giving up – kept more of the common resource for themselves than participants using a commons dilemma frame. Further studies on give-some and take-some dilemmas supported this finding that decision frames led to a differential focus on the part of decision makers (Van Dijk & Wilke, 2000). Remarkably, Larrick and Blount (1997; p. 810) introduced the term *procedural frames* for "…different representations of structurally equivalent allocation processes."

When applying these findings to allocations of tangible resources in exchange negotiations, we assume that all proposals can either be framed as offering one's own resources (giving up resources) or as requesting another's resources (taking resources). Especially in negotiations, this procedural framing of proposals should impact parties' resource focus. Parties should focus either on the resources that are offered or the resources that are requested. Importantly, each proposal is identical in economic quality. However, they differ in the literal framing as offer versus request. We suggest that these differential frames of offering *own* versus requesting *other's* resources impact negotiators' willingness to concede – their concession aversion (De Dreu, Weingart, & Kwon, 2000; Kahneman, 1992).

For instance, when the Canadian company framed their proposals as requests for the U.S.'s resources (*your* A for my B), they may have proposed something along the lines of: "We request *your* usage rights for our oil." Under the request frame, the Canadian company, as the sender of the proposal, should have focused on the resource they requested, namely the usage

rights on U.S. territory. Thus, sending requests should highlight the resource to be gained, which should have led to an increase in their willingness to concede. In contrast, if the Canadian company had framed their proposals as offers of their own resources (*my* B for your A), they might have proposed the following: "We offer *our* oil for your usage rights." Under the offer frame, however, the Canadian company should have focused on the resource they offered, namely their own oil. Consequently, sending offers should highlight the resource to be lost, which should have led to a decrease in the company's willingness to concede.

Viewed from Mr. Obama's perspective, receiving requests for his country's usage rights should have led him to focus on the resource to be lost. The salience of the resource to be lost should have increased his concession aversion. In contrast, receiving offers of the company's oil should have led Mr. Obama to focus on the resource to be gained. The salience of the resource to be gained should have decreased his concession aversion. According to the different perspectives in the example, we propose antagonistic effects on senders' and recipients' concession aversion when proposals are framed procedurally. In essence, we predict that when the procedural framing of proposals highlights resources that negotiators are about to lose – either by sending offers or receiving requests – negotiators will experience a high state of concession aversion, which creates higher individual profits for themselves.

We tested our predictions across four non-interactive and four interactive experiments with an overall sample size of 652 participants, including students from different academic majors and two classes of fourth graders. As predicted, our findings revealed that negotiators, independently from their role as buyers or sellers, made lower concessions and reached significantly higher individual outcomes in distributive negotiations when they constantly offered their own resources rather than when they requested the other party's resources. We found strong support for the procedural framing effect in both transaction and buyer-seller negotiations. Importantly, the effects of procedural framing allocations in negotiations emerged not only from the literal framing of proposals as offering one's own versus requesting the other's resources. Equally, structural features of the allocation process also led negotiators to focus either on one (e.g., price) or the other (e.g., commodity) tangible resource as the salient reference resource in the transaction. However, the mere sequence of resources (e.g., A for B vs. B for A) significantly induced the same pattern of differentially salient reference resources that impacted negotiators' concession behavior and their individual outcomes.

By systematically investigating procedural framing of proposals in distributive negotiations, we provide some first empirical insights into how resources shape negotiation behavior and outcomes. In the vast majority of negotiations on allocating tangible resources,

procedural frames naturally emerge from the social interaction between parties and, thus, are an integral feature of the interactive negotiation process. By investigating a fundamental psychological process in the allocation of resources, we refine theory and offer important implications for practitioners. Undoubtedly, it seems very reasonable to assume that most negotiators are not consciously aware of how they procedurally frame their proposals as offering their own or requesting others' resources. So, it is all the more important that our research emphasizes procedural frames as a simple, yet effective, tool to determine ones' own and the counterparts' resource focus for the benefit of individual outcomes. We believe in the beneficial nature of procedural frames for the simple reason that being in control of the give-and-take process contributes to being successful at it.

(2) Motivated Anchor-Adjustment

In the previous research project, we found that framing proposals on tangible resources impacted parties' behaviors and outcomes during the ongoing negotiation process. Expanding on this line of research, we examined how procedurally framing opening proposals impacts negotiations from the very first moment at the bargaining table with respect to parties' concession behaviors and outcomes. An enormous quantity of empirical studies demonstrate that the first number that is proposed is key to successful negotiations (Ames & Mason, 2015; Gunia, Swaab, Sivanathan, & Galinsky, 2013; Loschelder, Trötschel, Swaab, Friese, & Galinsky, 2016; Mason, Lee, Wiley, & Ames, 2013; Yukl, 1974). The first proposal acts as an anchor that sways final estimates in the direction of the first proposal. Consequently, first-movers generate a bargaining advantage in that they end up with higher individual profits relative to responders. The anchoring impact of the first proposal culminates in the finding that opening proposals explain from 50% to 85% of the variance in final outcomes (Galinsky & Mussweiler, 2001; Orr & Guthrie, 2005). Since the late 1960s (Benton, Kelley, & Liebling, 1972; Chertkoff & Conley, 1967; Liebert, Smith, Hill, & Keiffer, 1968), first proposals have emerged as "a key concept in the study of negotiation" (Maaravi, Ganzach, & Pazy, 2011, p. 245).

At that time, Tversky and Kahneman (1974) demonstrated in their seminal work on decision making under uncertainty that numeric estimates assimilate towards a previously considered standard. The so-called anchoring and adjustment phenomenon became what is probably one of the most robust and remarkable phenomena in psychology that impacts human judgments (Klein et al., 2014). Anchoring has been found to shape our estimates in diverse judgmental domains, including general knowledge questions (Strack & Mussweiler, 1997; Epley & Gilovich, 2001), legal judgments (Chapman & Bornstein, 1996; Englich & Mussweiler, 2006; Englich & Soder, 2009), probability assessments (Plous, 1989; Wright & Anderson, 1989), evaluations of lotteries and gambles (Chapman & Johnson, 1994), purchasing decisions (Simonson & Drolet, 2004), price estimates (Mussweiler, Strack, & Pfeiffer, 2000; Northcraft & Neale, 1987), estimates of self-efficacy (Cervone & Peake, 1986), clinical judgments (Brewer, Chapman, & Schwartz, 2007; Richards & Wierzbicki, 1990), and negotiations (Galinksy & Mussweiler, 2001).

The estimation task developed by Tversky and Kahneman (1974) provided the blueprint for the *standard anchoring paradigm* (SAP), which is still the most widely used paradigm for

investigating anchoring effects in decision making. The apparent similarity between the SAP (estimation task) and negotiation situations has led researchers to assume that negotiations "…are structured in a fashion similar to the standard anchoring paradigm and therefore contain similar anchoring biases" (Epley, 2004; p. 247). Interestingly, the current literature predominantly focuses on cognitive processes to account for the anchoring effect in both estimation tasks and mixed-motive tasks such as negotiations. Suggested theories range from insufficient adjustment (Tversky & Kahneman, 1974), conversational inferences (Grice, 1975), numeric priming (Jacowitz & Kahneman, 1995; Wilson, Houston, Etling, & Brekke, 1996; Wong & Kwong, 2000), selective accessibility (Strack & Mussweiler, 1997; Chapman & Johnson, 1999; Mussweiler & Strack, 1999; 2001b), attitude change (Blankenship, Wegener, Petty, Detweiler-Bedell, & Macy, 2008; Wegener, Petty, Blankenship, & Detweiler-Bedell, 2010), and scale distortion (Frederick & Mochon, 2012; Mochon & Frederick, 2013) to an integrative theory (Simmons, LeBoeuf, & Nelson, 2010) – and all the theories have in common that they focus on cognitive processes to explain anchoring.

When comparing estimation tasks and negotiation tasks more closely, the most striking difference between the characteristics of the two types of task appears to be the mixed-motive nature of negotiations – as it is a core property in negotiation tasks (Gelfand, Fulmer, & Severance, 2011; Rubin & Brown, 1975) and absent in estimation tasks. Negotiations are mixed-motive tasks because parties experience a conflict between the motive to cooperate and the motive to compete (Schelling, 1960). Negotiators naturally seek to find a mutually beneficial agreement by cooperating, but they seek to find an agreement that favors their own interests by competing.

In the present research, we expand on purely cognitive processes by theoretically elaborating and empirically showing how motivation forces moderate anchoring effects in negotiations. In order to highlight the key role that motivational processes play in predicting anchoring effects in negotiations, we develop and test a Motivated-Adjustment Model of Anchoring (MAMA). The central proposition of our model is that first proposals emphasize either an offer of tangible resources ("I am offering my A for your B") or a request for tangible resources ("I am requesting your B for my A"). We predicted that the procedural framing of anchors would impact the responder's concession aversion. Specifically, opening proposals framed as offers would result in the classic anchoring effect because offers highlight gains to the responder. Contrarily, opening proposals framed as requests eliminate the anchoring effect because requests highlight losses to the responder, create concession aversion, and motivate the responder to adjust from the anchor.

Had the Canadian company, for instance, framed their opening proposal as an offer, they should have benefitted from the anchoring effect because an opening offer would have highlighted the gain of a more independent oil supply to Mr. Obama. Contrarily, had the Canadian company framed their opening proposal as a request, they would have decreased the anchoring potency of the proposal because the opening request would have highlighted a loss of territorial usage rights to Mr. Obama. To be more precise: Highlighting the tangible resource that Mr. Obama would have had to give up should have motivated the president to adjust far away from the opening anchor.

Four experiments tested our theoretical model and replicated our results in two simulated and two interactive negotiations for both expert and novice negotiators (total N = 515). In line with prior research, we replicated classic anchoring effects across all the experiments, but only when anchors were framed as offers that highlighted gains to the responder. When anchors were instead framed as requests that highlighted losses to the responder, responders eliminated the anchoring impact and reversed the first-mover advantage by adjusting far away from the opening anchor. Text analyses of responders' reactions to framed anchors corroborated that requests (as opposed to offers) elevated responders' concession aversion, leading to more aggressive counterproposals and, thus, reducing and even reversing anchoring effects.

Our Motivated-Adjustment Model of Anchoring (MAMA) empirically shows how framing opening proposals on tangible resources elicits motivational processes that impact the well-established anchoring effects in negotiations. We argue that motivation forces in mixed-motive tasks such as negotiations have long been overlooked in explaining anchoring effects. This was likely the case because of the literature's strong focus on cognitive mechanisms due to the prevailing assumption that estimation tasks and mixed-motive tasks induce similar anchoring biases. By combining the framing and anchoring literature, our research reveals some first insights into how motivational and cognitive processes interplay when opening proposals are about to anchor.

From an applied perspective, the findings of this research project suggest that ambitiously moving first in distributive negotiations is still a powerful strategy to facilitate individual outcomes. However, negotiators should take particular care to frame opening proposals as offers that highlight gains to the responder. Otherwise, a greedy request frame accentuates the resource the responder must give up, leveraging the anchoring impact of the opening proposal. Specifically, in situations where the responder's tangible resource may be

the center of attention, one should deliberate on ways in which opening proposals could be reframed in order to bring gains to the responder into the limelight.

(3) Pecuniary Power in Negotiations

Money is probably the one tangible resource that plays the most fundamental role in peoples' perceptions of negotiations, even though negotiations can involve any tangible or intangible resources in life that are important to us and our social environment. The two previous research projects demonstrated that the way parties' focus on their own or others' tangible resources has both beneficial and detrimental effects on their behaviors and outcomes throughout the whole negotiation process. In the present review, we address the special role that is assigned to money in negotiations. We present research that covers the psychological, behavioral, and economic consequences of this specific tangible resource in order to deduce advice on how to handle money in negotiations, whether one has or wishes to have it.

Although money is the most important outcome measurement in negotiation research (Gelfand et al., 2011), few researchers have recognized that money may have a stronger impact on behavior and outcomes in negotiations than other resources (e.g., Appelt, Zou, Aurora, & Higgins, 2009; Neal, Huber, & Northcraft, 1987). Whether one is in control of money, for instance as a buyer, or wants to gain control over money, for instance as a seller, in both cases money represents an inherent frame of reference for the quality of parties' outcomes. Whereas a buyers' subjective frame of reference in price negotiations typically involves a loss of money, a seller's subjective frame of reference emphasizes a gain of money. This natural reference frame in price negotiations strongly impacts how negotiators experience gains and losses. Research shows that parties under a loss frame are more concession averse (De Dreu, Carnevale, Emans, & van de Vliert, 1995), concede less to the counterpart (Trötschel & Gollwitzer, 2007), and end up with higher individual outcomes (De Dreu et al., 1995). These findings suggest that buyers in price negotiations – where money is the center of attention – experience a loss of their own money and are in the end better off in terms of outcomes (Appelt et al., 2009).

The literature on the endowment effect reports contradictory findings on the effects of money in price negotiations. The phenomenon that individuals' willingness to accept (WTA) money for a certain good is normally significantly higher than individuals' willingness to pay (WTP) for the same good is called the endowment effect (Kahneman, Knetsch, & Thaler, 1990;

Horowitz & McConnell, 2002). For instance, participants who have been given a mug and are then asked to sell it were more loss averse and, thus, were only willing to accept significantly higher amounts of money than potential buyers were willing to pay for the same mug (Kahneman et al., 1990).

By taking into account previous research that I presented in this thesis, the contradictory effects of money vs. goods on an individual's loss aversion can be bridged. Our research shows that parties focus on either their own tangible resources or the other's tangible resources, depending on the procedural frame in the social interaction. Whether the money represents the frame of reference or whether goods are the frame of reference within the interaction, buyers and sellers diametrically experience gains and losses in exchange negotiations. Thus, procedural framing can explain both findings – buyers' advantages in price negotiations and sellers' increased willingness to accept a price for a certain good relative to the buyers' willingness to pay.

Besides this fundamental impact of negotiators' resource focus in interactions involving money, pecuniary resources entail more key features that are unique in comparison to other tangible resources. For instance, money is transferrable into most other tangible resources (Lea & Webley, 2006), serves fundamental human needs (Zhang, 2009), and improves stress reactions and subjective self-efficacy perceptions (Vohs, 2015). Together, these findings provide additional support for the powerful role that people assign to money in negotiations. Specifically, in price negotiations and salary negotiations, "buyers" perceive themselves as more powerful because they experience less pressure to transact as compared to "sellers" (Neale et al., 1987).

However, when it comes to implications for negotiators, more basic features of tangible resources are highly important in order to strengthen the positions of those parties who cannot offer money (e.g., sellers). Specifically, those parties who can instead offer goods for money should consider the divisibility, ownership, and preferences of their own tangible resources (Trötschel et al., 2014). Only if the dominant focus on money derails and the focus within the interaction switches to one's own tangible resources are parties without money able to mitigate the power of parties holding money.

For instance, with respect to Mr. Obama's own tangible resource in the negotiation on the Keystone XL pipeline, usage rights are usually perceived as being an indivisible resource, making it hard for them to attract the parties' focus. In contrast, money always attracts a negotiator's focus because it is highly divisible and, thus, allows stepwise concessions to be made. By subdividing the territorial usage rights into distance, Mr. Obama would have been

able to channel the focus more towards the usage rights rather than towards the Canadian oil, which has similar characteristics as money. Making resources divisible can help to overcome natural frames of reference.

So far, we have concentrated on exchange negotiations, where owners of tangible resources exchange their resources in order to find mutually beneficial agreements. Recent research suggests that particularly exclusive (distribution of resources) or joint (contribution of resources) ownerships of tangible resources impact negotiators' experience of losses and gains (Höhne, Loschelder, & Trötschel, 2017). Thus, parties should strongly emphasize either exclusive gains for the counterparty or joint gains for both parties in order to reduce the counterpart's loss aversion. Had the U.S. administration cooperated on a joint venture with TransCanada, the company should have tried to highlight both joint gains within the venture and exclusive gains for the U.S. administration in order to reduce the company's loss experience.

Finally, people tend to perceive negotiations that involve money as a zero-sum game, which implies that both parties prefer the same resources, with one party's gain being the other's loss (Pinkley, Griffith, & Northcraft, 1995). This perception is mostly biased because parties have different preferences in negotiations involving more than one tangible resource. If negotiators hold diverging interests in various resources on the table, win-win solutions are possible and integrative agreements are much more likely than initially perceived. For instance, TransCanada would probably have been able to reduce Mr. Obama's loss aversion if they had offered to compensate for all the environmental harm caused during drilling (Lizza, 2015), given that Mr. Obama had a strong interest in preserving the environment that was threatened by the pipeline. As outlined above, the tangible resources' divisibility, ownership, and preference are key features that allow negotiators to reduce the counterparts' experience of loss aversion.

We conclude from our review article that parties who offer money in negotiations benefit from pecuniary power. Nevertheless, parties who hold goods are well-advised to digest as innovatively as possible a quote from Aristoteles Onassis – *"You must not run after money, you must go to meet it."* – in order to direct the focus of the social interaction onto one's own tangible resources instead of the counterpart's money.

(4) Professional Experience and Unethical Bargaining

I'm not a combative person.
My long experience has taught me to resolve conflict
by raising the issues before I or others burn their boats.
— Alistair Grant

In the following research project, we take a closer look at how intangible resources impact negotiations, even though they may not be the primary focus of the social interaction. As the previous studies within this thesis revealed, we found strong empirical support for the framing effects of tangible resources on parties' negotiation behavior. We expand on these findings by further integrating and examining the important role that intangible resources play in negotiations. Specifically, we investigate how the intangible resource of professional experience affects a negotiator's tendency to adopt unethical bargaining tactics.

Unethical behavior affects our social relationships in all areas of life, including business contexts, because "… unethical behavior is inherently a social phenomenon" (Brass, Butterfield, & Skaggs, 1998; p. 14). Recurrent negotiations are important elements in business relationships that have a formative influence on the quality of the relationship. Business relationships can be viewed as sustainable when the interactions between business partners prevail over the longer term, when they are stable, and when they are mutually beneficial for both partners (Reynolds, Fischer, & Hertmann, 2009). In negotiations, unethical bargaining strongly imperils sustainable business relationships (Volkema & Rivers, 2012), although ethically questionable bargaining tactics can lead to maximum individual gains in the short term, relative to the counterpart (Curhan, Xu, & Elfenbein, 2006).

In previous studies on business ethics, factors that trigger unethical behavior have received most of the scholarly attention (e.g., Ashforth, Gioia, Robinson, & Treviño, 2008). In negotiations, for instance, research has revealed that the cultural value of vertical individualism is strongly linked to competitive behaviors (De Dreu & Carnevale, 2003) and more so to ethically questionable negotiation tactics (Erkus & Banai, 2011). This strong link between vertical individualism and the ethically questionable bargaining tactics of pretending, deceiving, and lying has been replicated across different cultural contexts and samples (Banai, Stefanidis, Shetach, & Özbek, 2014; Goelzner et al., 2011; Stefanidis & Banai, 2014; Stefanidis, Banai, & Richter, 2013). Triandis (2001) even concludes a cultural universal in that idiocentrism is associated with deception in most cultures.

In contrast to previous studies, we focus not only on positive associations with unethical behavior but also on negative links helping to reduce unethical behavior and, thus, provide new insights into unethical bargaining tactics in negotiations. Prior studies suggested professional experience as one of the most important intangible resources for business success (Hall, 1992). In light of sustainable business relationships, we anticipate a similarly important role for professional experience in negotiations. To be precise, we assume that negotiators' professional experience is an important intangible resource that should be negatively linked to negotiators' attitudes towards pretending, deceiving, and lying tactics. Recent research on reputational risks can account for our assumption. Perceived reputational risks increase with years of tenure (Ma & Parks, 2012). Additionally, experienced professionals have already invested more in their business relationships (MacCrimmon & Wehrung, 1990). Thus, less experienced professionals might value these risks differently because they may not be aware of the long-term benefits of sustainable business relationships. In contrast, when positive reputations and sustainable business relationships are at risk, experienced professionals should avoid offending the counterparty with unethical bargaining tactics. Further, we examine an important boundary condition of unethical behavior. Researchers have pointed out that moderator variables have been widely neglected in the study of business ethics (O'Fallon, Kenneth, & Butterfield, 2005). We take up this point by assuming that professional experience moderates the universal link between vertically individualistic values and negotiators' endorsement of unethical bargaining tactics. Specifically, we suggest that with increasing professional experience the strength of the link between vertical individualism and the endorsement of unethical bargaining tactics decreases. Experienced professionals should avoid offending the counterparty, even when negotiators strongly value vertical individualism and intend to use ethically questionable bargaining tactics.

For instance, we would expect that Mr. Obama's professional experience of more than 20 years, from his first political role as senator of Illinois in 1996 to his ongoing seven years in office at that time, would have been linked to his intention of using ethically questionable tactics in the negotiation with TransCanada. Even if we had ascribed strong vertical individualistic values to the former president of the U.S., we assume that his professional experience would have weakened the strong link between his individualistic values and his attitude towards pretending, deceiving, and lying tactics.

In order to test our assumptions, we conducted an online survey and collected data from 207 professionals in various industries, with a wide range of tenure from one to 50 years. Our findings show that professional experience is negatively linked to the questionable bargaining

tactics of pretending, deceiving, and lying. Overall, the regression analysis revealed that professional experience is the strongest predictor of unethical bargaining tactics besides vertical individualism. The more experienced professionals are, the less they endorse ethically questionable bargaining tactics. The moderation analysis shows that professional experience moderates the strong link between vertical individualism and the most severely unethical tactic of lying.

Our empirical findings demonstrate that negotiators' endorsement of pretending, deceiving, and lying tactics decreases with increasing professional experience. Our study offers a richer picture of intangible resources in negotiations by revealing this strong link. Negotiators' professional experience appears to be a shielding factor that is negatively linked to one's attitude towards ethically questionable bargaining tactics. For experienced professionals, the costs of unethical tactics threatening sustainable business relationships might be perceived as more averse than for inexperienced professionals.

Our research contributes to a better understanding of unethical behavior in the business context in that we shed new light on the relationship approach of ethical behavior (Brass et al., 1998). There are two dominant research approaches towards unethical behavior. Whereas some researchers use the metaphor of bad apples, i.e., focusing on individual factors (e.g., moral development; Kohlberg & Kramer, 1969), other researchers focus more closely on the circumstances of unethical behavior, suggesting the metaphor of bad barrels (e.g., reward systems; Hegarty & Sims, 1978). Our research falls into line with the more recent approach that takes into account factors within the social relationship that, in combination with the individual and the situation, have an impact on unethical behavior (e.g., relationship strength; Brass et al., 1998). Indeed, sustainable business relationships may offer specific characteristics that guide our ethical, or even unethical, negotiation behavior, besides personal and contextual factors.

Much more broadly, we refrain from speculating why the current president of the U.S. resumed negotiations with TransCanada regarding the Keystone XL pipeline after less than one week of professional experience in office (Baker & Davenport, 2017). With respect to our research, we suggest that TransCanada should, in any case, be very aware of ethically questionable bargaining tactics maximizing short-term gains for the counterpart.

Discussion

The research presented in this thesis contributes to a deeper and richer understanding of how and why even basic elements such as tangible and intangible resources affect our attitudes, behaviors, and final outcomes at the bargaining table. In fact, our research demonstrates that the involved tangible, and also intangible, resources have differential effects, depending on whether they are more or less prominent in parties' perception of the social interaction.

We provide some first empirical insights on the allocation procedure of offering one's own and requesting others' tangible resources, which is fundamental to exchange negotiations. By procedurally framing the allocation process, parties either focused on losing or obtaining tangible resources. Parties who concentrated on losing their own resources throughout the whole negotiation process experienced greater concession aversion, made fewer concessions, and achieved higher outcomes than those parties who concentrated on obtaining others' tangible resources.

What has been found to be essential in the ongoing negotiation process on tangible resources is equally important in the first moment at the bargaining table. Framing opening proposals as requests led responders to focus on losing their own resource, motivating them to adjust farther away from the opening anchor than responders who focused on obtaining the first-mover's resource. Responders' motivation to adjust moderated the classic anchoring effect and the first-mover advantage in negotiations, which have previously been conceived as primarily cognitive phenomena.

By taking into account that people widely recognize money as the most important tangible resource at the bargaining table, we identified the key features of this resource, which give money holders power. At the same time, we disclosed possibilities for holders of goods to leverage the pecuniary power of money holders. In sum, the empirical findings across our studies on tangible resources raise a very basic principle that helps one to succeed in negotiations: Cushion your counterparts' pain at losing their resources by highlighting the pleasure of obtaining your resources.

Beyond the insights on the effects of tangible resources, our research on intangible resources demonstrated a bargaining advantage emerging from negotiators' professional experience. Negotiators with longer professional experience were less likely to endorse severely unethical bargaining tactics. Our findings suggest that inexperienced professionals use unethical bargaining to maximize short-term gains. Lacking the intangible resource of

professional experience may lead negotiators to lose sight of long-term benefits because they have not invested much in good reputations or sustainable business relationships.

With respect to the characteristics of intangible resources, previous studies have suggested an outcome dependence as a characteristic of both tangible and intangible resources (Rubin & Brown, 1975; Trötschel et al., 2014). However, I argue that intangible resources do not necessarily have to be on the negotiation table and, thus, do not need to depend in terms of outcomes. For negotiations to occur, the quality of one party's outcome has to be, at least partially, dependent on the quality of the outcome that the counterparty can receive. Therefore, outcome interdependence of at least one tangible or intangible resource is a necessary precondition for the negotiation process to occur. In addition, our findings suggest that outcome-independent intangible resources, such as professional experience, also affect negotiation processes and agreements, besides the specific outcome-dependent tangible and intangible resources at stake.

Across the presented studies, we approached our research questions with a variety of research designs, including survey methods, online simulated experiments, interactive face-to-face experiments, and computer-mediated experiments. The studies included data from diverse samples, such as fourth graders, university students, and experienced professionals. Although the findings from these studies demonstrate important insights into how resources influence negotiations, the reported studies are only the first steps in an area that needs more systematic investigation in order to better understand the impact and interplay of tangible and intangible resources.

Future Research

Up until now, only a few studies have integrated objective value from tangible resources and the perceived subjective value emerging from intangible resources (Curhan et al., 2006; Curhan, Elfenbein, & Kilduff, 2009; Curhan, Elfenbein, & Eisenkraft, 2010; Galinsky, Mussweiler, & Medvec, 2002; Thompson, 1995; Tinsley, O'Connor, & Sullivan, 2002; White, Tynan, Galinsky, & Thompson, 2004). Typically, the existing paradigms in negotiation research are not adequately integrating tangible and intangible resources within the same study. Certainly, the existing paradigms have been invaluably helpful for the scientific understanding of social interactions in negotiations, but, nevertheless, these paradigms reflect a specific extract of real-world phenomena. Negotiation researchers should increase their efforts to develop paradigms

and introduce new methods that combine tangible and intangible resources in order to better capture relevant psychological processes. I agree with Mannix, Tinsley, and Bazerman (1995, p. 250) who "...argue that many fascinating issues in negotiation deal with time, relationships, mobility, and trust that are absent or minimized in one-shot experimentation."

An important starting point for this venture could be paradigms with "…greater personal stakes for the negotiator" (Curhan et al., 2006, p. 508). Interdependence theory, developed originally by Kelley and Thibaut and then extended by others (1978; Kelley et al., 2003), may provide the theoretical foundations needed to better conceptualize and structure interpersonal situations with respect to tangible and intangible resources. Specifically, interdependence theory states that social interactions are a function of each individual and the particular situation in which they are interacting [I= *f*(Situation, Person A, Person B)]. Consistent with this, interdependence theory considers that the dynamic aspects of a social relationship over time are a particularly important part of a situation, for example, the level of dependence or the temporal structure (for a complete review of interdependence theory, see, for example, Van Lange & Balliet, 2014). Whereas existing paradigms focus specifically on static interactions with one-shot negotiations, alternative paradigms should involve a sequence of decisions and interactions in order to model integrativity over time (Kelley, 1997; Mannix et al., 1995). Experience, reputation, or face-saving as intangible resources are highly interrelated, with temporal structures in the interaction that increase parties' personal stakes. In contrast, common one-shot negotiation tasks typically require lower levels of personal dedication. I assume that the temporal dimension has the potential to create a richer and more complete understanding of psychological processes in negotiations. By including the temporal dimension, new paradigms could help to model a wide array of intangible resources that impact subjective evaluations of the negotiation. In the following, I point to prolific research areas that could benefit immensely from an integration.

The intangible resource of reputation is typically established over a series of interactions. Thus, paradigms that include the temporal dimension in negotiations are mandatory to uncover the effects of reputation as an intangible resource. One could imagine a situation in which parties highly prefer intangible resources, such as their established reputation, over tangible resources, such as their monetary outcome. These differential evaluations of tangible and intangible resources could pave the way to integrative agreements via the intangible resource of reputation. For instance, strong differences in preferences might have existed when, in 2015, the law firm Freshfields Bruckhaus Deringer was tasked by the DFB (German Soccer Federation) to internally investigate corruption in the context of the 2006

FIFA World Cup in Germany. The DFB likely considered maintaining its reputation to be more important than the negative consequences of the enormous costs of Freshfields' internal investigation.

Additionally, the combination of tangible and intangible resources in dynamic relationships across negotiations could be specifically helpful to shed further light on the underlying psychological processes that are involved in negotiations with future contacts. In their groundbreaking work on perspective taking and empathy, Galinsky and colleagues (2008) examined whether the distinct social competencies of perspective taking or empathy would result in more mutually beneficial agreements. In their studies using one-shot negotiations, perspective taking led to more beneficial agreements for both parties than empathy. In situations where negotiators hold greater personal stakes because parties have to interact in a series of negotiations, it seems reasonable to assume that perspective taking and empathy together add up to the most beneficial mutual agreements. Understanding the counterparts' interests on tangible resources might be a big part of the puzzle, while feeling emotional concern for a counterparty's suffering on intangible resources might lead negotiators keep sight of the bigger picture.

Over recent decades, internationalization and globalization have exponentially increased social networks across the world. Negotiation researchers have opened up an important and emerging field, revealing many findings on how cultural factors impact conflict resolution and negotiations (e.g., Gelfand & Brett, 2004; Adair & Brett, 2005; Rubin & Sander, 1991). Many findings are drawn from cross-cultural differences in negotiators' relationships (Gunia, Brett, Nandkeolyar, & Kamdar, 2011), ethics (Erkus & Banai, 2012), and strategies (Adair, 2008), suggesting that cultural values have a strong impact, specifically on parties' valuations of intangible resources. However, the main objectives under investigation were mostly tangible resources, such as joint or individual gains. Adding intangible resources in future research could help to draw a more fine-grained picture of cultural factors' impact on negotiation behavior. I believe that this avenue to cross-cultural studies in negotiation research will be relevant when it comes to disentangling the complex characteristics of cultures around the globe, particularly when repeated interactions constitute relationships.

Just recently, Wolfgang Schäuble, the German secretary of finance, might have had a concentration on tangible and a neglect of intangible resources in mind when he criticized the current U.S. administration for thinking in terms of deals (Wolf, 2017). Mr. Schäuble outlined that there is no case in which the world would be in need of solutions where one party's gain is another one's loss. He rather emphasized that the world would be in need of integrative

solutions. Paradoxically, adding complexity to negotiations, in the sense of intangible resources, could extend the zone of possible agreements and, thus, reveal great opportunities for mutual solutions.

Concluding Thoughts

Taken together, our research shows that losing tangible resources and lacking intangible resources crucially impacts attitudes, behaviors, and outcomes in negotiations. I completely agree that "…even when the division of tangible resources is the primary focus of activity, intangibles … become intimately involved" (Rubin & Brown, 1975, p. 12). In line with this, our research suggests that it is more beneficial in negotiations to focus primarily on keeping hold of one's own tangible resources, while keeping intangible resources in mind. Certainly, the Keystone XL negotiation entailed important tangibles. Thus, Mr. Obama most likely experienced losing the grip of his tangible resources, but he probably never lost sight of the intangibles. Instead, he saw a big chance to build an ambitious legacy in terms of climate protection policy. In contrast, given the renewal of the Keystone XL negotiation by his successor, we can surmise where trying to catch hold of the counterpart's tangible, and losing sight of intimately involved intangible, resources might lead.

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Chapter 2: Procedural Frames in Negotiations: How Offering My Resources Versus Requesting Yours Impacts Perception, Behavior, and Outcomes

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Abstract

While abundant negotiation research has examined outcome frames, little is known about the procedural framing of negotiation proposals (i.e., offering my vs. requesting your resources). In a series of eight studies, we tested the prediction that negotiators would show a stronger concession aversion and attain better individual outcomes when their own resource, rather than the counterpart's, is the accentuated reference resource in a transaction. First, *senders* of proposals revealed a stronger concession aversion when they offered their own rather than requested the counterpart's resources—both in buyer-seller (Study 1a) and in classic transaction negotiations (Study 2a). Expectedly, this effect reversed for *recipients*: When receiving requests rather than offers, recipients experienced a stronger concession aversion in buyer-seller (Study 1b) and transaction negotiations (Study 2b). Study 3 to 5 investigated procedural frames in the interactive process of negotiations—with elementary school children (Study 3), in a buyer-seller context (Study 4a & 4b), and in a computer-mediated transaction negotiation void of buyer/seller roles (Study 5). In summary, eight studies show that negotiators are more concession averse and claim more individual value when negotiation proposals are framed to highlight their own rather than the counterpart's resources.

Keywords: negotiations, procedural frames, concession aversion, offer, request, buyer, seller

Negotiation is commonly defined as a decision-making process among parties with divergent interests (Pruitt & Carnevale, 1993). Parties typically interact by alternately making and receiving proposals (Kahneman, 1992). As an integral feature of this interactive process parties decide what to give and what to take (Neale & Bazerman, 1992). In other words, decision making in negotiations revolves around the exchange of material and immaterial resources. In the present research, we propose that in classic exchange negotiations (e.g., buyer-seller; union-management; transaction negotiations), proposals inevitably accentuate either negotiator's resource as the salient reference resource—proposals either highlight the resource that is offered or the resource that is requested (*procedural framing*; see also Larrick & Blount, 1997; Brewer & Kramer, 1986). For instance, in a buyer-seller negotiation, sellers may offer their resource – say a 2011 Toyota Corolla – in exchange for the buyer's resource money: "I offer you my Toyota for 12,000€". Alternatively, they can request money in exchange for the car: "I request a price of 12,000€ for my Toyota". Both of these proposals are identical in objective quality; they differ only in how the exchange of resources is framed. In sum, the present research revolves around a rather simple question: Does a negotiation proposal framed as "my X for your Y" lead to different cognitive processing, negotiation behavior and individual outcomes than an equivalent proposal framed as "your Y for my X"?

According to Rabin (1998, p. 36) framing effects occur when two "logically equivalent (but not transparently equivalent) statements of a problem lead decision makers to choose different options" (see Tversky & Kahneman, 1981). In the present research, we propose that framing proposals as offering *own* resources vs. requesting *other's* resources affects negotiators' concession aversion – their willingness to concede in the negotiation process (Kahneman, 1992; see also Benton, Kelley, & Liebling, 1972; De Dreu, Weingart, & Kwon, 2000; Druckman, 1994; Kelley & Thibaut, 1978; Pruitt, 1981). Specifically, the negotiator whose resource is procedurally framed as the salient reference resource of the transaction – either by sending an offer or by receiving a request – is predicted to show a stronger concession aversion, which results in a larger share of individual profits (e.g., Neale & Bazerman, 1985; Olekalns & Frey, 1994; Trötschel, Bündgens, Hüffmeier, & Loschelder, 2013).

In the following, we first give an overview of previous research on procedural-framing effects in decision making, such as experimental games. We point to relevant differences between outcome and procedural frames and conclude with an overview of the present research.

Procedural Framing in Negotiations and Experimental Games

Although the present research is the first to systematically examine procedural framing in negotiations, previous studies have examined this type of framing in experimental games (Blount & Larrick, 2000; Brewer & Kramer, 1986; McCusker & Carnevale, 1995; Rutte, Wilke, & Messick, 1987). This research indicates that procedural frames have a strong impact on players' cooperative and competitive behaviors in different types of games (e.g., social dilemmas or ultimatum bargaining games) – effects that may also occur in the context of negotiations. While experimental games and negotiations share some commonalities, one should be careful to generalize the effects from either line of research to the other (e.g., Polzer, 1996). Most relevant for the present research, the interactive component in negotiations is more pronounced than in experimental games.

In the interactive process of negotiations, cognitive framing has been shown to affect parties' resistance to concede (De Dreu, Carnevale, Emans, & Van de Vliert, 1994; Neale & Bazerman, 1985). Based on the concept of concession aversion (Kahneman, 1992; see also Benton et al., 1972; Kelly & Thibaut, 1978), we propose that procedural frames systematically impact parties' perceptions, behavior and ultimately determine their negotiation outcomes. Specifically, framing negotiation proposals as offering resources accentuates parties' own rather than the counterpart's concessions. Offers refer to the resources that a negotiator gives to the other party (e.g., sellers: "I offer you my commodity X for a price of Y"; buyers: "I offer you a price of Y for commodity X"). In other words, in the case of an *offer*, parties' own resources become the salient reference point of a proposal. By contrast, when parties frame a proposal as a request, they accentuate the counterpart's concessions. A request highlights the resource a negotiator would like to attain from the other party (e.g., sellers: "I request a price of Y for commodity X"; buyers: "I request commodity X for a price of Y"). In other words, in the case of a *request*, the counterpart's resource will become the reference point of a proposal.

Importantly, procedural frames do not only emerge from the literal use of the semantic terms "offer" vs. "request": Parties may emphasize the give and take of resources with various synonyms (offer-framing: "I'll give you X for Y"; "I can provide you with X for Y"; "I'll pay X for Y"; request-framing: "I'd like to have Y for X"; "I demand Y for X"; "I claim Y for X"). In addition, procedural frames may also emerge from structural features of the negotiation. For instance, in a negotiation on the price of a commodity, buyer and seller are likely to focus on the resource *money*—which is in possession of the buyer. The negotiation is perceived as buyers offering and sellers requesting money in exchange for a specific commodity (e.g., "How much

for five apples?"). In contrast, when the negotiation revolves around the quality or the quantity of a commodity, both parties are likely to focus on the non-monetary resource—which is in possession of the seller. In this case, the negotiation will be perceived as sellers offering and buyers requesting the commodity (e.g., "How many apples for 5€?").

Finally, procedural frames can also emerge due to the sequence with which negotiation issues are addressed. The proposal "What about my X for your Y?" differs from the reversed version of "What about your Y for my X". The sequence "X for Y" puts a relatively stronger emphasis on the resource X, thereby leading the owner of X to anticipate a potential loss of own resources in the transaction. Conversely, the sequence "Y for X" accentuates resource Y, thereby leading the owner of Y to anticipate a loss in the transaction. In other words, the sequence of resources can determine the salient reference resource within the transaction (similar to reference *outcomes* in studies on outcome framing; De Dreu et al., 1994). Irrespective of how procedural frames emerge, negotiators should perceive a relatively stronger loss vs. gain frame depending on the salient reference resource.

How Procedural Frames Differ from Outcome Frames

Abundant negotiation research has focused on outcome frames (e.g., Bazerman, Magliozzi, & Neale, 1985; Bottom & Studt, 1993; Carnevale, 2008; De Dreu et al., 1994; Neale & Bazerman, 1985; Neale, Huber, & Northcraft, 1987; Olekalns, 1994, 1997; Olekalns & Frey, 1994; Trötschel & Gollwitzer, 2007). Although outcome frames are also explained in terms of an increased concession aversion, they differ from procedural framing in important ways: According to Larrick and Blount (1997) procedural frames are "different ways of describing *actions* (as opposed to *outcomes*) in structurally equivalent allocation procedures" (p. 810; see Fagley, 1993). While outcome frames are based on different reference *outcomes* – prospective outcome alternatives –, procedural frames are based on different reference *resources* – resources transferred from one party to the other. In addition, procedural frames emerge as a natural consequence of the social interaction in negotiations, while outcome frames may occur independently from the interaction (for instance by means of loss- vs. gain-framed payoff schedules). Finally, research on outcome frames has revealed that negotiators engage in *frame adoption* in that parties' adopt each other's outcome frame (De Dreu et al., 1994). In contrast, procedural frames are predicted to result in a *frame shift* due to the relative salience of reference resources: When a proposal is framed to focus the sender's resource, the sender will perceive

the transaction as a loss and the recipient as a respective gain of the reference resource. Reversely, when a proposal accentuates the recipient's resource, the sender perceives a gain and the recipient anticipates a respective loss of the reference resource.

Frame Shift: Antagonistic Effects for Senders and Recipients

The more negotiators focus on their own resources, the more concession averse they become. A closer look on the reference resources implies antagonistic effects for senders and recipients of a negotiation proposal. As mentioned above, we will refer to this process as 'frame shift', which describes the emergence of antagonistic effects for the sender and the recipient. A proposal accentuating the sender's resource (e.g., "I offer you my X for your Y") frames the transaction as the sender's loss and the recipient's gain. Conversely, a proposal accentuating the recipient's resource (e.g., "I request your Y for my X") frames the transaction as the recipient's loss and the sender's gain. As a consequence of these antagonistic effects, we propose that senders and recipients experience different levels of concession aversion depending on the salient reference resource. Accentuating the sender's resource, for instance a proposal framed as an offer, should lead to a stronger concession aversion on behalf of senders. By contrast, recipients should become more concession averse when a proposal accentuates the recipient's resource, for instance when a proposal is framed as a request.

Initial Indications for Procedural Frames at the Bargaining Table

Although procedural frames have yet to be investigated in negotiations, prior findings allude to their fundamental role at the bargaining table. For instance, in an early study on outcome frames Bazerman and colleagues (1985) found an unpredicted role effect for buyers vs. sellers (in addition to the expected effect of outcome frames). Buyers claimed more profits than sellers. This effect of negotiators' role has since been replicated consistently in various price-negotiations—not only in studies on outcome frames but also in research investigating expertise, power, self-regulation and goal difficulty (e.g., Appelt, Zou, Arora, & Higgins, 2009; Appelt & Higgins, 2010; Huber & Neale, 1986; McAlister, Bazerman, & Fader, 1986; Neale & Northcraft, 1986). In light of this consistent finding, Neale and colleagues (1987) took a closer look at negotiation roles. The authors suggest that buyers and sellers frame a price negotiation

differently (see Appelt et al., 2009): Buyers perceive the negotiation in terms of concessions made (money spent), whereas sellers frame the negotiation in terms of concessions received (money earned).

Interestingly, framing effects for sellers vs. buyers have also been observed in research on the endowment effect (Kahneman, Knetsch, & Thaler, 1990; Carmon & Ariely, 2000). According to the endowment effect, sellers will pay more money to retain a possession, for instance a coffee mug, than a buyer is willing to pay to own it. In contrast to negotiation studies, higher levels of concession aversion emerge for sellers instead of buyers. Although the seemingly contradictory findings from these two lines of research are not the focus of the present research, the theoretical reasoning of procedural-framing effects might inform these differences: A procedural-framing perspective would suggest taking a closer look at the setup of these experimental tasks. It appears that negotiation research has conceptualized the bargaining tasks as a negotiation on the price (money as the reference resource), while endowment research has conceptualized a similar task as a transaction of a commodity (commodity as the reference resource). The seemingly inconsistent findings from negotiation and endowment research could be due to different reference resources and the present research aims at taking a closer look at the role of reference resources in negotiations.

Present Research: Contributions and Overview

By introducing procedural frames to the field of negotiations, we intend to contribute to research on conflict resolution and decision-making processes in different ways: From the perspective of negotiation theory, we aim to add to the well-established outcome frames by establishing a second type of framing that emerges naturally in negotiations – for instance via offering and requesting resources. In a series of studies, we test the assumption that salient reference resources affect negotiators' perceptions of proposals, their concession behavior and ultimately their individual outcomes. From the perspective of the decision-making literature, a specific type of framing is examined that emerges in social interactions (e.g., negotiations) and induces antagonistic effects on the interacting individuals (see *frame-shift*). Specifically, when one party makes a decision on how to frame a proposal, both parties, senders and recipients, are automatically framed in antagonistic ways.

We conducted eight experiments to establish the fundamental role of procedural frames in negotiations. The experiments strive (1) to demonstrate the *intra*personal, antagonistic effects

of procedural frames on senders and recipients (Study 1a-2b), and (2) to investigate procedural frames in the *inter*personal, interactive process of dyadic negotiations (Study 3-5). To demonstrate the antagonistic effects for senders and recipients, two non-interactive studies focused on senders in a buyer-seller context (Study 1a) and in a transaction negotiation void of buyer-seller roles (Study 2a). The subsequent two studies focused on recipients, again in a buyer-seller (Study 1b) and a transaction setting (Study 2b). In the final set of studies (Study 3-5), procedural frames are investigated in interactive negotiations with parties sending and receiving proposals. To corroborate that procedural frames are an integral feature of negotiations and reflect a fundamental psychological process, we first conducted a field-experiment in a local elementary school: Fourth graders negotiated the transaction of collector's cards, while we manipulated the framing of negotiation proposals (Study 3). Subsequently, we explored procedural frames in two laboratory experiments with participants in the role of buyer and seller. Procedural frames were either directly induced by explicit, semantic instructions (Study 4a), or indirectly manipulated by means of structural features of the negotiation task (price- vs. commodity negotiation; Study 4b). In a final study, procedural frames were induced implicitly by means of the sequential order of the reference resources (i.e., own vs. counterpart's resource first; Study 5). Mediation analyses in Studies 3-5 test the theoretical reasoning that an increased concession aversion accounts for procedural-framing effects.

Study 1a

In Study 1a, all participants assumed the role of a buyer or a seller and send a negotiation proposal (offer vs. requests) to the counterpart. We predicted that senders would reveal a stronger concession aversion, and consequently make more self-serving proposals, when offering own resources rather than requesting the counterpart's resources—irrespective of their role as buyer or seller. These predictions are reflected in an interaction effect: Whereas sellers sending offers should suggest *higher* prices than sellers sending requests, buyers should suggest *lower* prices in the case of offers than in the case of requests.

Method

Participants and design. Ninety-three students (M_{age}=23.01; 78 females) with different academic majors were recruited through leaflets and received €5 as remuneration. Data collection was terminated when no more students signed up and a minimum of 20 observations per cell had been reached. Study 1a followed a 2 x 2 factorial design with participants' role (buyer vs. seller) and procedural frame (offer vs. request) as between-subjects variables.

Procedure, independent and dependent variables. Participants received instructions via a booklet illustrating the following scenario: Sellers were asked to imagine moving out of their apartment and thus intend to sell four electronic devices to the subsequent tenant. Buyers were asked to imagine moving into a new apartment, which is already furnished with electronic devices from the previous tenant. The four electronic devices to be sold/bought were a refrigerator, baking-oven, washing machine, and a dishwasher. Both buyers and sellers were informed that the devices were approximately two years old, in good condition, and had original prices of €270 (dish-washer), €360 (refrigerator), €400 (baking-oven), and €550 (washing machine). Buyers and sellers were asked to imagine having negotiated with a counterpart for a while, who now asked them to make another proposal for each item. Sellers were asked to either make an offer (e.g., "I offer the washing machine for a price of €___"), or to propose a request ("I request a price of €___ for the washing machine"). Accordingly, buyers were asked to propose an offer (e.g., "I offer a price of €___ for the washing machine"), or a request ("I request the washing machine for a price of €___").

Results

We averaged participants' price proposals across the four electronic devices. A 2 (*Role*: buyer vs. seller) x 2 (*Frame*: offer vs. request) ANOVA revealed a significant main effect for role, $F(1,92)=72.69$, $p<.001$, $\eta_p^2=.44$, and the predicted two-way interaction, $F(1,92)=11.19$, $p=.001$, $\eta_p^2=.12$ (other $F=1.01$, $p=.31$). Not surprisingly, buyers proposed lower prices (M=157.96€, SD=19.91) than sellers (M=225.61€, SD=54.21). Contrast analyses for the two-way interaction revealed that sellers in the offer condition suggested higher prices (i.e., more self-serving proposal; M=243.69€, SD=64.00) than in the request condition (M=208.25€, SD=36.23), $t(92)=3.06$, $p=.001$. Conversely, buyers making offers suggested lower prices (i.e., more self-serving proposal; M=148.43€, SD=22.19) than buyers making requests, (M=167.89€, SD=10.60), $t(92)=1.84$, $p<.05$. In other words, irrespective of their role, buyers and sellers

revealed a stronger concession aversion and made more self-serving proposals when offering own rather than requesting the counterpart's resource.

Discussion

Study 1a supports the prediction for procedural-framing effects on *senders*. Irrespective of the role as buyer or seller, senders revealed a stronger concession aversion when the attention was turned to their own resource (offer condition) rather than their counterparts' resource (request condition). If our assumptions for the antagonistic effects on senders vs. recipients hold true, procedural framing should produce reversed effects for *recipients*: Parties receiving a request should focus on their own resource, while parties receiving an offer should focus on the counterpart's resource. Consequently, recipients should reveal a stronger concession aversion following requests rather than offers—irrespective of their role as buyers or sellers.

Study 1b

Participants assumed the role of buyer or seller and were asked to rate proposals they received from a (simulated) sender. We predicted that recipients of requests would reveal a stronger concession aversion than recipients of offers.

Method

Participants and design. Eighty-seven students (M_{age}=22.51; 73 female) with different academic majors were recruited through leaflets and received €5 as remuneration. Data collection was terminated when no more students signed up and a minimum of 20 observations per cell had been reached. Study 1b followed a 2 x 2 factorial design with participants' role (buyer vs. seller) and procedural frame (offer vs. request) as between-subjects variables.

Procedure, independent and dependent variables. Participants received instructions to the same buyer-seller scenario used in Study 1a. Having read the instructions, participants received a proposal from a (simulated) counterpart with whom they imagined having negotiated for a while. To make proposals for the four electronic devices as realistic as possible, we matched the simulated prices with the means suggested by participants (senders) in Study 1a (i.e., €270, €210, €160 and €130). Buyers either received offers (e.g., "The seller offers the refrigerator for a price of €160"), or identical proposals framed as a request ("The seller requests

a price of €160 for the refrigerator"). Accordingly, sellers either received offers ("The buyer offers a price of €160 for the refrigerator"), or identical requests ("The buyer requests the refrigerator for a price of €160"). As dependent measures we assessed participants' willingness to concede ("In light of the proposal, I am willing to concede in the subsequent negotiation"), their evaluation of the proposal ("I evaluate the proposal as positive"), as well as their tendencies to accept the proposal ("I am inclined to accept the proposal"). Items were accompanied by seven-point scales ranging from 1 (*do not agree*) to 7 (*strongly agree*). As the items were strongly associated with each other (α=.88, α=.90, α=.93, and α=.95 for the four devices), we computed an averaged rating score for each electronic device. We predicted that parties would reveal a stronger concession aversion for proposals framed as requests rather than offers, irrespective of whether they were buyers or sellers.

Results

An averaged score for buyers' and sellers' ratings across the four electronic devices was computed. A 2 (*Role*: buyer vs. seller) x 2 (*Frame*: offer vs. request) ANOVA revealed a main effect for role, $F(1,84)=43.20$, $p<.001$, $\eta_p^2=.34$, and a significant main effect for procedural frame $F(1,84)=14.24$, $p<.001$, $\eta_p^2=.15$. As expected, the interaction effect did not reach significance ($F=.014$, $p=.91$). Note that proposals of participants in Study 1a were used as orientation prices for the simulated proposals in Study 1b (see Method section). As these proposals favored buyers—i.e., the prices for each device were less than 50% of the original price—buyers were more willing to concede ($M=4.82$, $SD=1.26$) than sellers ($M=3.29$, $SD=1.07$). More relevant to the present research, the main effect for procedural framing showed that participants receiving requests were less willing to concede ($M=3.59$, $SD=1.30$) than participants receiving offers of identical value ($M=4.47$, $SD=1.35$). This effect occurred irrespective of participants' role as buyer ($M=4.39$ vs. $M=5.24$), $t(84)=2.66$, $p=.009$, or seller ($M=2.82$ vs. $M=3.73$), $t(84)=2.68$, $p=.008$.

Discussion

Study 1b shows that the effects of procedural frames on parties' concession aversion are reversed when negotiators *receive* proposals. Recipients who focused on their own resources (request condition) reported a higher resistance to concede than recipients who focused on the counterpart's resource (offer condition). As predicted, this effect emerged irrespective of participants' role as buyer or seller.

Although the first two studies support the assumption on antagonistic framing effects for senders and recipients, this frame-shift should not be limited to a buyer-seller context. Instead, we propose that it reflects a more fundamental mechanism that generalizes to other types of negotiations as well. Hence, the subsequent two studies followed three goals: First, we aimed to replicate the antagonistic effects for senders and recipients outside buyer-seller negotiations. Second, Studies 2a and 2b used experimental settings, in which participants anticipated face-to-face negotiations with a counterpart rather than engaging in hypothetical negotiation scenarios. Third, in the first two studies procedural frames were induced with the semantic terms of 'offer' vs. 'request'. As pointed out in the introduction, procedural frames—accentuating a salient reference resource—can emerge in different ways. Importantly, a proposal needs to direct parties' attention towards either their own or the counterpart's resource. Following this reasoning, we framed the transaction of resources as a 'giving own' or 'taking other's resources' to test an alternative manipulation of procedural framing.

Study 2a

Study 2a was conducted to replicate the effects from Study 1a in a transaction negotiation void of buyer-seller roles. We predicted that senders with a focus on own resources would reveal a stronger concession aversion (i.e., leave fewer resources to the opponent) than senders with a focus on the counterpart's resources.

Method

Participants and design. Ninety-two students (M_{age}=22.94; 71 females) from a subject pool at the University of {Institution} participated and received €5 as remuneration. Data collection was terminated when no more students signed up and a minimum of 20 observations per cell had been reached. The experiment followed a 2 x 2 factorial design, with framing of proposals

(*Procedural Framing*: give vs. take) and negotiators' role (manager X vs. manager Y) as between-subjects factors.

Procedure, independent and dependent variables. Participants received written instructions to negotiate as the managing director of a zoo X or a zoo Y. Managers from both zoos were told that recent breeding projects had successfully produced offspring—eleven tigers in zoo X and seven polar bears in zoo Y. Participants were to negotiate with the opposing manager on the exchange of animals to increase the number of visitors in each zoo. Instructions clarified that marketing directors had estimated a monthly increase in visitors worth 700€ (per tiger) and 1,100€ (per polar bear).

Both managers read that they had been randomly assigned to send a proposal. The procedural framing was manipulated as follows: Participants were asked either to make a proposal starting with their own resource (e.g., manager X: "What about: I'll give ___ tigers for ___ polar bears"), or starting with the counterparts' resource ("What about: I'll take ___ tigers for ___ polar bears"). As dependent variables, we assessed participants' concession aversion in terms of profits managers claimed for themselves (i.e., ranging from 0€ for no animals to 15,400€ for all animals). We predicted that irrespective of role (manager X or Y), parties would be more resistant to concede – claim more value – when focusing on their own rather than the other's resources.

Results

A 2 (*Role*: manager X vs. manager Y) x 2 (*Procedural Framing:* give vs. take) ANOVA revealed only the predicted Framing main effect, $F(1,88)=11.98$, $p=.001$, $\eta_p^2=.12$ (main effect role: $F=0.03$, $p=.859$; interaction: $F=1.06$, $p=.306$). Managers focusing on their own animals were more resistant to concede and made more self-serving proposals (M=8,928.26€, SD=1250.36) than managers focusing on the counterpart's animals (M=8,167.39€, SD=797.79), $t(90)=3.48$, $p<.001$. This pattern of results emerged irrespective of negotiators' role as manager X (M=8,834.78€ vs. M=8,300.00€), $t(44)=1.61$, $p=.055$, or manager Y(M=9,021.74€ vs. M=8,034.78€), $t(44)=3.42$, $p=.001$.

Discussion

Study 2a corroborates our procedural-framing assumptions for *senders* in a negotiation void of buyer-seller roles. Participants were more concession averse and acted more self-servingly when perceiving the transaction as giving their own rather than taking the counterpart's resources. Similar effects emerged as in Study 1a, even though Study 2a accentuated the reference resource by a different means.

Study 2b

Study 2b was conducted to replicate the findings of Study 1b for *recipients* in a negotiation void of buyer-seller roles. We varied procedural frames in the same way as in Study 2a but all participants acted as recipients. Based on Study 1b, we predicted that recipients would be less willing to concede when a proposal accentuates the resources the sender intends to take rather than give.

Method

Participants and design. Eighty students (M_{age}=23.13; 67 females) from a subject pool at the University of {Institution} participated in Study 2b and received €5 as remuneration. Data collection was terminated at 20 observations per cell. The experiment followed a 2 x 2 factorial design, manipulating the framing of proposals (*Procedural Framing*: give vs. take) and negotiators' role (*Role*: manager X vs. manager Y) as between-subjects factors.

Procedure and independent variables. Negotiation scenario and roles were identical to Study 2a, with the exception that all participants were informed about their random assignment to *receiving* a proposal. We systematically manipulated the procedural framing of this (simulated) proposal: The proposals were framed to accentuate either the resources the sender intended *to give* (e.g., Manager X: "What about: I'll give you six tigers for four polar bears"), or *to take* ("What about: I'll take four polar bears for six tigers"). Importantly, the quality of proposals was held constant across all experimental conditions with an estimated increase in visitors worth €7,500 per month. The dependent variables was the same as in Study 1b (Cronbach's α=.83). We predicted that participants would reveal a stronger concession aversion when proposals accentuated the resources that were to be taken from rather than given to them.

Results

A 2 (Role) x 2 (Procedural Framing) ANOVA revealed a marginally significant main effect for Role, $F(1,76)=2.75$, $p=.10$, $\eta_p^2=.03$, and the predicted main effect for Procedural Frame, $F(1,76)=5.34$, $p=.024$, $\eta_p^2=.07$. The interaction effect did not reach significance ($F=0.01$, $p=.993$). First, it appears that managers of zoo X tended to evaluate proposals somewhat more positively than managers of zoo Y ($M=4.05$ vs. $M=3.53$). More relevant to the present research, managers receiving proposals accentuating the loss of own resources were less willing to concede ($M=3.39$, $SD=1.37$) than managers receiving identical proposals that accentuated the gain of the counterpart's resource ($M=4.13$, $SD=1.54$).

Discussion

Study 2b corroborates the findings from Study 1b in showing that procedural-framing effects are reversed when negotiators receive rather than send a proposal. In sum, the four non-interactive studies (Study 1a-2b) indicate that negotiators are more resistant to concede when a transaction is framed to accentuate the loss of a resource (i.e., sending offers, receiving requests). Although the non-interactive studies allowed us to disentangle the intrapersonal, antagonistic effects for senders and recipients (frame shift), the question remains how procedural frames affect parties' behaviors and outcomes in the interactive negotiation process. Study 3 therefore investigates the interpersonal implication of our findings in an interactive face-to-face negotiation. To corroborate that procedural frames constitute a fundamental mechanism in negotiations, we first investigated the give and take of resources in a study with fourth graders at a local elementary school.

Study 3

Study 3 pursued two major goals: First, we strove to test whether procedural-framing effects already emerge for parties lacking considerable negotiation experience. Hence, we conducted a negotiation study with school children in fourth grade at a local elementary school (aged 9 to 11 years). To ease participants into the negotiation setting, we used a task and items that our

young negotiators were familiar with – fourth graders negotiated the trade of blue and yellow fantasy cards.

Second, we aimed to demonstrate that procedural frames affect parties' concession aversion in the interactive process of negotiations. Therefore, we led both children in each dyad to focus either on Party A's blue fantasy cards or on Party B's yellow fantasy cards. For instance, owners of the blue cards were instructed to frame the transaction as giving their own cards ("What about: I'll give you X of my blue cards for Y of your yellow cards?"). In the same condition, the owner of the yellow cards was instructed to frame the transaction as taking the other's cards ("What about: I'll take X of your blue cards for Y of my yellow cards?"). Note that both instructions accentuated the blue fantasy cards as the salient reference resource. In a second condition, yellow fantasy cards were accentuated as the reference resource; consequently, instructions for owners of blue and yellow cards were reversed.

Due to the antagonistic effects for senders and recipients we accentuated the same reference resource but refrained from accentuating different reference resources within pairs. In the latter case, for instance when both negotiators framed proposals as giving resources (i.e., each party's own cards are the salient reference resource), competing effects should likely cancel each other out (Study 1a-2b)[1]. Hence, both parties were led to focus on the same reference resource.

Method

Participants and design. Fifty-two fourth graders (M_{age}=9.96; 24 females) from two entire classes at a local elementary school in {City} participated in this study. Negotiations revolved around the transaction of fantasy cards (with figures such as wizards, witches, fairies and trolls). Children's negotiation role (owner of yellow cards vs. owner of blue cards) was varied as an independent variable within pairs. More relevant, we also realized two procedural-framing conditions: In a first condition, owners of the blue cards were instructed to frame the transaction as *giving* and owners of yellow cards as *taking*—leading both parties to accentuate the blue cards as the salient reference resource. In a second condition, owners of the yellow cards were

[1] When both parties focus on giving own resources, both parties experience a high resistance to concede when acting as senders (Study 1a & 2a), but a *low* resistance to concede when acting as recipients (Study 1b & 2b). Conversely, when both parties focus on requesting the counterpart's resources, both parties will experience a low resistance to concede when acting as senders, but a strong resistance to concede when acting as recipients (Study 1b & 2b).

instructed to frame the transaction as *giving* and owners of blue cards as *taking*—leading both parties to accentuate the yellow cards as the salient reference resource.

Procedure and independent variable. Upon obtaining permissions from parents, teachers, principal, ethics commission and data protection officer, the study was conducted during class time. Each negotiation dyad was instructed and observed by a trained observer, who ensured that children paid attention and understood the negotiation task. Due to this elaborate procedure, fourteen observers were trained prior to data collection and recorded children's concessions over the course of negotiations. All observers were Master students of Psychology at the University of {Institution) and had passed a two-semester class on behavior observation prior to data collection. We developed a negotiation task based on a trading game familiar to most children aged 9 to 11. Children negotiated the transaction of fantasy cards similar to the collector-card game *Pokemon*. We used simple rules that could be learned easily by fourth-graders. Each child started with a set of twelve yellow or blue cards depicting different fantasy figures (e.g., witch, wizard). Two dimensions "rarity" and "magical power" assigned specific values to each card. Both sets of yellow and blue cards had a total value of 72 points.

Two procedural-framing conditions were manipulated: In one condition, the negotiation pair was led to focus on the blue cards as the reference resource (owners of blue cards: "I'll give you X of my blue cards for Y of your yellow cards"; owners of yellow cards: "I'll take X of your blue cards for Y of my yellow cards"). In the second condition, these framing instructions were reversed so that proposals accentuated the yellow cards as the reference resource. Following instructions, children completed a set of test trials to gain experience with the negotiation. The trained observers tested whether participants had understood the task by presenting an exemplary negotiation proposal, for which students had to indicate the value this proposal implied for them. Negotiations were limited to 20 minutes—pretests had indicated this to be sufficient for reaching an agreement. Subsequent to negotiations, children filled out a short questionnaire and received a piece of candy as remuneration.

Dependent variables. We assessed children's individual negotiation outcomes (ranging from 0 to 144 points) and their concessions over the course of negotiations. For the latter measure, observers recorded in each round the total value of fantasy cards that children proposed to trade. From these proposals, a concession score was computed, indicating the extent to which children conceded per proposal. Specifically, concession scores capture the amount of points a student yielded to the counterpart per negotiation proposal. Lower scores reflect a stronger concession aversion. For instance, a concession score of 0.50 indicates that a

student on average conceded fantasy cards worth half a point to the counterpart per negotiation proposal. Higher scores indicate larger concessions – that is a less pronounced concession aversion. Finally, a questionnaire assessed students' perceptions of the transaction as a manipulation-check (i.e., "In the negotiation, I told the other child which cards I wanted to give"; "In the negotiation, I told the other child which cards I wanted to take"). Items were accompanied by five-point Likert scales ranging from 1 (*do not agree*) to 5 (*strongly agree*).

Predictions. Based on the non-interactive Studies 1a-2b, we predicted that the child whose cards were accentuated by our framing manipulations would reveal a stronger concession aversion and secure higher outcomes than the counterpart. These predictions are reflected in an interaction effect of procedural framing and negotiation role: Owners of yellow cards should be more concession averse and achieve higher individual outcomes in negotiations with yellow cards as reference resource than in negotiations with blue cards as the reference resources. Conversely, owners of blue cards should be more concession averse and achieve higher individual outcomes when blue cards and not yellow cards were the salient reference resource. We predicted that the procedural-framing effect on negotiation outcomes would be mediated by parties' differences in concession making. Specifically, framing a child's cards as the reference resource should lower its willingness to concede, which in turn should account for a higher number of individual points secured at the end of negotiations.

Results

Subsequent statistical analyses used the degrees of freedom related to the number of negotiation pairs in order to account for the non-independence of data within dyads (Kenny, Kashy, & Cook, 2006). In the analyses of dyadic data, two alternative statistical approaches can account for the non-interdependence of data. First, data can be analyzed with a multi-level approach that accounts for the nesting of individual data within pairs (Kenny et al., 2006). Alternatively, non-independent dyadic data can be analyzed with repeated-measure designs. Kenny and colleagues have suggested that, "dyadic data involving within-dyads independent variables fit well within the framework of traditional repeated measures designs. Whereas in traditional repeated measures designs the same person is measured at two (or more) times, with dyads the same dyad is measured twice, once for each member. Thus, statistics developed to analyze repeated measures data can be used for dyads" (Kenny et al., 2006, p.62). As the statistical analyses of all subsequent negotiation studies revealed the same effects for multi-level and

repeated-measure analyses, we will follow Kenny et al.'s suggestion (2006) and report the repeated-measure analyses only.

Manipulation check. Analyses on the two procedural-frame manipulation check items suggest that the manipulation was successful: A 2 (Procedural Frame) x 2 (Item) ANOVA with repeated measure on the latter factor revealed the predicted interaction effect, $F(1,24)=58.86$, $p<.001$, $\eta_p^2 = .71$, ($F=.32$, $p=.57$, and $F=1.58$, $p=.22$ for Item and Frame main effects, respectively). Parties gave more affirmative answers to the 'give' item when they were led to focus on own cards as reference resource ($M=4.15$, $SD=0.80$) rather than the counterpart's cards ($M=1.88$, $SD=.77$), $t(24)=7.38$ $p<.01$. Conversely, parties led to focus on the counterpart's cards ($M=4.12$, $SD=.68$) gave more affirmative answers to the 'take' item than parties focusing on own cards ($M=2.23$, $SD=.90$), $t(24)=6.01$ $p<.01$.

Negotiation Outcomes. A 2 (Procedural Frame) x 2 (Role) ANOVA with repeated measures on the latter factor revealed a marginal interaction effect only, $F(1,24)=2.95$, $p=.09$, $\eta_p^2=.11$, other Fs$<.46$, ps$>.50$ (Figure 1, Top Panel). Children focusing on their own cards as reference resource (i.e., give-frame) achieved higher outcomes ($M=76.08$, $SD=9.23$ and $M=73.78$, $SD=8.10$ for yellow and blue card owners, respectively) than children focusing on the counterpart's cards as reference resource (i.e., take frame; $M=67.92$, $SD=9.23$ and $M=70.22$, $SD=8.10$ for yellow and blue card owners, respectively), $t(24)=1.72$, $p=.046$.

Negotiation behaviors. In distributive zero-sum negotiations, differences in individual negotiation outcomes are either due to parties' opening proposals (Loschelder, Stuppi, & Trötschel, 2013; Loschelder, Swaab, Trötschel, & Galinsky, 2014) or their concession making (Kahneman, 1992; Pruitt, 1983). Accordingly, we analyzed parties' opening proposals as well as their concession rates over the course of negotiations.

Opening Proposals. A 2 (Procedural Frame) x 2 (Role) ANOVA with repeated measures on the latter factor revealed a marginal main effect for *Role*, $F(1,24)=4.18$, $p=.06$, $\eta_p^2=.14$, and a marginal interaction effect, $F(1,24)=3.05$, $p=.093$, $\eta_p^2=.11$ (main effect Framing: $F=.02$, $p=.97$). On closer inspection, yellow-card owners in the condition of blue cards as accentuated reference resource made more self-serving opening proposals than participants in the other three conditions, $t(24)=1.97$, $p<.05$. As no interaction effects on opening proposals emerged in any of the three subsequent studies, we refrain from speculating on this marginally significant effect and interpret it as a chance finding.

Concession Rate. A 2 (Procedural Frame) x 2 (Role) ANOVA revealed a marginal interaction effect only, $F(1,24)=3.67$, $p=.067$, $\eta_p^2=.13$ (Figure 1; Bottom Panel), while the main effect for Role and Frame did not reach significance ($F=.52$, $p=.48$, and $F=.41$, $p=.53$,

respectively). Across conditions, children focusing on their own cards as reference resource revealed a stronger concession aversion (*M*=.42, *SD*=.44 for blue card owners, and *M*=.74, *SD*=1.09 for yellow-card owners) than children focusing on the counterpart's cards (*M*=1.05, *SD*=1.15 for yellow-card owners, and *M*=1.02, *SD*=.43 for blue-card owners), *t*(26)=1.93, *p*=.033.

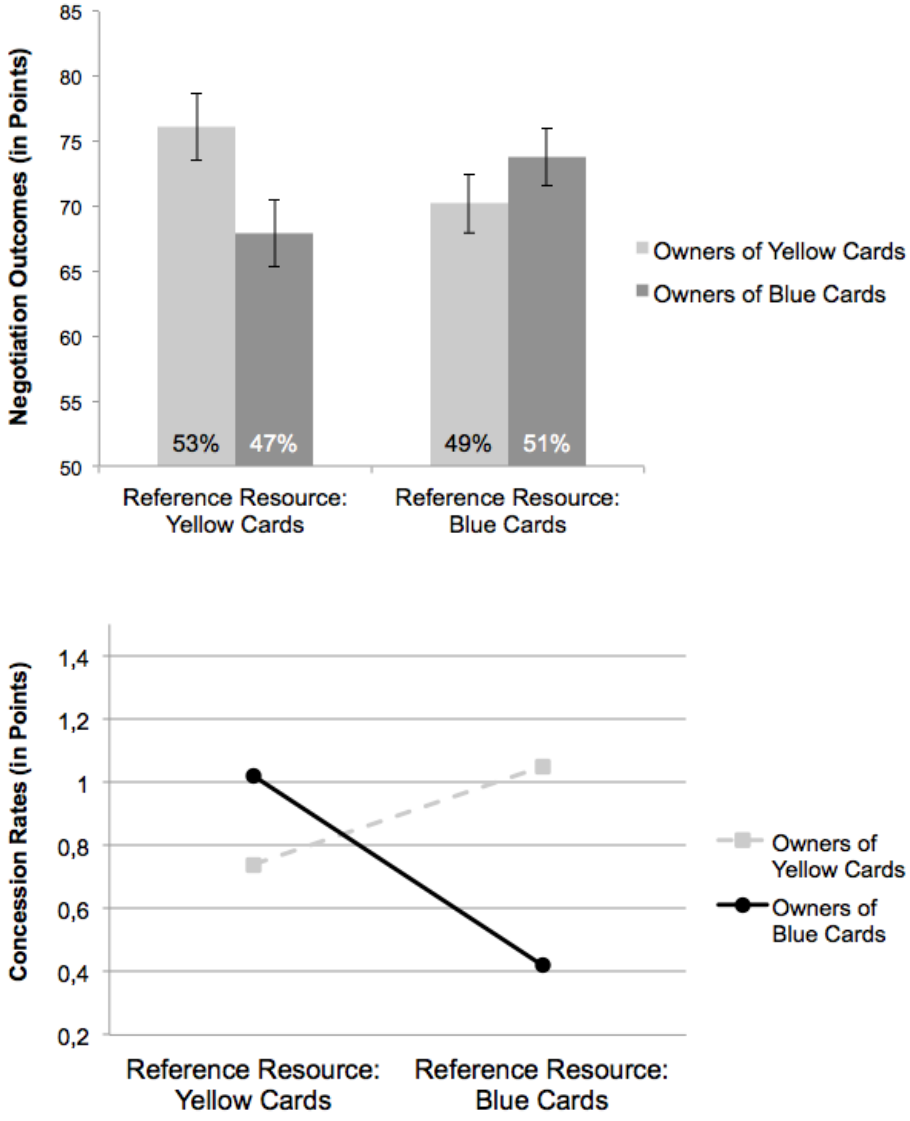


Figure 1. Study 3: Negotiation Outcomes in points and the average percentage of total profits (144 points) as a function of reference resource and negotiators' role. Error bars indicate ±1 SEM (Top). Concession rates as a function of reference resource and negotiators' role (Bottom). Lower values indicate that negotiators conceded less per proposal, reflecting a higher concession aversion.

Mediation Analysis. To test our hypothesis regarding the mediating role of concession aversion on outcomes, we conducted mediation analysis using bootstrapping procedures as suggested by Preacher and Hayes (2008). As outcomes in zero-sum negotiations are affected by parties' opening proposals and concession making, we entered the differences in their opening proposals and concession rates as multiple mediators into the analysis. The procedural frame factor was entered as the predictor and differences between parties' outcomes were entered as the dependent variable. The bootstrap results indicate that the indirect effect through concession rates was significantly different from 0, with a point estimate of 10.83 and a $BCaCI_{90\%}$ (bias-corrected and accelerated confidence interval; see Efron, 1987) of .86 to 19.16. In contrast, the indirect effect through opening proposals did not reach significance, with a point estimate of -1.58 and a $BCaCI_{90\%}$ of -5.26 to .24. In total, this finding suggests that procedural framing affected children's concession aversion, which in turn influenced the profit they secured at the end of negotiations.

Discussion

Study 3 offers initial support for the prediction that procedural frames affect parties' concessions and ultimately impact the quality of individual outcomes. The data complement the intrapersonal findings from Study 1a-2b in an interpersonal negotiation setting: Negotiators perceive higher levels of concession aversion and concede at a lower rate throughout the negotiation when framing manipulations accentuated own rather than the counterpart's resources. As the present study was conducted with fourth graders who lack considerable negotiation experience, it appears that procedural-framing effects play a rather basic and fundamental role in negotiations.

Study 3 has some shortcomings that were addressed in subsequent studies. Specifically, due to the time-consuming data collection with fourteen observers, only a limited number of negotiations could be conducted (i.e., two classes with 26 dyads, 13 pairs of children in each cell). Given the rather small sample size, statistical power was inevitably limited. Moreover, one may criticize that the focus on fourth graders reflects a specific context from which the observed effects cannot be generalized to more formal negotiations. Hence, subsequent studies were conducted to explore the generalizability of the observed effects: The following two studies concentrated on buyers vs. sellers (Neale et al., 1987). We predicted that procedural frames impact parties' concession aversion irrespective of their role. In addition, we

manipulated procedural frames in different ways: In Study 4a, parties were asked to frame the transaction as either offering own vs. requesting the counterpart's resource (see Study 1a and 1b). In Study 4b, we refrained from such a semantic manipulation (i.e., the terms '*offer*' and '*request*'); we instead varied structural features of the negotiation context, allowing for an indirect manipulation of procedural frames without semantic instructions.

Study 4a

The major goal of Study 4a was to replicate the findings of Study 3 in a buyer-seller negotiation. Procedural frames were induced by means of semantic manipulations (i.e., framing the transaction as offers vs. requests). Negotiators within each dyad focused on the same reference resource – either the buyer's money or the seller's commodity. For this purpose, one party was asked to offer their own resources, whereas the counterpart was asked to request the counterpart's resource. Thus, pairs of negotiators were led to focus on (a) the resource owned by the buyer—buyers offered and sellers requested money for a commodity, or (b) the resource owned by the seller—sellers offered and buyers requested the commodity for money.

Method

Participants and design. Eighty students (M_{age}=22.14; 52 female) with different academic majors (e.g., business administration, law) were recruited from a subject pool at the University of {Institution} and received €8.00 as remuneration. Data collection was terminated at 20 observations per cell. Four dyads came to an agreement that incurred a monetary loss for one of the two parties – the outcome would have forced these students to pay for participating in the experiment, thus suggesting they did not understand the logic of the payoff structure. Analyses are based on the remaining seventy-two participants. Participants' role was varied as an independent variable within dyads (buyer vs. seller). In addition, we realized two procedural-framing conditions in that (a) sellers making requests were paired with buyers making offers, or (b) sellers making offers were paired with buyers making requests. In all, Study 3 followed a 2 (Role) x 2 (Procedural Frame) design with repeated measures on the first factor.

Procedure and negotiation task. We developed a buyer-seller task that realized a positive bargaining zone in that parties made profit in the transaction of money vs.

commodities. The task also realized a symmetric, distributive pay-off structure – parties could earn the same level of individual profits. To increase the realism of the negotiation, parties were asked to invest part of their remuneration payment in the negotiation. Upon arrival at the laboratory, participants received all instructions for the face-to-face negotiations via written booklets. They were randomly assigned to an experimental condition, a counterpart, and the role of buyer or seller. Participants were told to negotiate the price and the quantity of commodities (i.e., oranges) with a counterpart. To increase the experimental realism, a basket with oranges was placed on the sellers' side of the bargaining table. Sellers were informed that these oranges would be given to them for €0.20 per orange (i.e., they could invest between €0.20 for one orange and €1.80 for nine oranges). Sellers could turn oranges into profit by selling them to buyers. Oranges could be sold on a price-scale ranging from €1.00 to €2.80 with incremental steps of €0.20. Buyers could make profit with the oranges by trading juice for cash. For this purpose, they were provided with a juice squeezer. Buyers could earn between €2.00 for juice from one orange and €3.60 for juice from nine oranges (incremental steps of €0.20 per unit of juice). To sum up, parties were told that they could sell/buy between one (minimum) and nine (maximum quantity) oranges on a price-scale ranging from €1.00 (minimum price) to €2.80 (maximum price).

As Figure 2 indicates, a seller could, for instance, make a profit of €1.20 by selling 6 oranges for a price of €2.40 (€2.40 selling price minus €1.20 spent on 6 oranges). In this example, the buyer would leave the bargaining table with €0.60 (€3.00 for juice from 6 oranges minus the €2.40 spent on 6 oranges). In another example (Figure 2, bottom panel), a buyer makes €1.40 by buying 4 oranges for €1.20. This agreement leaves the seller with €0.40. In any case of an agreement, the total profit per pair summed up to €1.80.

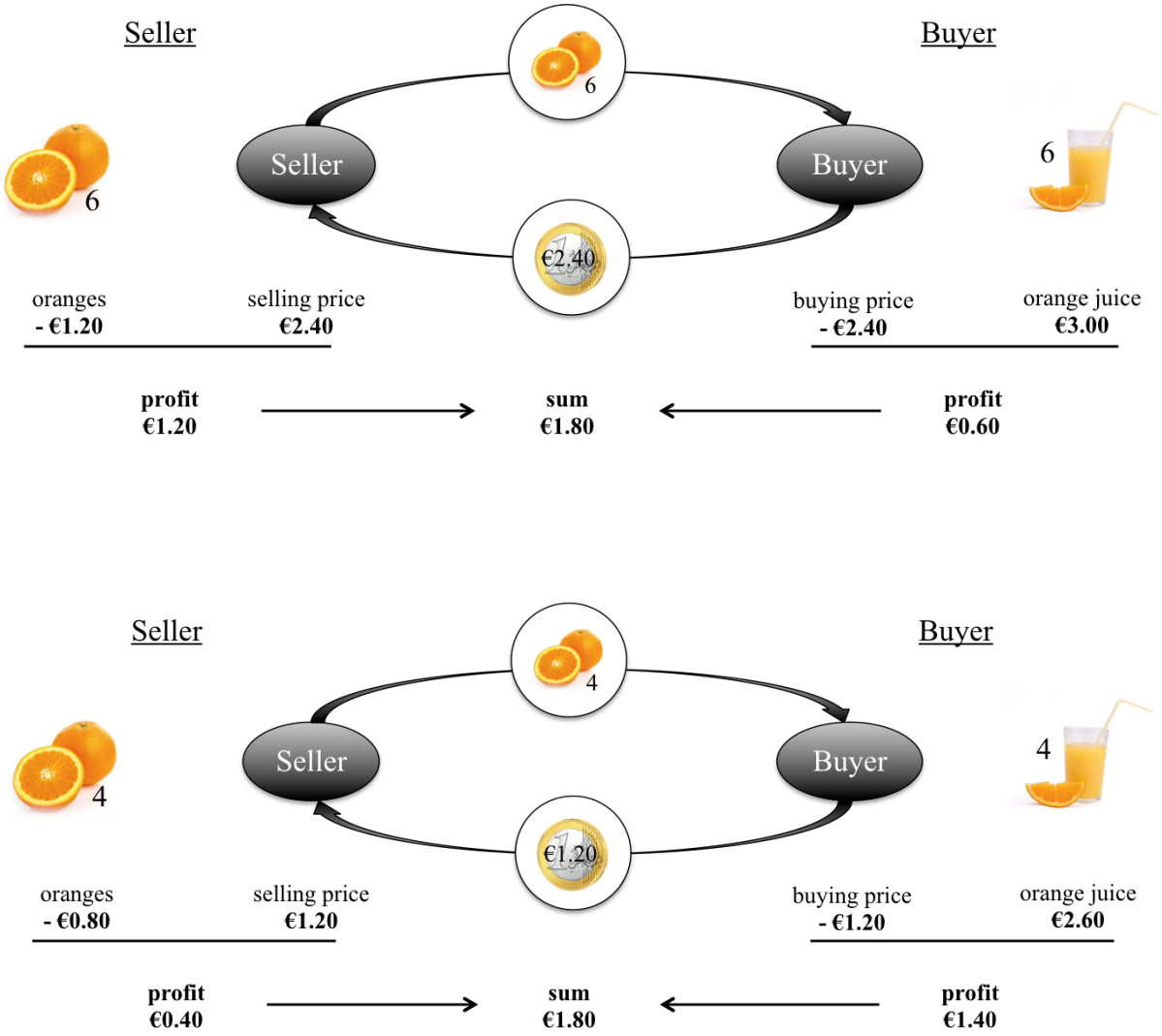


Figure 2. Example 1 (Top) and Example 2 (Bottom) illustrate the negotiation task in Study 4a.

Experimental manipulations. In addition to participant's role (buyer vs. seller), we varied the procedural framing of the transaction: In a first condition, sellers were instructed to make offers while buyers were instructed to propose requests. In a second condition, sellers were instructed to make requests, while buyers proposed offers. To make the procedural framing salient throughout negotiations, parties were asked to continuously record their proposals on a negotiation sheet. Sellers recorded either their request ("I request a price of €___ for ___ oranges") or their offer ("I offer ___ oranges for a price of €___"). Respectively, buyers recorded either their offer ("I offer a price of €___ for ___ oranges") or their request ("I request ___ oranges for a price of €___"). These framing combinations accentuate different reference

resources: In the money-condition, parties were led to focus on the buyers' resource (buyers offered and sellers requested money for oranges). In the orange-condition, parties focused on the sellers' resource (sellers offered and buyers requested oranges for money). Participants were asked to write down their opening proposals prior to negotiations. Subsequently, parties recorded each proposal on the negotiation sheet and read it out to the other party. Negotiations were limited to 15 minutes—a length of time pilot tests had shown to be sufficient for reaching an agreement.

Dependent Variables. To check whether the manipulation of procedural frames was successful, participants were asked whether they had framed their proposals as offers ("In the previous negotiation I predominantly sent offers to the other party") or requests ("In the previous negotiation I predominantly sent requests to the other party"). Items were accompanied by seven-point scales ranging from 1 (*do not agree*) to 7 (*strongly agree)*. As major dependent variables, we assessed parties' individual profits, their opening proposals, and their resistance to concede over the negotiation process. With respect to the latter measure, a concession rate score was computed (see Study 3), indicating the extent to which parties conceded per proposal. For instance, a score of 0.10 indicates that a party conceded on average €0.10 per proposal. Again, lower scores are indicative of a stronger concession aversion. We predicted that parties focusing on their own resources (offer-frame) would show a stronger concession aversion and achieve better individual outcomes than parties focusing on their counterpart's resource (request-frame). We predicted that the procedural-framing effect on individual outcomes would be mediated by differences in negotiators' concession rates.

Results

All negotiation pairs achieved an agreement. Statistical analyses used the degrees of freedom related to the number of dyads in order to account for the non-independence of data within pairs of negotiators (Kenny et al., 2006).

Manipulation Check. Analyses on the two procedural-frame manipulation check items suggested that the manipulation was successful: A 2 (Procedural Frame) x 2 (Item) ANOVA with repeated measure on the latter factor revealed the predicted interaction effect, $F(1,34)=9.01$, $p<.01$, $\eta_p^2=.21$, ($F=0.83$, $p=.37$, and $F=0.29$, $p=.59$, for Item and Frame main effects, respectively). Parties gave more affirmative answers to the "offer" item when framing proposals as offers ($M=4.22$, $SD=1.28$) rather than requests ($M=3.58$, $SD=1.25$), $t(34)=2.08$

$p<.05$. Conversely, parties framing requests gave more affirmative answers to the "request" item ($M=4.77$, $SD=1.26$) than parties making offers ($M=3.63$, $SD=1.37$), $t(34)=2.70$ $p<.01$.

Outcome profits. A 2 (Procedural Frame) x 2 (Role) ANOVA with repeated measures on the latter factor revealed a main effect for Role, $F(1,34)=8.69$, $p<.01$, $\eta_p^2=.20$, and the predicted interaction effect, $F(1,34)=4.55$, $p=.04$, $\eta_p^2=.12$ (Figure 3, Top Panel). Parties making offers achieved higher outcomes ($M=1.02$€, $SD=.34$) than parties making requests ($M=0.78$€, $SD=.35$), $t(34)=2.13$, $p=.04$. This effect emerged regardless of parties' role as buyer or seller. Specifically, sellers offering their oranges left the bargaining table with more individual profit ($M=0.86$€, $SD=.39$) than sellers requesting money ($M=0.62$€, $SD=.26$), $t(34)=2.13$, $p<.05$. The analysis for buyers' completely paralleled the effects for sellers, as the sum of profits within dyads equaled 1.80€: Buyers offering money attained higher profits, ($M=1.18$€, $SD=.26$) than buyers requesting oranges ($M=0.94$€, $SD=.39$), $t(34)=2.13$, $p<.05$. To test for the well-established role effect of buyers outperforming sellers, individual profits were also tested against the compromise (€0.90). Averaged over both framing conditions sellers achieved lower profits ($M=0.74$, $SD=.34$) and buyers achieved higher profits ($M=1.06$, $SD=.34$) than the compromise point (€0.90), $t(36)=2.81$, $p=.008$. However, this effect was mainly due to the condition in which buyers made offers ($M=1.18$) and sellers made requests ($M=0.62$), $t(18)=4.61$, $p<.001$. In contrast, parties' profits did *not* differ from the compromise when buyers made requests ($M=0.94$) and sellers made offers ($M=0.86$), $t(18)=.49$, *ns.*

Negotiation behaviors. Again, we analyzed the quality of parties' opening proposals as well as their concession rates over the course of negotiations.

Opening Proposals. A 2 (Procedural Frame) x 2 (Role) ANOVA with repeated measures on the latter factor revealed a main effect for role, $F(1,34)=5.34$, $p=.027$, $\eta_p^2=.14$, and a marginal main effect for procedural frame, $F(1,34)=3.61$, $p=.066$, $\eta_p^2=.010$. The interaction effect did not reach significance, $F=0.84$, $p=.365$. Buyers made opening proposals that were more self-serving in terms of individual profits ($M=1.75$€, $SD=.54$) than sellers ($M=1.41$€, $SD=.60$). Moreover, parties proposing offers ($M=1.69$€, $SD=.39$) tended to open more self-servingly than parties proposing requests ($M=1.58$€, $SD=.35$).

Concession rate. A 2 (Procedural Frame) x 2 (Role) ANOVA on concession rates revealed the predicted interaction effect, $F(1,34)=7.02$, $p=.012$, $\eta_p^2=.17$ (Figure 3; Bottom Panel). Both main effects were not significant, ($F=0.005$, $p=.944$ for Role, and $F=1.40$, $p=.244$ for Framing). Parties proposing offers made smaller concessions ($M=0.08$€, $SD=.25$) than parties making requests ($M=0.16$€, $SD=.22$), $t(34)=2.64$, $p<.01$. This effect emerged irrespective of parties' role as buyer or seller. Specifically, when money was the salient

reference resource, offering buyers made smaller concessions (M=0.10€, SD=.027) than requesting sellers (M=0.17€, SD=.022), $t(34)=1.82$, $p<.05$. Accordingly, when oranges were the salient reference resource, offering sellers made smaller concessions (M=0.07€, SD=.027) than requesting buyers (M=0.14€, SD=.022), $t(34)=1.83$, $p<.05$.

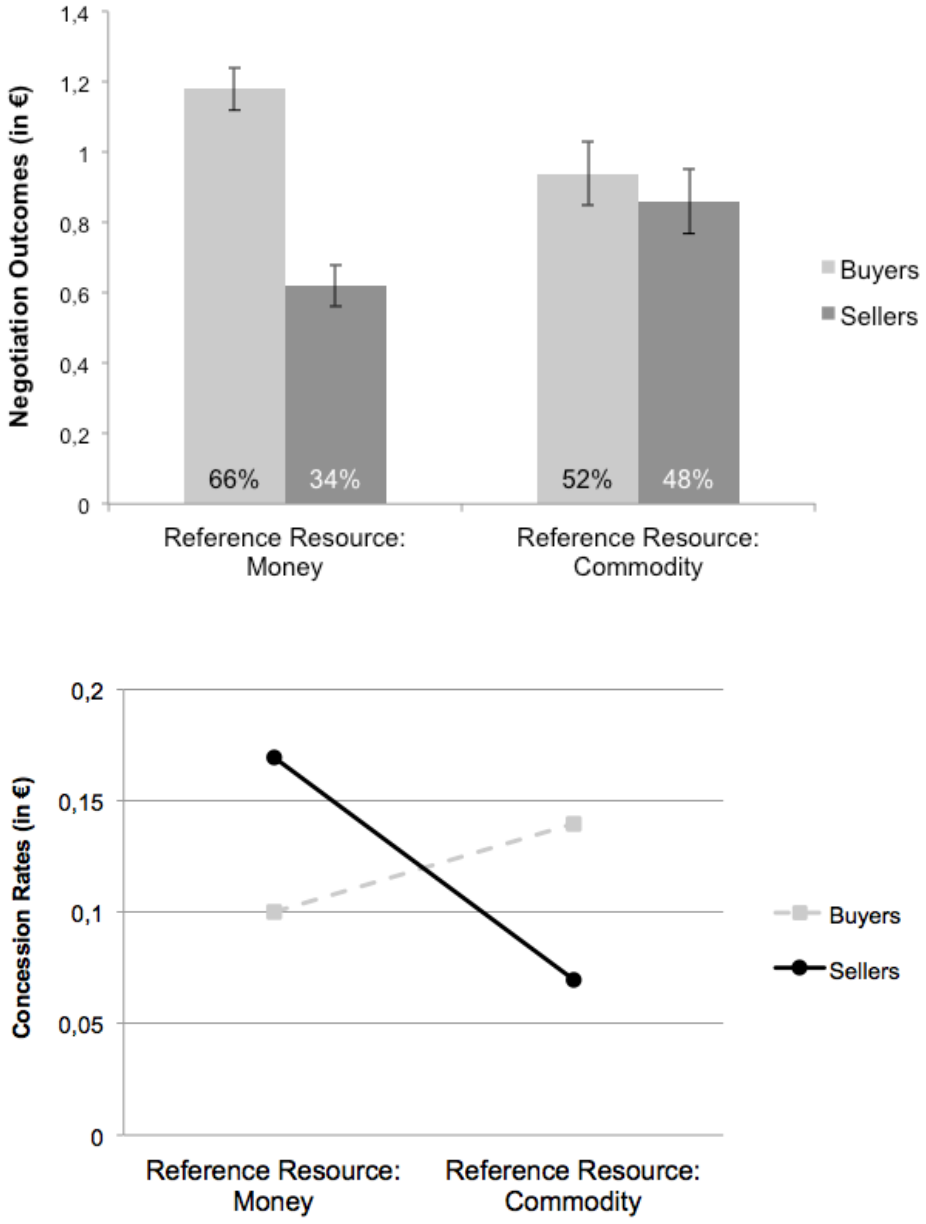


Figure 3. Study 4a: Negotiation Outcomes in € and the average percentage of total profits (€ 1.80) as a function of reference resource and negotiators' role. Error bars indicate ±1 SEM (Top). Concession rates in € as a function of reference resource and negotiators' role (Bottom). Lower values indicate that negotiators conceded *less* per proposal, reflecting a *higher* concession aversion.

Mediation analyses. We tested whether the procedural-framing effect on individual profits could be explained by differences in (a) opening proposals, or (b) concession rates in the negotiation process. The bootstrap results indicated that the indirect effect through concession rates was significantly different from 0, with a point estimate of .31 and a BCa $CI_{95\%}$ of .08 to .56, suggesting that differences in concession rates qualified as a mediator. In contrast, the indirect effects through opening proposals did not reach significance, with a point estimate of .16 and a BCa $CI_{95\%}$ of -.15 to .52 (the confidence interval includes 0). In line with our assumptions, procedural frames affected negotiators' resistance to concede, which in turn led to the observed differences in individual outcomes.

Discussion

Study 4a corroborates the prediction that procedural frames impact parties' behaviors and outcomes not only in negotiations on non-monetary resources, such as collector's cards, but also in a buyer-seller setting (Neale et al., 1987). Buyers and sellers made lower concessions and achieved higher individual outcomes when offering rather than requesting resources. Mediation analyses further showed the procedural-framing effects on outcomes could be traced back to differences in negotiators' concession making. The present results extend the findings of Study 3 and illustrate the crucial role of procedural frames in the context of buyer-seller negotiations.

With respect to all prior studies, one may criticize that procedural frames have only been induced by means of semantic instructions – that is to "offer/request" or to "give/take" resources. To counter this criticism and to illustrate that procedural frames are not inevitably linked to certain semantics, a seventh study (Study 4b) was conducted. We refrained from semantic instructions and instead induced procedural frames indirectly through structural features of the negotiation task.

Study 4b

Neale and colleagues (1987) have pointed to an important aspect of buyer-seller negotiations: parties commonly exchange concessions on the price-dimension – buyers propose offers and

sellers propose requests on the buyer's resource money. Consequently, buyers are assumed to perceive a higher concession aversion than sellers (Neale et al., 1987, p. 231). However, buyers and sellers can also exchange concessions on the commodity dimension. In this respect, it is important to note that negotiation resources can either be *fixed* or *flexible*. Flexible resources vary in quantity or quality. For instance, the buyer's capital in a price-negotiation is typically a flexible resource, allowing negotiators to exchange concessions on the price-dimension. In contrast, resources can also be fixed. For instance, parties may negotiate the price of an immutable commodity that can only be purchased as a whole (e.g., a used car). When negotiating the price of an immutable product, parties cannot increase or reduce concessions on the fixed resource.

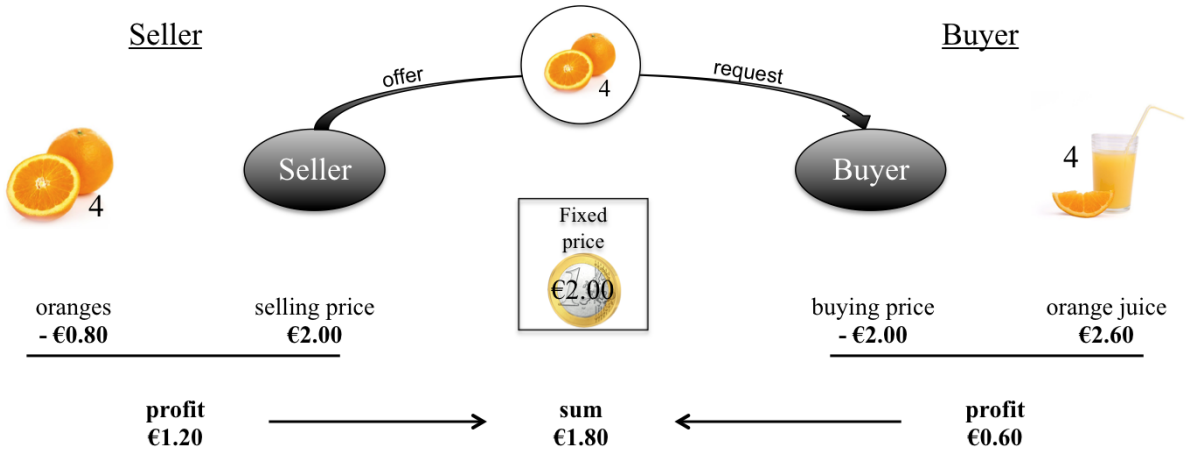
Following this reasoning, Study 4b induced procedural frames indirectly by varying the flexibility of the seller's resource (commodity) or the buyer's resource (money). Negotiating a fixed commodity leads parties to exchange concession on the price dimension while moving towards an agreement. Buyers offer money to sellers, sellers request money from buyers. In other words, a fixed commodity leads parties to focus on the buyers' money as the reference resource. Conversely, a fixed price leads parties to exchange concessions on the sellers' commodity: Sellers offer and buyers request a certain quantity of the commodity. Fixing the price thus highlights the sellers' commodity as the salient reference resource of a transaction.

Method

Participants and design. Eighty-eight students (M_{age}=21.70; 64 female) with different academic majors (e.g., business administration, law) were recruited from a subject pool at the University of {Institution} and received €8.00 for remuneration. Data collection was terminated when no more students signed up and a minimum of 20 observations per cell had been reached. Participants' role (buyer vs. seller) was manipulated as an independent variable. In addition, we varied the flexibility of resources. In the *price-negotiation* condition, we fixed the commodity (the number of oranges was non-negotiable), leaving the price as the predominant reference resource. In the *commodity-negotiation* condition, we fixed the price as non-negotiable, leaving the number of oranges as the predominant issue (commodity as the reference resource). In all, Study 4b followed a 2 (*Role:* buyer vs. seller) x 2 (*Procedural Frame*: price vs. commodity negotiation) design with repeated measures on the first factor.

Procedure and independent variables. We slightly adapted the buyer-seller paradigm from Study 4a. Again, both parties were to make profit from the transaction (a total of €1.80) in a distributive, symmetric negotiation. In contrast to Study 4a, participants negotiated either the number of oranges or the transaction price. In *commodity-negotiations*, the price of the transaction was fixed at €2.00 and parties negotiated only the number of oranges (i.e., oranges were the accentuated reference resource). Consequently, parties made profit depending on the number of oranges they agreed to buy/sell. Each party's profit varied between €0.00 (sellers giving away all oranges or buyers taking only one orange) and €1.80 (sellers giving away only one orange or buyers taking all oranges). As Figure 4 (top panel) illustrates, if negotiators agreed to buy/sell four oranges, for instance, the seller made €1.20 (€2.00 fixed transaction price minus €0.80 spent on four oranges), which leaves the buyer with €0.60 (€2.60 for juice from four oranges minus €2.00 transaction price).

In *price-negotiations*, the number of oranges was fixed at five and parties negotiated the price only. Each party's profit again varied between €0.00 to €1.80. For instance, (Figure 4, bottom panel), when negotiators agreed on a price of €1.60, the seller made €0.60 (€1.60 transaction price minus €1.00 spent on five oranges), leaving the buyer with €1.20 (€2.80 for juice from five oranges minus €1.60 transaction price). As parties negotiated the transaction price, buyers offered money to the seller, while sellers requested a price from the buyer (money as the reference resource). Importantly, effects are due to parties' focus on buyers' money in price negotiations vs. sellers' oranges in commodity negotiations.



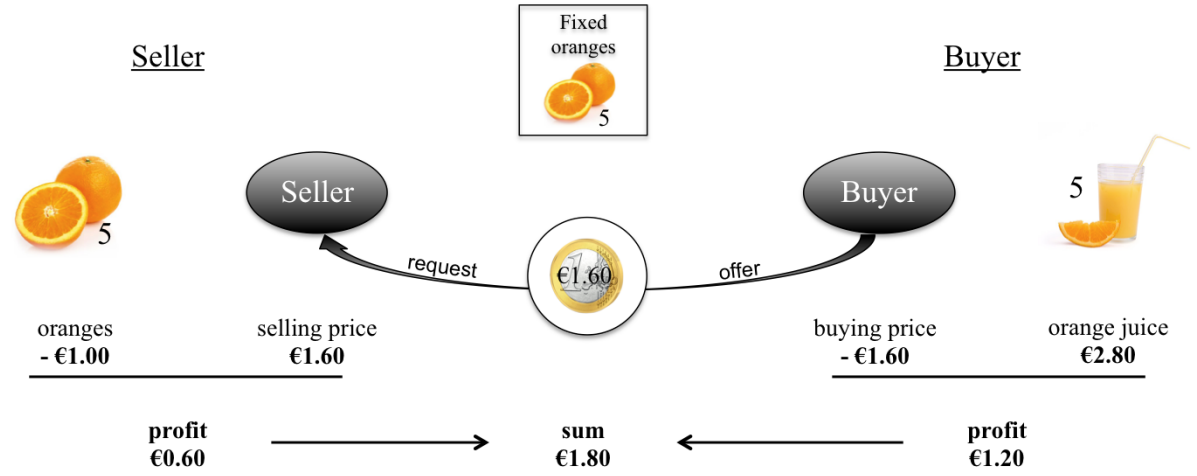


Figure 4. Example 3 (Top) illustrates a commodity-negotiation with a fixed transaction price of €2.00 and Example 4 (Bottom) illustrates a price-negotiation with the number of oranges fixed at five (Study 4b).

Dependent variables. To check for the manipulation of accentuated reference resources, participants were asked to indicate whether they had mainly focused on the money or the quantity of oranges during the negotiation ("In the previous negotiation, I predominantly focused on (a) the transaction price, or (b) the number of oranges"). The quality of outcomes, parties' opening proposals and concession rates were assessed as dependent measures (Study 4a). We predicted that sellers in commodity-negotiations would show a stronger concession aversion and achieve higher individual outcomes than in price negotiations, while buyers were predicted to be more concession averse and to achieve higher outcomes in price- rather than

commodity negotiations. Again, the difference in individual profits should be accounted for by differences in parties' concession aversion.

Results

All pairs achieved an agreement within the given negotiation time. Statistical analyses again used the degrees of freedom related to the number of negotiation pairs.

Manipulation Check. In accordance with the manipulation, 36 out of 44 parties (17 sellers & 19 buyers) in the price condition stated to have predominantly focused on the price, whereas 36 out of 44 parties (19 sellers & 17 buyers) in the commodity condition reported to have predominantly focused on the number of oranges, χ^2=35.64, p<.001.

Outcome profits. A 2 (Procedural Frame: *commodity* vs. *price negotiation*) x 2 (Role: *buyer* vs. *seller*) ANOVA with repeated measures on the latter factor revealed a main effect for Role $F(1,42)=37.34$, $p<.001$, $\eta_p^2=.47$, and the predicted interaction effect, $F(1,42)=5.41$, $p=.02$, $\eta_p^2=.11$ (Figure 5; Top Panel). Expectedly, sellers achieved higher individual profits in commodity negotiations (M=0.78€, SD=.17) than in price negotiations (M=0.63€, SD=.23), $t(42)=2.43$, $p=.019$. As the total profit for the negotiation pair equaled €1.80, the analysis for buyers matched the effects for sellers: Buyers attained more profit in price negotiations (M=1.17€, SD=.23) than in commodity negotiations (M=1.02€, SD=.17; Figure 5). We again analyzed whether buyers outperformed sellers: As evident in the Role effect noted above, sellers achieved lower profits (M=0.70€, SD=.21) than buyers (M=1.10€, SD=.21) averaged over both framing conditions. Importantly, this buyer advantage was less pronounced in commodity negotiations (M_{seller}=0.78€ vs. M_{buyer}=1.02), $t(21)=3.19$, $p<.01$, than in price-negotiations (M_{seller}=0.63€ vs. M_{buyer}=1.17), $t(21)=5.23$, $p<.001$.

Negotiation behaviors. We analyzed the quality of parties' opening proposals as well as their concession rates.

Opening proposal. A 2 (Procedural Frame) x 2 (Role) ANOVA with repeated measures on the latter factor revealed a main effect for Role, $F(1,42)=55.33$, $p<.001$, $\eta_p^2=.57$. All other effects were not significant, (F=0.90, p=.348 for Framing, and F=0.055, p=.815 for the interaction). Buyers made more self-serving opening proposals (M=1.63, SD=.18) than sellers (M=1.20, SD=.35).

Concession rate. Analyses on negotiators' concessions per proposal revealed the predicted interaction effect between procedural framing and role, $F(1,42)=8.16$, $p=.007$,

η_p^2=.16 (Figure 5; Bottom Panel). All other effects were not significant, (F=0.109, p=.743 for Role, and F=0.202, p=.656 for Framing). Contrast analyses showed that sellers revealed lower concession rates in commodity negotiations (M=0.08€, SD=.064) than in price negotiations (M=0.13€, SD=.09), t(42)=1.64, p=.054. In contrast, buyers revealed lower concession rates in price negotiations (M=0.09€, SD=.042) than in commodity negotiations (M=0.12€, SD=.049), t(42)=2.26, p<.05. Viewed from a different perspective, sellers in commodity-negotiations revealed lower concession rates than their counterparts in the role of buyers, t(42)=2.25, p<.05. Conversely, in price-negotiations buyers revealed lower concession rates than their counterparts in the role of sellers, t(42)=1.78, p<.05.

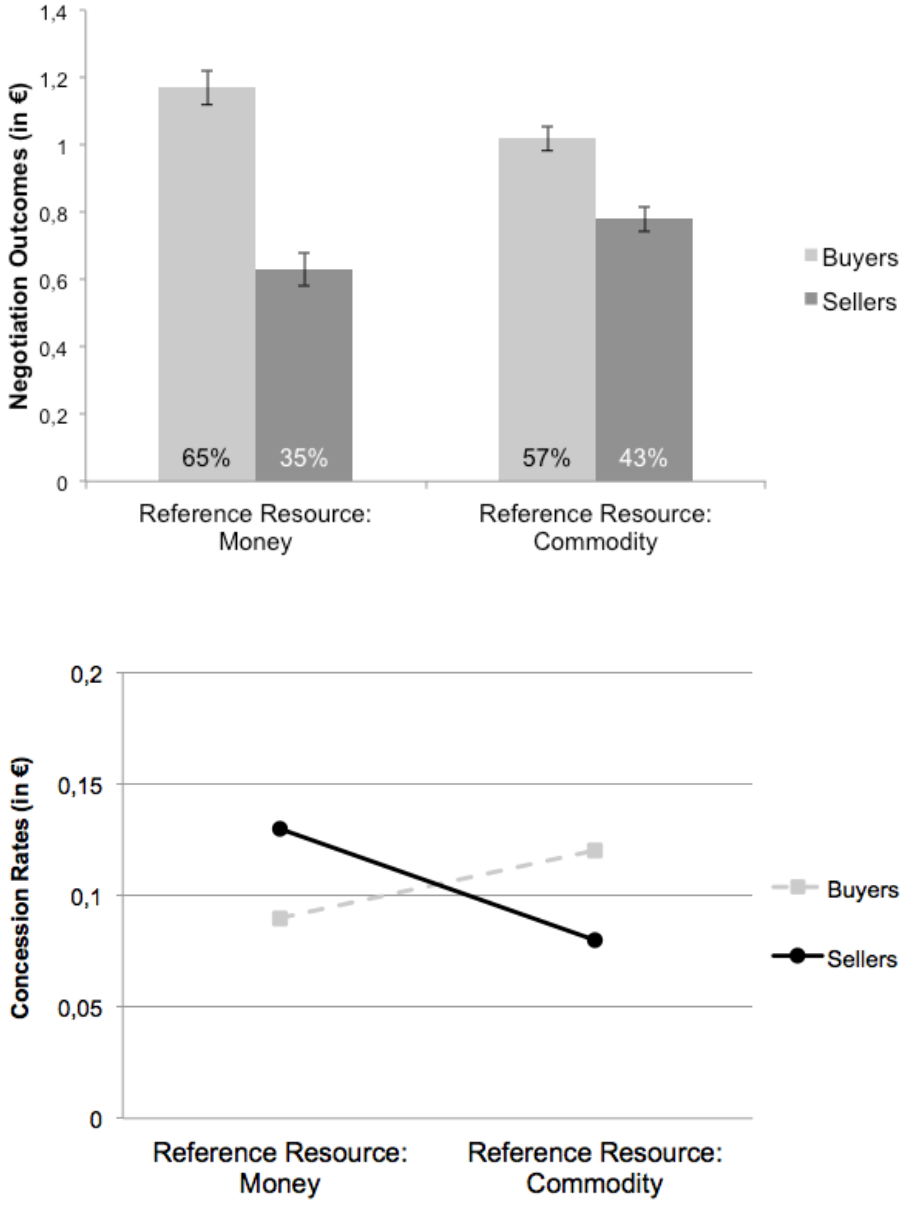


Figure 5. Study 4b: Negotiation Outcomes in € and the average percentage of total profits (€ 1.80) as a function of reference resource and negotiators' role. Error bars indicate ±1 SEM

(Top). Concession rates in € as a function of reference resource and negotiators' role (Bottom). Lower values indicate that negotiators conceded *less* per proposal, reflecting a *higher* concession aversion.

Mediation analyses. We tested whether the procedural-framing effect of commodity- vs. price-negotiations on individual profits could be explained in terms of differences in opening proposals or concession aversion (see Study 4a). The bootstrap results indicated that the indirect effect through concession rates was significantly different from 0, with a point estimate of .30 and a BCa $CI_{95\%}$ of .12 to .71, suggesting that differences in conceding qualified as a significant mediator. In contrast, the indirect effects through opening proposals did not reach significance with a point estimate of .02 and a BCa $CI_{95\%}$ of -.21 to .22. These findings show that sellers in commodity-negotiations and buyers in price-negotiations are more concession averse, which in turn led to the differences in individual profits at the end of negotiations.

Discussion

In contrast to the previous studies, we manipulated procedural frames in Study 4b indirectly through structural features of the negotiation task and not by means of semantic instructions. Negotiating either a fixed commodity or a fixed price led parties to exchange concessions on the remaining flexible resource. In line with our predictions, sellers in commodity- rather than price-negotiations revealed a stronger concession aversion and attained higher individual profits. In contrast, buyers revealed a higher resistance to concede and attained higher profits when money rather than the commodity was the salient reference resource.

The findings of Study 4b may shed further light on the contradicting findings from previous research on buyer-seller negotiations (Neale et al., 1987) and the endowment effect (Kahneman et al., 1990). Whereas negotiation research suggests that buyers have a stronger concession aversion than sellers (e.g., Bazerman et al., 1985; Huber & Neale, 1986; Neale et al., 1987), research on the endowment effect suggests the opposite, with sellers being less willing to make concessions than buyers (Kahneman et al., 1990; Carmon & Ariely, 2000). Our findings speak to the different structural frames that may have been realized in these two lines of research: While negotiation research has led participants to focus on the price dimension,

studies on the endowment effect focused participants on the commodity of the transaction (e.g., mugs or tickets).

Although the reported findings show that procedural frames affect both buyers and sellers, the classic buyer advantage was reduced but not eliminated. The remaining buyer advantage thus shows that in addition to procedural frames, other processes may still underlie the classic buyer-seller role effect. For instance, money is in itself a highly salient issue, an all-purpose social resource (Zhou, Vohs, & Baumeister, 2009; see also Lea & Webley, 2006; Furnham & Argyle, 1998) and fulfills basic human needs such as nourishment and shelter (e.g., Zhang, 2009). With this essential role in social life, it is not surprising that negotiators are strongly influenced by the resource money, which by definition lies in the hand of the buyer. While the dominant role of money might account for the remaining buyer-advantage in Study 4b, procedural framing nonetheless mitigated the classic role effect. Study 5 realized a negotiation scenario void of buyer-seller roles to test the procedural framing predictions without the strong impact of the buyer's resource money.

Our findings to this point suggest that procedural frames emerge due to the semantic framing of proposals or structural features of the negotiation. If our theoretical assumptions regarding reference resources hold true, procedural-framing effects should also emerge based on a rather minimalistic manipulation: In a final eighth study (Study 5), we solely manipulated the sequence of two flexible resources (i.e., "resource X for Y" vs. "resource Y for X") and predicted that parties would perceive a stronger loss of their own vs. gain of the counterpart's resources depending on the accentuated reference resource.

Study 5

Study 5 pursued three goals: First, we tested whether the sequence with which resources are addressed (own vs. counterpart's resource first) leads to similar procedural-framing effects as observed in the previous studies. We hypothesized that the party whose resource is addressed first would reveal a stronger concession aversion than their counterpart whose resource is not accentuated—irrespective of the semantic terms "to offer" vs. "to request". Second, we investigated another type of transaction negotiation void of buyer-seller roles (see Study 2a and 2b). Third, we aimed to shed additional light on the underlying psychological mechanism that accounts for the procedural-framing effects. We predicted that our manipulation of resource sequence leads parties whose resource is addressed first (1) to focus more strongly on own

resources, (2) to become more concession averse as a consequence of this focus, and (3) to claim more individual profits at the end of negotiations.

Method

Participants and design. Eighty students (M_{age}=24.65; 48 female) with different academic majors (e.g., business administration, law) were recruited from a subject pool at the University of {Institution} and received €7.00 as remuneration. Data collection was terminated at 20 observations per cell. The computer program did not record negotiation data for five dyads due to a network error. Analyses are thus based on the remaining seventy participants. Participants' role was varied as an independent variable within the dyad (manager X vs. Y; see Study 2a and 2b). Procedural frames were induced in the minimalistic way described above: Parties either made proposals starting with their own resource (own animals first) or starting with the counterpart's resource (other animals first). We used a computer-mediated negotiation task, which asked participants to exchange proposals on a pre-defined input mask, allowing for the manipulation of resource sequence: Within negotiation pairs, parties focused on the same reference resource: In one condition, both parties started with animals from zoo X (i.e., "___ animals from zoo X for ___ animals from zoo Y"), thereby accentuating animals from zoo X as the reference resource. In a second condition, parties started with animals from zoo Y, thus accentuating animals from zoo Y as the reference resource (i.e., "___ animals from zoo Y for ___ animals from zoo X"). Study 5 followed a 2 (*Role*: manager X vs. manager Y) x 2 (*Resource sequence*: zoo X first vs. zoo Y first) design with repeated measures on the first factor.

Procedure and negotiation task. As in the previous studies, we used a task with a positive bargaining zone and a symmetric pay-off structure. Participants were recruited in pairs and were randomly assigned to the role of manger X or Y. Upon arrival at the laboratory, participants were seated in a cubicle equipped with a networked computer and received all instructions on the screen. Participants were told that a recent breeding project had successfully produced offspring. To increase the complexity of the task used in Study 2a and 2b, the number of animals and the species of offspring was increased. Manager X owned seven tigers and eleven lamas, manager Y owned five lions and thirteen seals. Instructions explained that marketing directors had estimated monthly increases in visitors worth €200 (per tiger), €130 (per lama), €280 (per lion), and €110 (per seal). Participants were to exchange proposals over several rounds via customized negotiation software; each round involved a proposal and a

counterproposal. The participant making the first proposal was randomly selected. Negotiation time was not limited. All parties came to an agreement within ten rounds. After parties had reached an agreement they were ask to answer a short post-negotiation questionnaire.

Dependent Variables. We assessed parties' profits at the end of negotiations (ranging from €0 to €5,660 depending on the animals and the corresponding increase in visitors), their opening proposals, and their resistance to concede over the negotiation process indicated by the concession rate (see Study 3, 4a, and 4b). Again, lower scores on the concession index reflect a stronger resistance to concede. For instance, a score of 50 indicates that a party on average conceded animals worth €50 per proposal. In addition, we assessed items on the underlying psychological process: We asked participants whether they mainly perceived a loss of own animals ("When making a proposal I mainly focused on my own animals I was going to lose"; "When receiving a proposal I mainly focused on my own animals I was going to lose"; r=.58, p<.001) or a gain of the counterpart's animals ("When making a proposal I mainly focused on the counterpart's animals I was about to gain"; "When receiving a proposal I mainly focused the other party's animals I was about to gain"; r=.63, p<.001). Items were accompanied by seven-point scales ranging from 1 (*do not agree*) to 7 (*strongly agree*).

We predicted that negotiators would be more concession averse and achieve higher individual outcomes when their own animals rather than the counterpart's animals were addressed first. We further predicted that the framing effect on outcomes would be mediated by differences in parties' concession aversion. Expanding this mediation model, we predicted that differences in concession aversion would be due to negotiators' subjective loss perceptions in the negotiation process. The effect on parties' behavioral concession aversion (low concession rates) should be mediated by their tendency to psychologically perceive a stronger loss aversion concerning their own resources.

Results

All negotiation pairs achieved an agreement. Statistical analyses used the degrees of freedom related to the number of pairs in order to account for non-independence of data within dyads.

Outcome profits. A 2 (Resource sequence: zoo X first vs. zoo Y first) x 2 (Role: manager X vs. manager Y) ANOVA with repeated measures on the latter factor revealed a significant interaction effect, $F(1,33)=11.68$, p=.002, η_p^2=.27, other Fs<1.40, ps>.244 (Figure 6, Top Panel). Contrast analyses revealed that managers whose animals were addressed first as

the reference resource achieved higher profits (*M*=2,924.44€, *SD*=274.55 and *M*=3,024.71€, *SD*=221.16 for zoo managers X and Y, respectively) than managers who addressed the counterpart's animals first (*M*=2,635.29€, *SD*=221.16 and *M*=2,735.55€, *SD*=274.55 for managers X and Y, respectively), $t(33)=3.41$, $p<.01$, $\eta_p^2=.26$. Viewed from a different perspective, parties in the role of manager X achieved higher outcomes than manager Y when animals from zoo X were addressed first, $t(33)=1.61$, $p=.05$ (one-tailed), while this pattern of findings completely reversed when animals from zoo Y were addressed first, $t(33)=3.21$, $p<.01$.

Negotiation behaviors. We again analyzed parties' opening proposals as well as their concession rates over the course of negotiations.

Opening proposals. A 2 (Procedural Frame) x 2 (Role) ANOVA with repeated measures on the latter factor revealed a marginal effect for role, $F(1,33)=3.27$, $p=.079$, $\eta_p^2=.09$. All other effects were not significant, ($F=1.49$, $p=.230$ for Framing, and $F=0.088$, $p=.769$ for the interaction). Parties in the role of manager X tended to start the negotiation with slightly more self-serving proposals (*M*=3,186€; *SD*=576.52) than parties in the role of manager Y (*M*=2,974€; *SD*=385.67).

Concession rates. A 2 (Procedural Frame) x 2 (Role) ANOVA with repeated measures on the latter factor revealed the predicted interaction effect only, $F(1,33)=7.01$, $p=.012$, $\eta_p^2=.18$ (Figure 6, Middle Panel). All other effects were not significant ($F=0.08$, $p=.773$ for Role, and $F=0.07$, $p=.790$ for Framing). Contrast analyses showed that managers whose animals were addressed first made smaller concessions (*M*=14.20€, *SD*=57.27 and *M*=14.32€, *SD*=51.63 for managers X and Y, respectively) than managers who addressed the counterpart's animals first (*M*=78.49€, *SD*=132.04 and *M*=65.88€, *SD*=110.42 for managers X and Y, respectively), $t(33)=2.65$, $p<.05$. Viewed from a different perspective, parties in the role of manager X made smaller concessions than their counterparts in the role of manager Y when animals from zoo X were addressed first, $t(33)=2.11$, $p<.05$. This pattern was completely reversed when animals from zoo Y were addressed first, $t(33)=1.64$, $p=.05$.

Loss and gain perceptions. Parties' subjective perceptions of losses and gains – their focus on the loss of own vs. the gain of the counterpart's animals – were analyzed with separate ANOVAs. The ANOVA on perceived gains did not reveal any main or interaction effect, all Fs<0.178, ps>.675. The ANOVA on perceived losses revealed a significant interaction effect only, $F(1,33)=5.49$, $p=.025$, $\eta_p^2=.14$ (Figure 6, Bottom Panel). All other effects were not significant ($F=0.057$, $p=.812$ for Role, and $F=0.196$, $p=.661$ for Framing). Parties whose animals were addressed first were more sensitive to the loss of own animals (*M*=5.61, *SD*=1.45 and *M*=5.38, *SD*=1.23, for managers X and Y, respectively) than parties who addressed the

counterpart's animals first (M=4.79, SD=1.34 and M=4.88, SD=1.39, for managers X and Y, respectively), $t(33)=2.34$, $p<.05$.

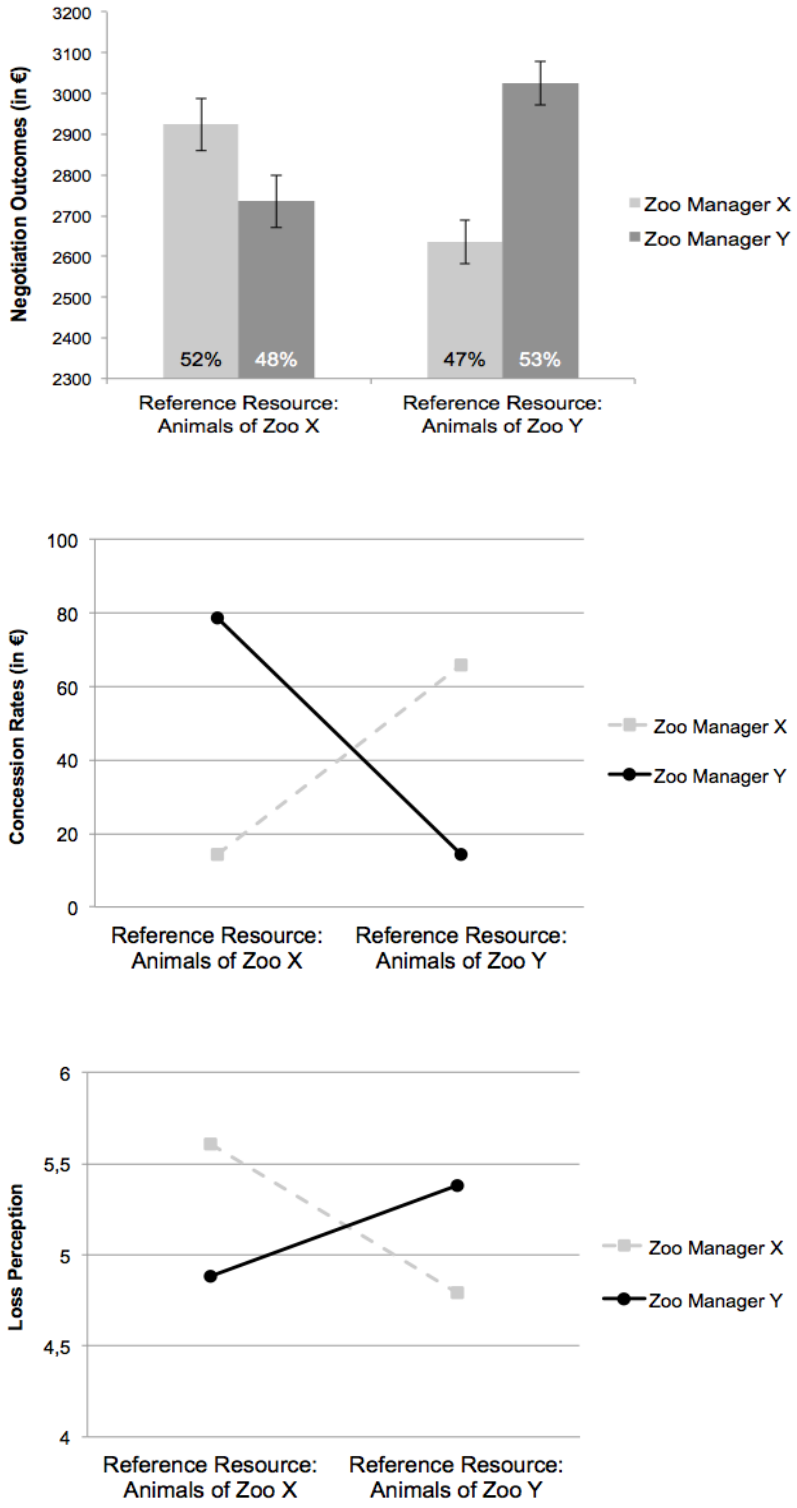


Figure 6. Study 5: Negotiation Outcomes in € and the percentage of total profits as a function of reference resource and negotiators' role. Error bars indicate ±1 SEM (Top). Concession rates as a function of reference resource and negotiators' role (Middle). Lower values indicate that negotiators conceded *less* per proposal, reflecting a *higher* concession aversion. Loss perception

(scale 1-7) as a function of reference resource and negotiators' role (Bottom).

Mediation analyses. In a first step, we again tested whether the procedural-framing effect on individual profits could be explained in terms of differences in opening proposals or concession rates. The bootstrap results indicated that the indirect effect through concession rates was significantly different from 0, with a point estimate of -445.49 and a BCa $CI_{95\%}$ of -882.26 to -238.81, suggesting that differences in concession rates qualified as a mediator. The indirect effects through opening proposals did not reach significance with a point estimate of 49.85 and a BCa $CI_{95\%}$ of -281.19 to 485.04. In a second step, we tested whether parties' concession behavior could be explained in terms of their subjective loss- and gain perceptions. Mediation analyses were conducted with the procedural-frame factor as the predictor and differences between manager X's and manager Y's concession rates as the dependent variable. We entered parties' self-reported perceptions of losses and gains as multiple mediators into the bootstrapping analyses (see Figure 7). The bootstrap results indicated that the indirect effect through parties' perceptions of losses was significantly different from 0, with a point estimate of 39.33 and a BCa $CI_{95\%}$ of 12.43 to 132.23. The indirect effect through parties' perceptions of gains did not reach significance, (point estimate -3.21; BCa $CI_{95\%}$ of -57.62 to 28.09; Figure 7).

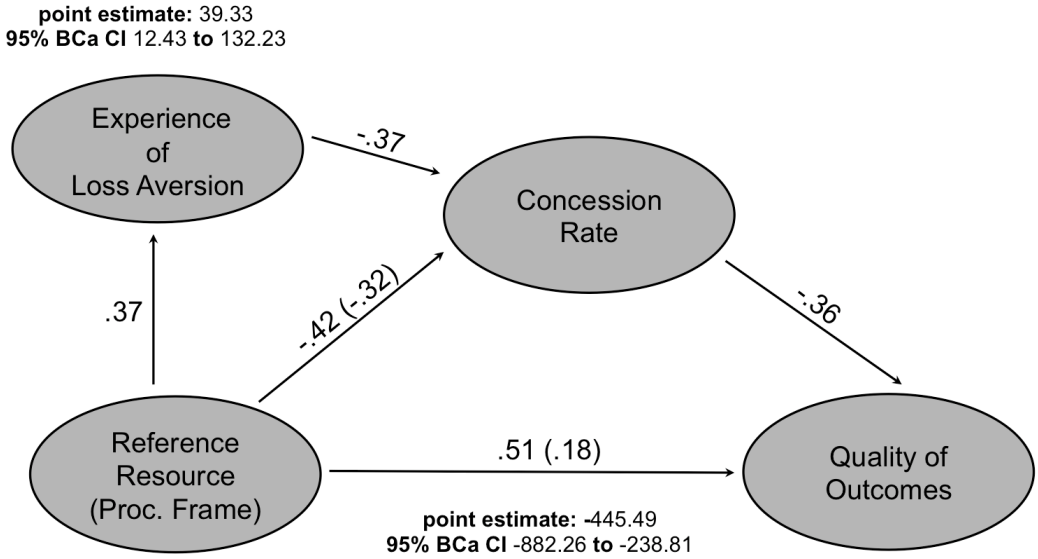


Figure 7. Mediation model in Study 5. The procedural framing effect on individual profits is mediated by negotiators' different concession rates. The effect of framing on concession rates is in itself mediated by negotiators' subjective experience of loss aversion.

Discussion

Study 5 extends the findings on procedural-framing effects in two ways: First, parties' concession aversion is affected by means of a rather minimalistic manipulation—solely altering the sequential order of reference resources suffices to induce different level of concession aversion. Second, the data illustrate that different foci on reference resources results in different concession rates, which in turn accounts for negotiation outcomes. To our knowledge, the study is the first to show a link between the psychological process of parties' sensitivity to losses and the behavioral effect on concession rates in interactive negotiations.

General Discussion

In the present research, we examine the important role that procedural frames can play in the negotiation process. We establish procedural framing as placing a stronger emphasis on either negotiator's resource – the reference resource. The negotiator, whose resource is procedurally framed as the salient reference resource, becomes more concession averse and consequently ends up with higher individual outcomes. We tested these predictions in eight studies. Four non-interactive studies showed antagonistic effects of procedural frames on senders and recipients (i.e., frame shift). While senders were more concession averse when proposing offers, recipients were more concession averse when receiving requests. These effects emerged in buyer-seller negotiations (Study 1a & 1b), and in transaction negotiations void of buyer-seller roles (Study 2a & 2b). The subsequent series of studies examined procedural frames in the interactive process of transaction (Study 3 & 5) and buyer-seller negotiations (Study 4a and 4b). Fourth graders in elementary school showed a difference in concession making due to accentuated reference resources (fantasy cards). As a consequence, the child whose resources were accentuated left negotiations with larger individual profit shares. Two laboratory studies in a buyer-seller context (Study 4a & 4b) corroborated these findings: Irrespective of their role as buyers or sellers, parties were less willing to concede when focusing on offering own rather than requesting the counterpart's resources. Interestingly, when structural features of the negotiation led parties to perceive the negotiation as either a price- or a commodity-negotiation, similar procedural-framing effects as observed from semantic manipulations emerged. A final study realized a rather minimalistic manipulation of procedural framing. We found that shifting the sequence of resources affects parties' concessions and their individual outcomes much the

same way as semantic (Study 3 and 4a) and structural manipulations (Study 4b). In sum, the findings from eight studies show how procedural frames affect negotiators' concession aversion and ultimately their individual profits. In the following, we would like to point to limitations, future research and the role of procedural framings in other negotiation contexts.

Variable-sum Negotiations and Impasses

The interactive Studies 3-5 induced different procedural frames for negotiation pairs—thereby leading parties to focus on the same reference resource. This approach seems reasonable in zero-sum negotiations, in which one party's gain leads to an equivalent loss for the counterpart. The antagonistic effects of procedural frames for senders and recipients would likely cancel each other out when negotiators were to focus on different referent resources (e.g., both offer or both request resources). However, in integrative negotiations with a variable-sum payoff structure, parties may benefit from focusing on different references resources: When both parties offer resources, they should both experience a stronger concession aversion when sending a proposal. In contrast, when both parties request resources, parties will experience a stronger concession aversion when receiving the counterpart's demands. This increased concession aversion for pairs with the same procedural frame may turn out to be a double-edged sword, however (see Pruitt & Carnevale, 1993): On the one hand, negotiators with a low willingness to concede are more likely to end up with impasses and, consequently, achieve outcomes of lower quality (e.g., Bartos 1974; Trötschel & Gollwitzer, 2007; Trötschel, Hüffmeier, Loschelder, Schwartz, & Gollwitzer, 2011). On the other hand, concession averse negotiators are more likely to explore the integrative potential and to achieve win-win agreements (e.g., De Dreu et al., 2000; Pruitt & Lewis, 1975). Hence, negotiators are faced with a concession dilemma (Weingart, Thompson, Bazerman, & Caroll, 1990). Negotiators need to make concessions to avoid impasses; yet they need to be somewhat resistant to concede in order to explore the integrative potential. It remains to be seen whether an increase of concession aversion from procedural framing translates into a heightened risk for impasses or leads to integrative win-win agreements.

Limitations and Future Research

According to the frame-shift hypothesis, we reasoned in the introduction that accentuated reference resources would lead to antagonistic effects for senders and recipients. Although the antagonistic effects in the non-interactive studies (Study 1a-2b) provide first evidence for this frame-shift assumption, future research may investigate a frame shift in the interactive negotiation process. Specifically, it may be interesting to explore whether accentuating a reference resource for only one negotiator automatically leads the counterpart to focus on the same resource – leading both parties to focus on the *same* reference resource. Based on the present findings, a focus on the same reference resource will lead one party to experience a loss focus and the counterpart to experience a gain focus. In contrast, an alternative prediction can be derived from research on outcome framing: The frame adoption effect (De Dreu et al., 1994) reveals that parties adopt the cognitive frame (loss vs. gain focus) from their counterpart; the frame adoption, however, implies that parties focus on different reference outcomes. In sum, parties in a procedural-frame mindset should experience antagonistic loss/gain perceptions while focusing the same reference resource, whereas parties in an outcome-frame mindset experience congruent loss/gain perceptions while focusing different reference outcomes. Future research may compare the effects of outcome framing and procedural framing on the perceptions and behavior of interacting negotiators and test directly for frame adoption and frame shift effects.

While the present findings consistently show that procedural frames have a pervasive impact on parties' willingness to concede in the negotiation process, future research may examine possible procedural framing effects on negotiators' first offer and its anchoring impact. The present data seem to offer an inconclusive answer to this research questions: While procedural frames may lead senders to propose more ambitious opening proposals (see Study 2a), the interactive findings seem to suggest that procedural framing effects are less crucial at the beginning than in the ongoing process of a negotiation (see mediation analyses in Study 3-5). Nonetheless, future research should systematically investigate if and how procedural frames may moderate the well-documented anchoring impact of opening proposals. In light of previous work on "first *offers* as anchors" (see Galinsky & Mussweiler, 2001), it remains to be seen whether and how first *requests* exert a different anchoring impact.

Finally, although the present findings did not attempt to contrast negotiation research with the endowment effect, the theorizing on procedural framing might speak to the contradictory findings from both lines of research. For instance, future studies may

systematically examine whether the accentuation of different reference resources (money vs. mug) also moderates the well-established endowment effect (e.g., Kahneman et al., 1990; Carmon & Ariely, 2000). One could predict that sellers (buyers) would be willing to sell for less (pay more) when the buyer's money rather than the seller's mug is accentuated in the transaction. However, following Kahneman (1992) it may also be interesting to examine whether procedural frames moderate the endowment effect in transactions on *goods held for use* but not when transactions center on *goods held for exchange*. It seems an interesting venue for future research to examine the interplay of procedural framing, endowment effects and different transaction goods.

Practical implications

With respect to distributive negotiations, the present findings suggest that it may be wise for negotiators to frame proposals they send to the other party as offers in order to reduce the counterparts' concession aversion. In any case, parties should (1) be aware of the frame of a proposal, the salient reference resource and their implications, and (2) possibly reframe proposals in order to gain a less biased, more objective perspective. At the same time, parties may try to lead their counterparts to adopt a request frame. Asking counterparts to focus on the resource that is to be gained should effectively reduce the opponent's resistance to concede (e.g., "What do you request for resource X?").

In light of the well-established role effects in buyer-seller negotiations, the present findings suggest a means how sellers may alleviate or even overcome the detrimental effects arising from their negotiation role. In spite of money's predominant social role, sellers should make a conscious effort to frame all proposals as offers rather than requests. And, importantly, negotiators can only continuously frame proposals as offers when their own resources are flexible rather than fixed. Consequently, sellers should try to transform any immutable commodity into a more flexible resource—for instance, the seller of a car may include additional equipment or services to shift the focus away from the price and towards his/her commodity.

Conclusion

The present research illustrates that procedural frames impact negotiators' resistance to concede and the quality of individual outcomes. Hereby, we strive to contribute to theory and research on negotiation and decision-making processes: A negotiation-specific form of framing is established that emerges naturally in the interactive negotiation process and strongly impacts final outcomes. In addition, these procedural frames are shown to emerge by different means, such as explicitly instructing negotiators to offer/request or give/take, by means of implicit structural manipulations and by alternating the sequence in which resources are addressed. Across eight studies, accentuated reference resources emerge as a crucial determinant for the perception and behavior of negotiation parties and point to a number of fruitful research questions that might further testify how procedural frames constitute a fundamental process across a variety of negotiations.

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Chapter 3: The Motivated-Adjustment Model of Anchoring: How the Framing of Anchors Matter in Negotiations

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Abstract

Abundant research has established that first proposals anchor negotiation outcomes. The current research developed and tested a Motivated-Adjustment Model of Anchoring (MAMA) that combines the literatures on framing and anchoring to highlight how concession aversion moderates the anchoring effects in negotiations. In addition to cognitive processes in classical judgment tasks, we highlight the motivation forces that play an important role in predicting anchoring effects. Our model starts with the fact that first proposals either emphasize an offer of resources (e.g., I am offering my A for your B) that highlight gains to a responder or a request of resources (e.g., I am requesting your B for my A) that highlight losses. We predicted that this framing of an anchor would affect responders' concession aversion. When a first proposal is framed as an offer, we predicted that the well-documented anchoring effect would emerge because offers highlight what the responder gains and do not create excessive concession aversion. In contrast, because requests highlight what the responder will give up, opening requests likely create concession aversion, thus eliminating and even reversing the anchoring effect. Four experiments confirmed these predictions for negotiation novices and seasoned experts. Across the studies, we found moderation of two classic anchoring effects: the anchor extremity effect and the first mover effect. The findings highlight the key role that motivational processes play in mixed-motive decision-making.

Keywords: negotiation, anchoring effect, first offers, framing, concession aversion

In February 2015, Greece was facing the expiring date of its current bailout program and contended with the European Union about an extension. One week before the expiration date, Greece initiated negotiations with the request of a six-month loan extension in exchange for partially meeting the conditions of the bailout program as dictated by the Eurozone Finance Ministers. In simplified terms: Greece requested cash for reforms. The Greek request was rejected a mere five hours later by the German Ministry of Finance. A spokesperson of the German Finance Department said that the request "was not a substantial proposal to resolve matters" (Kanter & Kitsantonis, 2015, para. 5); the EU was not willing to concede but insisted on previous commitments for the bailout program and no loan extension. Four months and a dramatic back-and-forth later, Greece initiated a new round of negotiations but this time *offered* new budget proposals for an extended bailout program. In simplified terms: Greece offered reforms for cash. This time, Jeroen Dijsselbloem, chairman of the Eurozone Finance Ministers, reacted positively and evaluated the Greek offer as "a basis to really restart the talks" (Maltezou & Strupczewski, 2015, para. 10). The Greek offer yielded fruit, when on July 13th, 2015 an agreement between Greece and the Eurozone was announced.

Although a variety of psychological and contextual factors impact complex political negotiations, the prior example illustrates a crucial question: How does the way an opening proposal is presented affect the counterpart's reaction to it? We propose that people's susceptibility to be anchored by a first proposal depends on whether the proposal is framed as a first *offer* versus a first *request*. We develop and empirically test a Motivated-Adjustment Model of Anchoring (MAMA), which provides a novel theoretical integration of two of the most robust phenomena in psychology—the anchoring-and-adjustment heuristic and the framing heuristic. Specifically, this new model refines our understanding of anchoring effects by adding a motivational perspective to what has been predominantly viewed from a cognitive standpoint.

We propose that motivational processes matter because offers versus requests serve as frames that differentially focus attention on the resource the responder is about to gain vs. about to give up. Offers focus attention on the first-mover's resource that the responder can gain (e.g., Greece's financial reforms), whereas requests accentuate responders' own resource that they must give up (e.g., the EU's cash). The model argues that this focus on different resources matters because it differentially affects the responder's loss/concession aversion and their motivation to adjust away from the opening anchor. Put differently, when a *request* accentuates the responder's resource, they should experience more concession aversion and adjust farther

away from the opening anchor by making aggressive counteroffers. For instance, Greece's first request (i.e., cash for reforms) highlighted the responder's resource that they must give up, motivating the EU to adjust far away from the opening anchor. In the second proposal, however, Greece made an offer (i.e., reforms for cash), thereby decreasing the EU's aversion to the Greek anchor and alleviating the adjustment motivation. The current research seeks to understand how the framing of offers versus requests—and the resultant adjustment motivation—moderate the anchoring effect of first proposals. Before reporting four experiments with negotiation novices and seasoned experts, we will first review the literature on anchoring and loss/concession aversion and introduce our Motivated-Adjustment Model of Anchoring.

The Anchoring Effect of First Proposals

Anchoring has been defined as the assimilation of a numeric estimate towards a previously considered standard (Tversky & Kahneman, 1974). The anchoring effect in decision-making is so robust that even clearly uninformative or implausibly extreme values function as potent anchors (Mussweiler & Strack, 2000b; Chapman & Johnson, 1994). Likewise, participants' expertise seems to have little impact on the anchoring potency (Englich, Mussweiler, & Strack, 2006; Northcraft & Neale, 1987). In fact, even explicit instructions to sufficiently adjust away from anchor values do not reduce anchor potency (Wilson, Houston, Etling, & Brekke, 1996). Two prominent explanations for the anchoring effect are *insufficient adjustment* (Epley & Gilovich, 2006; 2010; Tversky & Kahneman, 1974) and the *Selective-Accessibility Model* (e.g., Strack & Mussweiler, 1997). On the one hand, people serially adjust from an anchor until they reach a plausible estimate, but this adjustment process is often insufficient (Epley & Gilovich, 2001). On the other hand, anchors lead responders to apply a hypothesis-consistent test strategy that increases the selective accessibility of anchor-consistent knowledge. On the basis of selectively more accessible information people form judgments that are consistent with the anchor (Mussweiler & Strack, 2001b).

The robustness of the anchoring effect is also reflected in substantial negotiation research showing that first-movers generate a robust bargaining advantage over responders (Gunia, Swaab, Sivanathan, & Galinsky, 2013; Loschelder, Trötschel, Swaab, Friese, & Galinsky, 2016; Mason, Lee, Wiley, & Ames, 2013; Yukl, 1974). In negotiations, first proposals typically anchor because counterproposals gravitate toward the value of the first proposal. As a result, a first-mover advantage emerges that is reflected in higher profits for the

first-mover relative to the second-mover. The anchoring impact of the first proposal accounts for 50% and up to 85% of variance in final outcomes (Galinsky & Mussweiler, 2001; Orr & Guthrie, 2005). However, implausible and extreme anchors elevate the risk of impasses because they offend recipients (Schweinsberg, Ku, Wang, & Pillutla, 2012).

The prominent theories for anchoring – insufficient adjustment and selective accessibility – have also been applied in negotiations (Galinsky & Mussweiler, 2001; Galinsky, Ku, & Mussweiler, 2009). When people receive an opening proposal, they serially adjust their counteroffer away from the anchor but this adjustment is insufficient. People also generate information consistent with the first proposal; this selective accessibility adds validity to the first proposal and responders generate counteroffers consistent with the value of the opening proposal (Galinsky & Mussweiler, 2001).

As these two prominent mechanisms highlight, the vast majority of existing studies have examined anchoring effects from a cognitive perspective. In addition, much of the research outside of negotiations has utilized a two-stage methodological procedure (Chapman & Johnson, 2002). The *standard anchoring paradigm* initially asks participants to make a comparative assessment (e.g., "Did Einstein visit the US for the first time before or after 1905?") followed by an absolute estimate (e.g., "In what year did Einstein visit the US for the first time?"). This classic paradigm (Strack & Mussweiler, 1997) produces highly robust anchoring effects and has been invaluably helpful in examining cognitive processes of anchoring effects.

Concession Aversion

The classic paradigm differs from a mixed-motive context, such as negotiations, in important ways, two of which are particularly relevant for present purposes. First, responses to most first proposals do not involve a comparative assessment because sellers typically ask for more than buyers want to pay (and vice versa). Second, negotiators experience a conflict between the motive to cooperate and the motive to compete; this conflict of interests is resolved through the mutual exchange of resources (e.g., reforms for cash; Kelley et al., 2003). To reach a deal, each side needs to make concessions; yet, it is averse for negotiators to concede their own resources. Negotiators' concession aversion is particularly strong when they perceive the allocation of resources as a relative loss rather than a relative gain (Bazerman, Magliozzi, & Neale, 1985; Bottom & Studt, 1993; De Dreu, Carnevale, Emans, & van de Vliert, 1994; Neale, Huber, &

Northcraft, 1987; Trötschel, Loschelder, Hoehne, & Majer, 2015). More broadly, classic work on framing effects have established clear evidence that people suffer from loss aversion: losses are more painful than equivalent gains are pleasurable and so people are highly motivated to avoid losses (De Dreu & McCusker, 1997; Kern & Chugh, 2009; Meyerowitz & Chaiken, 1987; Schneider, 1992; Tversky & Kahneman, 1981). The current work brings together two classic heuristics—framing and anchoring—to provide new insights into the motivation foundations of anchoring.

Because of concession aversion, negotiators are inherently motivated to adjust away from a counterpart's opening proposal. In other words, in classical decision-making tasks (e.g., "When did Einstein first visit the US?") individuals do not experience concession aversion, an assertion we empirically established in a pilot study.[1] In mixed-motive negotiations, however, concession aversion should crucially impact the first proposal's anchoring potency. In light of these theoretical considerations, motivational processes may be more important for anchoring than is currently portrayed in the literature.

The Motivated-Adjustment Model of Anchoring: The Case of Requests versus Offers

Although motivational processes in anchoring have yet to be systematically examined, some prior studies shed initial light on the important role of motivation. For instance, research reveals that when a first-mover signals flexibility, responders are less motivated to counter aggressively (Ames & Mason, 2015). Another study found that negotiators tend to walk away from the bargaining table when they perceive an opening proposal as too extreme (Schweinsberg et al., 2012). Expanding these preliminary indications, we systematically address the role of motivations in driving versus reducing the anchoring effect in negotiations.

Our Motivated-Adjustment Model of Anchoring integrates work on anchoring and framing to propose that the anchoring potency of opening proposals is moderated by parties' concession aversion, which motivates people to adjust away from opening anchors. In essence, the model predicts that first proposals do not only evoke cognitive processes (i.e., insufficient adjustment, selective accessibility) but also motivational processes in the form of concession aversion (Pruitt & Carnevale, 1993; De Dreu, Weingart, & Kwon, 2000). Specifically, the model suggests that the level of concession aversion impacts parties' motivation to move away from an opening proposal. For low levels of concession aversion, parties will have a lower motivation to move away from the first proposal, leading to the classic anchoring effect and

first-mover advantage (Galinsky & Mussweiler, 2001). Conversely, when the opening proposal elicits high levels of concession aversion, parties will be highly motivated to adjust away from the proposal, which will reduce or even eliminate anchoring effects.

An effective way to test for such motivational underpinnings of anchoring is by framing the opening proposal as a first offer versus a first request. Proposals framed as requests lead responders to focus on potential losses, which result in a high level of concession aversion (Kahneman, 1992; Trötschel et al., 2015). Conversely, proposals framed as offers lead responders to focus on the potential gains, which result in a low level of concession aversion. Research has not integrated the literatures on framing and anchoring. Our Motivated-Adjustment Model of Anchoring (Figure 1) proposes that the anchoring effect will be stronger when opening proposals are framed as offers rather than as requests. Opening *offers* highlight gains and lead responders to experience less concession aversion and to present weaker counterproposals (see Janiszewski & Uy, 2008; Mason et al., 2013). In contrast, opening *requests* highlight losses and lead responders to experience more concession aversion and to counter more aggressively.

It is important to note that neither the insufficient-adjustment explanation nor the Selective Accessibility Model predict differences in anchoring potency of identical proposals that only differ in framing. Thus, frames are particularly conducive for testing the motivational assumption postulated in the Motivated-Adjustment Model of Anchoring. Figure 1 synthesizes the assumptions of our model.

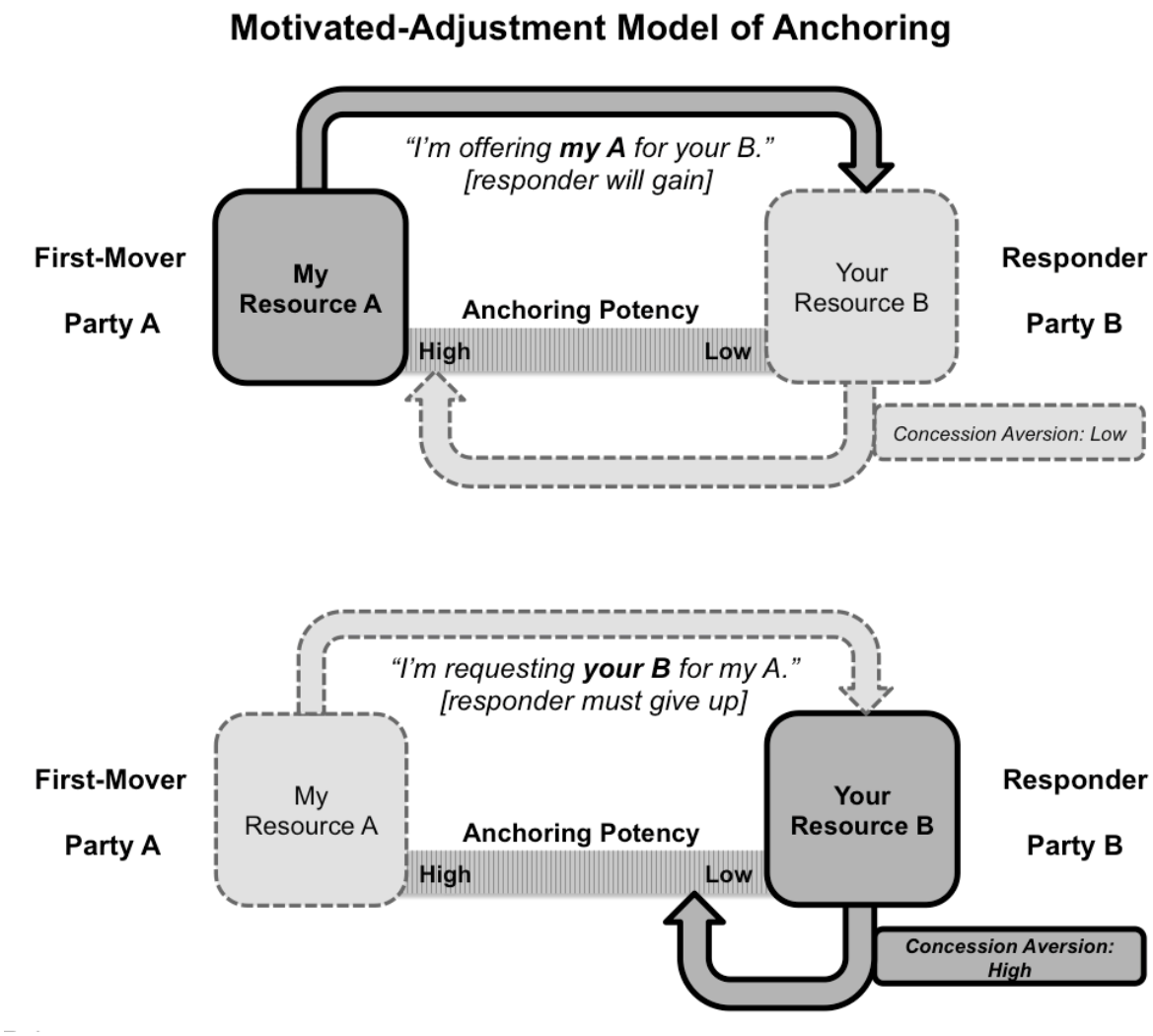

Figure 1. The Motivated-Adjustment Model of Anchoring: The framing of first proposals can vary on whether they highlight the first-mover's resource that the responder will gain (offer-frame) or the responder's resource that they must give up (request-frame). In the top panel, the responder experiences a low state of concession aversion from receiving an offer and is less motivated to adjust away from an anchor; as a result, a strong anchoring effect occurs. In the bottom panel, the opening request highlights the resource to be given up and the responder experiences a high state of concession aversion. A negotiator who responds to a request is highly motivated to adjust and to counter aggressively; as a result, a weaker anchoring effect occurs (bottom panel).

Experimental Overview and Theoretical Contribution

We developed and empirically tested a Motivated-Adjustment Model of Anchoring (MAMA) in four experiments. The first two studies manipulated both anchor extremity and anchor framing. Experiment 1 tested the MAMA with participants who have acquired years of extensive negotiation expertise. In Experiment 2, we tested our model in a classic negotiation paradigm on a pharmaceutical plant with negotiation novices (Galinsky & Mussweiler, 2001). Experiments 3 and 4 involved dyadic negotiations and manipulated who made the first offer. Experiment 3 manipulated both who made the first proposal and the type of proposal (offer vs. request) and explored whether the predictions of MAMA impact negotiation outcomes. Experiment 4 examined negotiators' underlying communication processes in addition to their concession behavior as joint mechanisms that account for final negotiation outcomes. Across the studies, we found moderation of two classic anchoring effects: the anchor extremity effect and the first mover effect.

The present research makes a number of theoretical and practical contributions. First, we present a new model that integrates the literatures on framing and anchoring. We develop and empirically test a Motivated-Adjustment Model of Anchoring that shows when, how, and why first proposals create more or less potent anchors. We extend the anchoring literature by demonstrating that motivational mechanisms play a pivotal role for anchoring effects in negotiations. We carve out the uniqueness of negotiations compared to classic judgment tasks that commonly lack competitive and cooperative motives. In particular, our data show that the size of the anchoring effect is determined by how opening proposals are framed; framing affects levels of concession aversion which impacts the anchoring effect and final outcomes. We also expand previous research by exploring the crucial interplay of cognitive and motivational processes in complex decision-making (De Dreu & Carnevale, 2003). Finally, we provide additional evidence that moving first in negotiations does not inevitably entail beneficial consequences (see Schweinsberg et al., 2012; Loschelder, Swaab, Trötschel, & Galinsky, 2014; 2016).

From an applied perspective, our model clarifies (1) which resource an opening proposal should emphasize, (2) how to systematically reduce an opponent's concession aversion, and (3) how to evoke less aggressive counterproposals. Our results and model go beyond student participants in a controlled laboratory environment to real-world experts with extensive negotiation experience.

Experiment 1

Experiment 1 investigated how the framing of an opening proposal affects the anchoring effect amongst seasoned negotiation experts. Participants assumed the role of recipients of a first proposal. We orthogonally manipulated both the framing of a first proposal and its extremity. We predicted that framing first proposals as an offer versus a request would moderate the seminal anchoring effect. Specifically, we hypothesized that first requests would lead to smaller anchoring effects because requests focus on losses, i.e., resources that must be given up, and thus elevate the responder's concession aversion. In contrast, first offers should lead to a stronger anchoring effect because offers focus attention on the resource the responder will gain.

Method

Participants and design. The sample included 99 professional craftspeople with an average of 15.48 years (*SD* = 10.07) of negotiation expertise. These experts were recruited during two subsequent workshops at the local chamber of crafts[2]. Nine participants were excluded from the analysis due to missing values.

The experiment had a 2 (Anchor Value: *ambitious* vs. *moderate*) x 2 (Anchor Frame*: offer* vs. *request*) between-subjects design.

Procedure. The study was conducted at a local chamber of crafts in {City} with seasoned experts, who conduct negotiations on a daily basis especially with their customers and business partners. Upon arrival in the auditorium, the experts were asked to take part in the study and then received general, written instructions. They were asked to imagine a negotiation situation with a supplier on a structural component (i.e., a boat engine), for which the bargaining zone ranged from €17,000 to €25,000. Participants received first proposals from the simulated supplier. Subsequently, the participants were asked to make their counterproposals (see Appendix B for instructions). In line with the MAMA, responders related to the same reference resource as the first-mover to ensure that they based their counterproposals on the resource that was either offered or requested (see Figure 1; Trötschel et al., 2015). We chose the special handicraft trade of a boat builder to avoid participants having detailed market knowledge.

Experimental manipulation. We orthogonally manipulated the Anchor Value (*ambitious* vs. *moderate*) and the Anchor Frame *(offer* vs. *request*). For ambitious anchors sellers asked €26,800 for the boat engine, moderate anchors were €23,200.

Anchor frames varied the opening proposal as an offer versus a request. An example for the ambitious-offer condition would be: "I offer you the engine for a price of €26,800." Respectively, an example for the moderate-request condition would be: "I request a price of €23,200 for the engine."

Dependent variables. Counterproposals represented the dependent variable. Note that higher counterproposals are indicative of greater movement away from the anchor, that is, a weaker anchoring effect.

Results

First, we replicated the seminal anchoring effect. Negotiators made higher counterproposals when they received ambitious anchors (M = €20,589.42, SD = 2446.00) than when they received moderate anchors (M = €19,191.38, SD = 1582.85), $F(1, 95) = 12.27$, $p = .001$, $\eta_p^2 = 0.114$. Second, negotiators who received first offers made higher counterproposals (M = €20,265.00, SD = 2419.61) than negotiators who received first requests (M = €19,534.78, SD = 1832.21), $F(1, 95) = 4.25$, $p = .042$, $\eta_p^2 = 0.043$.

These main effects were qualified by the predicted interaction effect, $F(1, 95) = 6.65$, $p = .011$, $\eta_p^2 = 0.065$ (see Figure 2). The anchoring effect between ambitious and moderate first proposals emerged when opening proposals were framed as *offers* ($M_{ambitious}$ = €21,562.00, SD = 2677.21; $M_{moderate}$ = €19,106.96, SD = 1398.54), $t(95) = 4.42$, $p < .001$, $d = 1.15$. When opening proposals were framed as *requests,* however, the anchoring effect disappeared ($M_{ambitious}$ = €19,688.89, SD = 1835.20; $M_{moderate}$= €19,315.79, SD = 1855.10), $t(95) = .36$, $p = .715$, $d = .20$. Inspecting this interaction differently, when negotiators' received ambitious offers they made significantly higher counterproposals (M = €21,562.00, SD = 2677.21) than when they received ambitious requests (M = €19,688.89, SD = 1835.20), $t(95) = 3.31$, $p = .001$, $d = .82$. The difference between moderate offers and moderate requests was not significant (M_{offer} = €19,106.96, SD = 1398.54; $M_{request}$ = €19,315.79, SD = 1855.10), $t(95) = .85$, $p = .396$, $d = .13$.

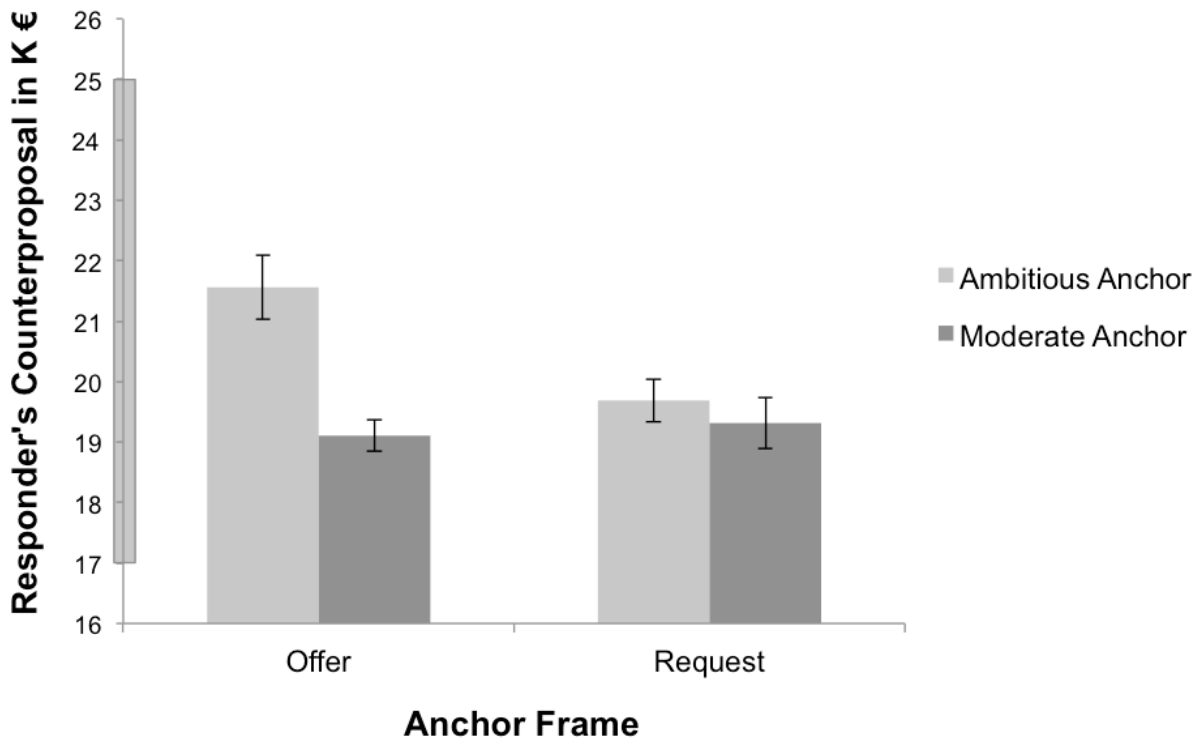

Figure 2. Experiment 1: Responders' counterproposal as a function of anchor frame and anchor value. Counterproposals are in thousands of euros. The grey shaded area on the y-axis represents the bargaining range. Error bars indicate ± 1 SEM.

Discussion

Experiment 1 replicates the classic anchoring effect among seasoned negotiation experts. Responders made higher counterproposals following ambitious compared to moderate anchors. Experiment 1 also provides support for the assumptions of our MAMA. The classic anchoring effect was moderated by the framing of the opening anchor. Whereas first offers resulted in the anchoring effect, first requests led to stronger counterproposals and eliminated the anchoring impact. This finding is in line with our theoretical prediction that framing an opening proposal as a request would create high levels of concession aversion because it focuses attention on giving up own resources.

Experiment 2

Experiment 2 sought to replicate the findings using a well-established negotiation task with negotiation novices. In Experiment 2, we simulated an actual negotiation around the sale of a chemical plant. In addition to counterproposals, Experiment 2 measured negotiators' Willingness to Pay (WTP). In terms of processes, we predicted that the anchoring effect on negotiators' WTP could be traced back to less conciliatory counterproposals (see Experiment 1).

Method

Participants and design. The sample consisted of 108 participants who were recruited via social networks and university newsletters. Three participants were excluded from the analysis because the multivariate outlier analysis revealed a Mahalanobis D^2 with a probability less or equal to 0.001 (see Rasmussen, 1988). The Experiment had a 2 Anchor Value (*ambitious* vs. *moderate*) x 2 Anchor Frame (*offer vs. request*) between-factorial design (see Experiment 1).

Procedure. Participants negotiated via the online platform *SoSci Survey*. We adapted a well-established buyer-seller negotiation, in which parties negotiated over the price of a pharmaceutical plant (Galinsky & Mussweiler, 2001). Participants in the role of buyers were informed that building a new plant would cost €25 million and would last much longer than acquiring the seller's plant. Participants were also informed that the seller could strip the plant and sell its components for €17 million. Unbeknownst to participants, sellers were computer-simulated. The computer made the first proposal, which differed only in anchor value and anchor framing. Both independent variables were manipulated as in Experiment 1. After reading the instructions, participants received first proposals and were asked to make a counterproposal. In the end, we asked participants to state their maximal willingness to pay (see Appendix C for instructions).

Experimental manipulation. The ambitious anchor condition realized a first proposal of €26.5 million for the plant, the moderate anchor was €23.5 million. Again, we also manipulated the framing of anchors as offers vs. requests. For instance, an ambitious offer was: "I offer you the plant for a price of €26.5 million." Conversely, a moderate request was: "I request €23.5 million for the plant."

Dependent variables. We assessed buyers' immediate counterproposals. In addition, we assessed their WTP by asking participants to make a final proposal on how much they were maximally willing to pay for the plant. Because participants were assigned to the role of buyers lower values indicate more aggressive counterproposals and WTP and thus greater adjustment away from the opening anchor.

Results

Counterproposal. Replicating the seminal anchoring effect, negotiators who received ambitious anchors made higher counterproposals (M = €19.31 mil., SD = 6.43) than negotiators who received moderate anchors (M = €17.75 mil., SD = 3.66), $F(1,101) = 3.08$, $p = .082$, $\eta_p^2 = .030$. When negotiators received first offers they made higher counterproposals (M = €19.96 mil., SD = 6.44) than when they received first requests (M = €17.21 mil., SD = 3.43), $F(1,101) = 8.25$, $p = .005$, $\eta_p^2 = .076$.

Both main effects were again qualified by a marginal interaction effect, $F(1,101) = 2.83$, $p = .095$, $\eta_p^2 = .027$ (see Figure 3). As expected, the difference between moderate and ambitious anchors was more pronounced when opening proposals were framed as offers ($M_{ambitious}$ = €21.71 mil., SD = 7.84 vs. $M_{moderate}$ = €18.34 mil., SD = 4.38), $t(101) = 2.29$, $p = .024$, $d = .52$. The anchoring effect was non-significant for requests, ($M_{ambitious}$ = €17.25 mil., SD = 4.03 vs. $M_{moderate}$ = €17.22 mil., SD = 2.76), $t(101) = 0.00$, $p = .987$, $d = .00$. Viewed differently, ambitious offers led negotiators to make significantly higher counterproposals than ambitious requests (M_{offer} = €21.71 mil., SD = 7.84 vs. $M_{request}$ = €17.25 mil., SD = 4.03), $t(101) = 3.10$, $p = .002$, $d = .72$. In the moderate anchor condition, the difference for offers and requests was not significant, $t(101) = .76$, $p = .387$, $d = .30$.

Willingness to pay (WTP). The anchoring impact also manifested for buyers' WTP: Ambitious anchors led to a higher WTP (M = €22.48 mil., SD = 3.41) than moderate anchors (M = €20.72 mil., SD = 2.15), $F(1,101) = 12.09$, $p = .001$, $\eta_p^2 = .107$. Expanding this research, negotiators who received first offers were willing to pay higher prices (M = €22.34 mil., SD = 3.44) than negotiators who received first requests (M = €20.91 mil., SD = 2.29), $F(1,101) = 7.86$, $p = .006$, $\eta_p^2 = .072$.

Both main effects were qualified by a marginal Anchor x Framing interaction, $F(1,101) = 3.44$, $p = .066$, $\eta_p^2 = .033$ (see Figure 3). The anchoring effect replicated when first proposals were framed as offers ($M_{ambitious}$ = €23.82 mil., SD = 3.79 vs. $M_{moderate}$ = €20.97 mil., SD = 2.43),

$t(101) = 3.60$, $p < .001$, $d = .90$. It became non-significant when first proposals were framed as requests ($M_{ambitious}$ = €21.34 mil., SD = 2.59 vs. $M_{moderate}$ = €20.47 mil., SD =1.87, $t(101) = 1.14$, $p = .257$, $d = .39$. Inspecting this interaction differently, ambitious offers led negotiators to a higher WTP than ambitious requests (M_{offer} = €23.82 mil., SD = 3.79 vs. $M_{request}$ = €21.34 mil., SD = 2.59), $t(101) = 3.09$, $p = .003$, $d = .76$. The difference for offers and requests in the moderate condition was not significant, $t(101) = .72$, $p = .473$, $d = .23$.

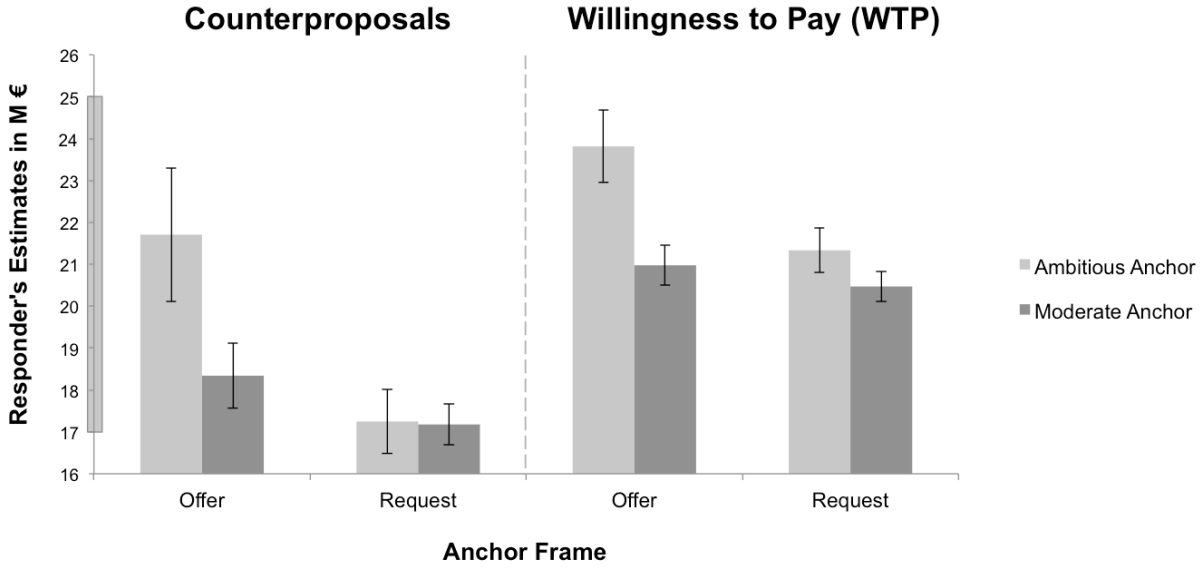

Figure 3. Experiment 2: Responder's Counterproposal (left panel) and WTP (right panel) as a function of anchor frame and anchor value. Counterproposals and WTP are in millions of euros. The grey shaded area on the y-axis represents the bargaining range. Error bars indicate ± 1 SEM.

Mediation Analysis. We predicted that the interaction effect of anchor value and anchor framing on parties' WTP would be accounted for by responders' initial counterproposal. Bootstrapping procedures for indirect effects tested this assumption in a moderated mediation model (Hayes, 2013, model 8; Preacher & Hayes, 2008). We entered anchor value as the independent variable (-1 = moderate, +1 = ambitious), anchor framing as a moderator (-1 = offer, +1 = request), counterproposal as the mediator, and parties' WTP as the dependent variable. The bootstrapping analysis corroborated that counterproposals mediated the moderation effect on negotiators' WTP (indirect effect: $b = 1.56$, $SE = .97$, BC $CI_{90\%}$ [+.07; +3.28]) as the confidence interval does not include zero.

Discussion

Experiment 2 replicated the results of Experiment 1: When confronted with first requests versus first offers, negotiators made more aggressive counterproposals. This finding is in line with the MAMA's reasoning that requests create more concession aversion because they accentuate losses, i.e., the resource a responder must give up, and concession-averse responders are more motivated to adjust away from the anchor. Specifically, the anchoring advantage of ambitious fist proposals was eliminated when negotiators received first requests compared to offers. Counterproposals mediated the interaction effect of anchor value and anchor framing on negotiators' WTP. Although Experiment 2 provides first evidence for the mediation effects of counterproposals on an outcome proxy (negotiator's WTP), we next tested this mediation effect in a dyadic negotiation between two interacting parties.

Experiment 3

Despite their consistent results, the first two experiments had several limitations. Although, the simulated first-mover in Experiments 1 and 2 allowed us to standardize opening proposals, this increased internal validity comes with the downside in that it prevents assessing responders' concession making in the ongoing process. Experiment 3 had a threefold aim. First, we examined our theoretical model in a dyadic, live negotiation. Second, we tested whether our findings would replicate regardless of whether buyers or sellers moved first. In contrast to Experiment 1 and 2, where the extremity of the first proposal was manipulated through a programmed first-mover, Experiment 3 only varied who would be the first mover and the responder. Third, we investigated whether immediate counterproposals would mediate the impact of anchor framing on final outcomes.

For individual profits, our predictions are reflected in an interaction of negotiation role (*first-mover* vs. *responder*) and different anchor frames (*offer* vs. *request*).

Method

Participants and design. One hundred sixty-two students at {Institution} with different academic majors (e.g., business administration, psychology, law) were recruited to participate in a laboratory study. The 162 recruited participants were randomly assigned to a 2 (Anchor Frame: *offer* vs. *request*) x 2 (Role: *first-mover* vs. *responder*) design with repeated measures on the last factor.

Procedure and task. We adapted an established negotiation task (Trötschel et al., 2015) to realize a pronounced economic background (i.e., negotiations on stock prices). The bargaining range featured a total of 30 stocks for an artificial company for a price range of €3.00 to €5.90. The task had a positive bargaining zone and a symmetric distributive pay-off structure so that each party could earn the same level of individual profits.

Upon arrival at the laboratory, participants were randomly assigned to networked computers and to an experimental condition. A computer-mediated negotiation program allowed us to assess parties' concession behavior over the entire process of the negotiation (e.g., Van Kleef & Côté, 2007)—including both immediate counterproposals and subsequent concessions. All instructions were given on the computer screen. Depending on randomly assigned roles, participants were either asked to initiate the negotiation or to respond to an opening proposal.

After a maximum of 45 minutes negotiations were terminated. All dyads reached an agreement. Finally, participants were debriefed, thanked and remunerated.

Experimental manipulations. Within dyads, we assigned participants to either the first-mover or the responder role (within factor).

Anchor framing was manipulated by an indirect procedure: When parties opened the negotiation with a first offer, we fixed the counterpart's resource to a pre-defined level (i.e., the seller's resource was fixed to 15 stocks, versus the buyers' resource was fixed to €3.00). Thus, parties were forced to place anchors on the remaining focal, negotiable resource. This approach highlighted what the responder would gain (i.e., they received money for a fixed amount of stocks or stocks for a fixed price). Accordingly, when parties opened the negotiation with a request, their own resources were fixed to a pre-defined level. Thus, we forced parties to place their anchors on the opponent's focal, negotiable resource. This approach highlighted what the responder would give up (i.e., they yielded stocks for a fixed price or money for a fixed amount of stocks; see Figure 1). This procedure is particularly useful to manipulate first-proposal

frames independent of parties' negotiation role as buyer or seller and to elicit concession aversion.

As an example, first-moving buyers in the offer condition were asked to offer their own resources to the seller (e.g., "I offer €3.50 for 15 stocks"). Conversely, buyers in the request condition were asked to request resources (e.g. "I request 27 stocks for €3.00").

Manipulation check. To check whether the manipulation of the anchor framing was successful, we asked participants whether they had focused predominantly on the first-mover's resource or the responder's resource ("The focus of our negotiation was on …"). A semantic differential was used with the bipolar ends "the first-mover's resource" vs. "the responder's resource" (1 = *the responder's resource* to 6 = *the first-mover's resource*).

Behavioral mechanisms. We sought to shed light on the underlying behavioral mechanisms of responders that could account for the anchor framing effects in negotiation outcomes.

Counterproposal. We assessed the value of responders' immediate counterproposals. Counterproposals were recoded across roles so that higher values indicate a higher concession aversion (more aggressive counterproposals).

Concession rate. As an alternative mechanism, we measured responders' concession rate *during* the negotiation process. The concession rate was scored as the averaged amount of concessions that responders made per round from counterproposal to final agreement. The score was recoded across roles so that lower values indicate a higher concession aversion (smaller concessions per round).

Claimed value. We assessed negotiators' claimed value at the end of negotiations (ranging from €0.00 to €2.90) as the main dependent variable. Due to the symmetric distributive payoff structure, individual profits within each dyad added up to a maximum of €2.90.

Results

All dyads reached an agreement. Statistical analyses used the degrees of freedom related to the number of dyads to account for non-independence of data within pairs of negotiators (Kenny, Kashy, & Cook, 2006).

Manipulation check. A 2 (Anchor Frame) x 2 (Role) ANOVA with repeated measures on the second factor revealed the predicted main effect of anchor framing, $F(1, 79) = 450.85$, $p < .001$, $\eta_p^2 = .851$. When first-movers offered their own resources, both parties focused equally

on the resource of the first-mover ($M_{first\text{-}mover}$ = 5.28, SD = 1.21; $M_{responder}$ = 5.43, SD = .90), $t(39) = 0.97$, $p = .338$. Accordingly, when first-movers requested the responders' resources, both parties focused equally on the resource of the responder ($M_{first\text{-}mover}$ = 1.59, SD = 1.07; $M_{responder}$ = 2.02, SD = 1.35), $t(39) = 1.50$, $p = .141$.

Claimed value. We predicted that when first-movers made opening offers, there would be a first-mover advantage. In contrast, we predicted this first-mover advantage would not emerge when first-movers made opening requests. The 2 (Anchor Frame) x 2 (Role) ANOVA with repeated measures on the role factor revealed the predicted interaction, $F(1, 79) = 35.73$, $p < .001$, $\eta_p^2 = .311$ (see Figure 4).

When first-movers offered their own resource, i.e., what the responder would gain, they reached higher individual profits (M = €1.88, SD = 0.63) than responders (M = €1.02, SD = 0.63), $t(39) = 4.31$, $p < .001$, $d = 1.36$. In contrast, when first-movers requested resources from the responder, responders reached significantly higher individual profits (M = €1.76, SD = 0.48) than first-movers, (M = €1.14, SD = 0.48), $t(40) = 4.18$, $p < .001$, $d = 1.29$.

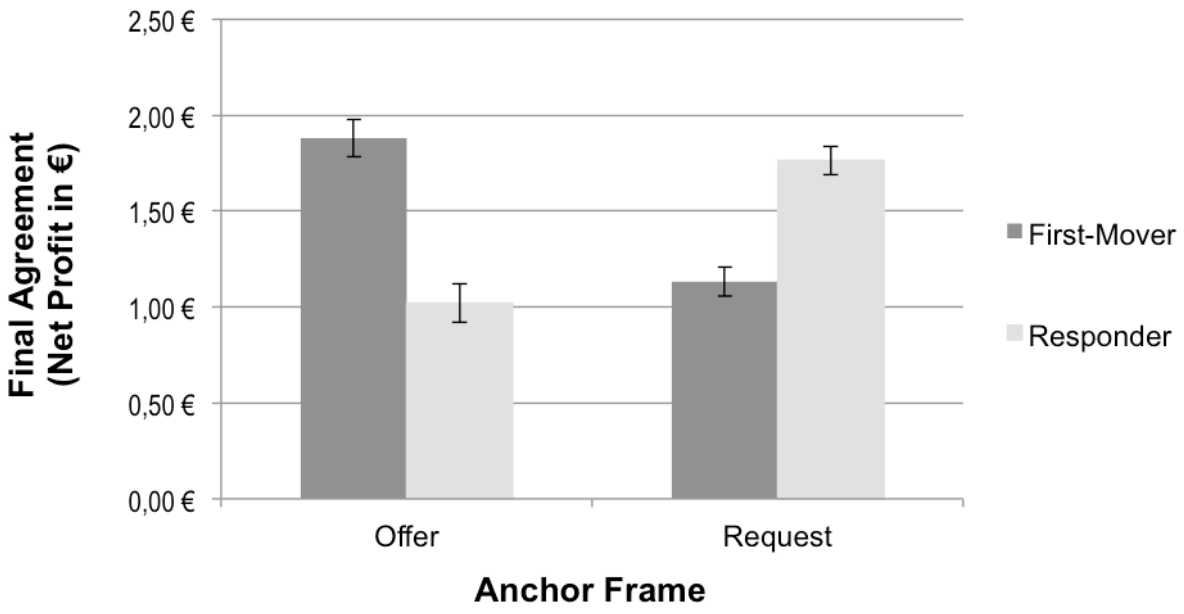

Figure 4. Experiment 3: Individual profits as a function of anchor framing and role. Final agreements are in euros. Error bars indicate ± 1 SEM. Higher values indicate a higher individual net profit for the negotiator. Individual profits within a dyad add up to €2.90 due to the distributive pay-off structure.

Behavioral mechanisms. In order to examine how the anchor framing impacted responders' immediate counterproposals and responders' subsequent concessions we next analyzed both behavioral mechanisms and conducted multiple mediation analyses.

Counterproposal. In line with Experiment 1 and 2, responders made more aggressive counterproposals when they received requests (M = €2.56, SD = 0.40) than when they received offers (M = €1.65, SD = 0.95), $t(52.00) = 5.68$, $p < .001$, $d = 1.26$. Levene's test indicated unequal variances ($F = 37.52$, $p < .001$), so degrees of freedom were adjusted from 79 to 52.00.

Concession rate. With respect to the subsequent negotiation process, responders' conceded marginally less per round after receiving first offers (M = €0.12, SD = 0.11) compared to first requests (M = €0.16, SD = 0.11), $t(79) = -1.78$, $p = .079$, $d = .39$.

Multiple mediation analysis. To test whether counterproposal or concession rate mediated the framing effects, we conducted multiple mediation analyses with a bootstrapping procedure with 5,000 iterations and entered responders' counterproposals and their concession rates as multiple mediators (Hayes, 2013, Model 4). Anchor Frame was entered as the predictor and the difference in final profits between first-mover and responder was entered as the dependent variable.

The analysis showed that counterproposals mediated the effect of anchor framing on final profits (indirect effect: b=-1.59, SE=0.30, BC $CI_{95\%}$ [-2.17; -1.02]). The concession rate was not a significant mediator (indirect effect: b=.32, SE=0.18, BC $CI_{95\%}$ [-.02; +.70]) as the confidence interval included zero. In sum, responders significantly reduced the first-mover advantage because they countered more aggressively and not because they conceded less after having received first requests versus first offers.

Discussion

Experiment 3 replicated the moderating impact of framing on the classic first-mover advantage in a dyadic, interactive negotiation. Whereas negotiators who opened with offers secured a first-mover advantage, negotiators who opened the negotiation with requests ended up with a first-mover *dis*advantage. Experiment 3 extends the previous scenario and simulation studies by providing empirical evidence for responders' immediate motivation to adjust away from the anchor (counterproposal) and not their subsequent concession proclivities as the mediator for the anchor framing effect.

Experiment 4

Experiments 1-3 support the MAMA. Experiment 4 was conducted to extend the prior studies in three ways. First, we attempted to replicate the prior effects in a negotiation with more than one negotiation issue. Given that single-issue negotiations might amplify (Gunia et al., 2013) or attenuate (Loschelder et al., 2016) the first-mover effect, it seems important to explore multi-issue negotiations. Hence, in Experiment 4 parties negotiated over the purchase price and the number of stocks simultaneously, thus allowing parties to place anchors on both resources (i.e., stocks and money).

Second, giving first-movers the possibility to place anchors on their own and the counterpart's resource allowed us to test an alternative explanation for the detrimental effect of requests observed in Experiment 3: Forcing first-movers to place their anchors on the counterpart's resource might have caused reactance in first-movers to be overly assertive. However, if no differences in the magnitude of anchors on own versus others' resources occur across the framing conditions in the following multi-issue negotiations, the observed effects would be due to the framing of proposals—as is suggested by the MAMA—and not to the location of the anchor.

Third, we sought to shed more light on underlying processes by investigating the communication process between the first-mover and the responder. We assessed parties' communication process via text messages to offer insight into the psychological mechanism of concession aversion. Hence, Experiment 4 assessed a psychological mechanism—participants' verbalized concession aversion—that precedes and explains the behavioral mechanism—counterproposal adjustment—that was established in our prior experiments.

Method

Participants and design. One hundred sixty-eight students with different academic majors (e.g., business administration, psychology, law) participated in this laboratory study. Five dyads were excluded from the analysis due to network issues (i.e., incomplete data). The final sample included 158 participants.

The experimental design was a 2 Anchor Frame (*offer* vs. *request*) x 2 Role (*first-mover* vs. *responder*) design with repeated measures on the Role factor.

Procedure and task. Apart from the multi-issue negotiation structure, the paradigm paralleled the one used in Experiment 3. Again, due to a symmetric distributive pay-off structure, each party could earn individual profits summing to a total of €2.90. When, for instance, the buyer made a profit of €1.60 the seller made €1.30 (see Appendix E for details).

Negotiators could accompany each of their proposals with a text message. After a maximum of 45 minutes negotiations were terminated. All dyads reached an agreement. Finally, participants were debriefed, thanked and remunerated.

Experimental manipulations. The experimental manipulation for participants' negotiation role paralleled Experiment 3.

Experiment 4 manipulated anchor frames using the same procedure as in Experiment 1 to 3 with the exception that we did not force participants to place their anchor on either their own (offer condition) or their counterpart's resource (request condition; see Experiment 3). Instead, we only instructed first-movers to frame their opening proposals as offers vs. requests (e.g., "I offer you 30 stocks for €3.00" vs. "I request €3.00 for 30 stocks").

Manipulation check. We again asked participants whether they had focused predominantly on the first-mover's or the responder's resource ("The focus of our negotiation was on ..."; 6-point scale ranging from 1 = *the responder's resource* to 6 = *the first-mover's resource*).

Behavioral mechanisms. As in Experiment 3, we measured the full range of responder's concession behavior including counterproposals and concession rates.

Claimed value. As main dependent variable, we assessed parties' individual profits ranging from €0.00 to €2.90.

Psychological mechanism. Instead of measuring concession aversion through self-reports that would have interrupted the negotiation process and would have disclosed our hypotheses to participants, we recorded and analyzed parties' text messages as a verbal proxy for concession aversion. To shed light on the underlying psychological process that may have caused responders' concession making, two independent coders rated responders' text messages on how much they reflected the responder to be concession averse. Coders used a 6-point scale that ranged from 1 = *low concession aversion* to 6 = *high concession aversion*. An example for a low concession aversion statement was: "Can we start a little bit lower?" An exemplary statement for high concession aversion was: "I am making a huge loss and can certainly not embark on your proposal!" Cohen's kappa was calculated for the inter-rater reliability that revealed a substantial κ of .68.

Results

All dyads reached an agreement. Statistical analyses used the degrees of freedom related to the number of dyads to account for the non-independence of data within pairs of negotiators (Kenny et al., 2006).

Manipulation check. The 2 (Anchor Frame) x 2 (Role) ANOVA with repeated measures on the latter factor revealed the predicted main effect of anchor framing, $F(1, 73) = 17.67$, $p < .001$, $\eta_p^2 = .195$. When first-movers offered the own resource, both parties focused similarly on the resource of the first-mover ($M_{first\text{-}mover} = 3.71$, $SD = 1.42$; $M_{responder} = 4.00$, $SD = 1.55$), $t(34) = 0.82$, $p = .416$, whereas, when the first-mover requested the responder's resource, both parties focused similarly on the resource of the responder ($M_{first\text{-}mover} = 3.00$, $SD = 1.66$; $M_{responder} = 2.58$, $SD = 1.11$), $t(39) = 1.55$, $p = .130$.

Claimed value. We again predicted that the first-mover advantage would emerge for first offers but not for first requests. The 2 (Anchor Frame) x 2 (Role) ANOVA with repeated measures on the latter factor revealed the expected interaction effect, $F(1, 77) = 32.18$, $p < .001$, $\eta_p^2 = .295$ (see Figure 5). When first-movers made a first offer, they reached higher individual profits ($M = €1.91$, $SD = 0.68$) than responders ($M = €0.99$, $SD = 0.68$), $t(35) = 4.02$, $p < .001$, $d = 1.45$. In contrast, when first-movers made requests, *responders* ended up with significantly higher profits ($M = €1.95$, $SD = 0.80$) than first-movers, ($M = €0.95$, $SD = 0.80$), $t(42) = 4.12$, $p < .001$, $d = 1.31$. Again, first requests diminished the anchoring effect of opening proposals.

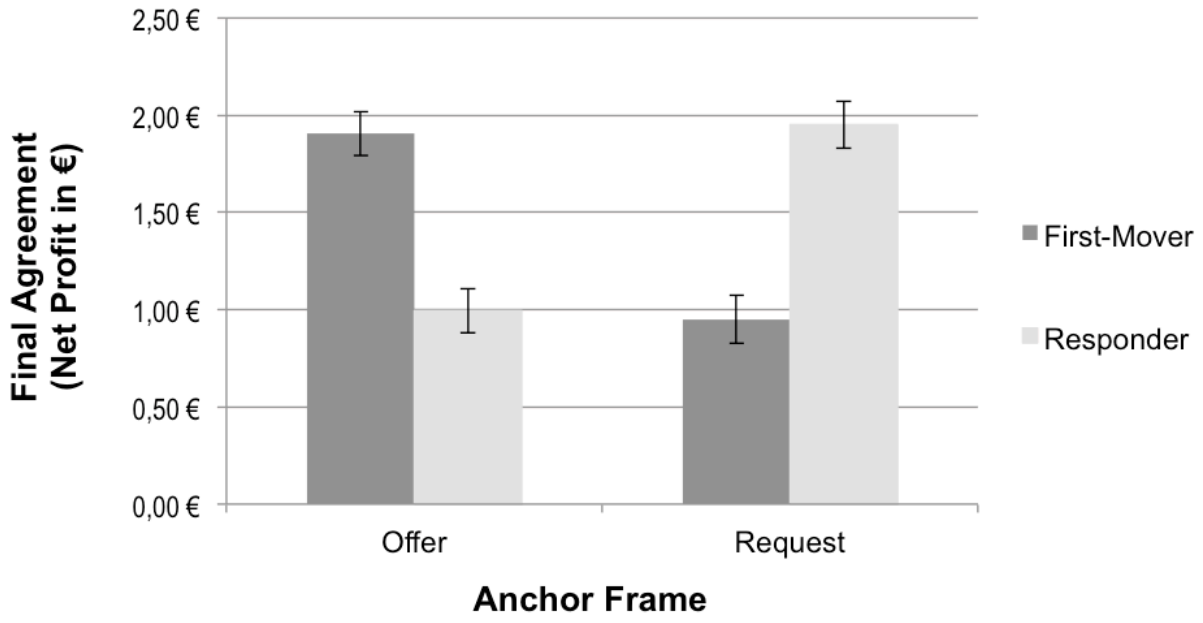

Figure 5. Experiment 4: Final individual profits as a function of anchor frame and role. Final agreements are in euros. Error bars indicate ± 1 SEM. Higher values indicate a higher profit for the respective negotiator. Individual profits within a dyad add up to €2.90 due to the distributive pay-off structure.

Behavioral mechanisms. Again, we analyzed responders' concession behaviors that could potentially account for the observed anchor framing effects (see Experiment 3).

Counterproposal. In line with Experiment 3, responders made more aggressive counterproposals when they received first requests (M = €2.25, SD = 1.13) than when they received first offers (M = €1.51, SD = 0.90), $t(77) = -3.08$, $p = .003$, $d = .70$.

Concession rate. Responders subsequent concessions per round did not differ depending on whether they had received first offers (M = €0.13, SD = 0.20) or first requests (M = €0.08, SD = 0.25), $t(77) = .83$, $p = .411$, $d = .22$.

Multiple mediation analysis. Experiment 3 demonstrated that the proposal framing effect on final profits was explained via responders' immediate counterproposals and not via their subsequent concession making. Experiment 4 sought to replicate this finding. We again conducted a multiple mediation analysis using bootstrapping procedures with 5,000 iterations (see Hayes, 2013, Model 4). Anchor Framing was entered as the predictor and the difference in final profits between first-mover and responder was entered as the dependent variable. Counterproposals and concession rates were entered as mediators. When responders received

first requests as opposed to offers, counterproposals mediated the proposal framing effect on final profits (indirect effect: b=-1.24, SE=.40, BC $CI_{95\%}$ [-2.05; -.46]). Again, concession rate did not mediate the framing effect on profits (indirect effect: b=-.31, SE=.37, BC $CI_{95\%}$ [-1.06; +.40]). Although this mediation analysis replicates Experiment 3, it does not yet answer *why* responders made more aggressive counterproposals after receiving opening requests.

Psychological concession aversion. We unobtrusively analyzed the text messages that responders sent to the counterpart with their respective proposals. In line with the MAMA's assumptions, responders expressed more concession aversion when they received first requests (M = 3.30, SD = 1.77) than when they received first offers (M = 2.36, SD = 1.52), $t(53) = -2.09$, $p = .041$, $d = .57$.

Serial mediation with psychological and behavioral mediators. We tested a serial mediation model of Anchor Framing → Psychological Concession Aversion → Behavioral Concession Aversion → Final Outcomes. We report the analysis of "(…) a causal chain linking the mediators, with a specified direction of causal flow" (Hayes, 2012; p. 14). In order to test this serial mediation model, we conducted a mediation analysis using a bootstrapping procedure with 5,000 iterations (see Hayes, 2013, Model 6). Anchor Framing was entered as the predictor, concession aversion was entered as first psychological mediator and counterproposals as the second behavioral mediator. The difference in negotiators' final profits served as the dependent variable.

Bootstrapping analysis revealed that concession aversion and counterproposals in sequence explained the anchor framing effect on final agreements (b=-.09, SE=.09, BC $CI_{90\%}$ [-.36; -.01]). In other words, first requests led responders to psychologically experience more concession aversion, which produced more aggressive counterproposals, which in turn reduced the classic first-mover advantage (see Figure 6).

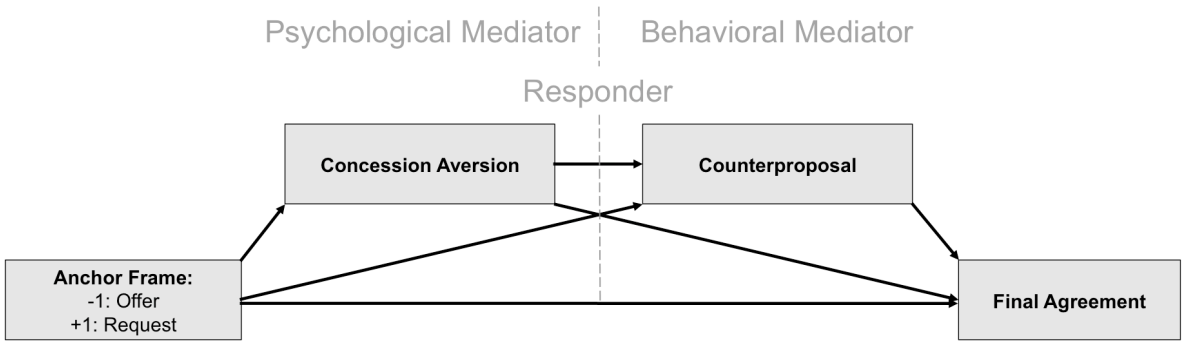

Figure 6. Serial mediation analyses (see Hayes, 2013; Model 6) showed that when responders received first requests vs. offers they experienced greater concession aversion, which in turn elicited more aggressive counterproposals and finally produced more beneficial final agreements. The psychological mediator and the behavioral mediator in sequence accounted for the reduced anchoring effect.

Additional analysis. The multi-issue task of Experiment 4 allowed us to test whether the observed framing effect was due to the resource on which first-movers placed their anchors (own vs. counterparts' resource) or instead due to the suggested framing of the opening proposal (offers vs. requests) as predicted by our MAMA. Note that the alternative mechanism of anchor location would be reflected in an interaction effect of proposal framing and anchor location on either of the two issues. The 2 (Anchor Frame: *offer* vs. *request*) x 2 (Anchor Location: *own resource* vs. *counterpart's resource*) ANOVA with repeated measures on the latter factor ruled out the alternative explanation of anchor location. Neither the main effects nor the interaction effect of Anchor Frame x Anchor Location were significant, all Fs < .29, p > .592, η_p^2 < .004. In line with our MAMA, Experiment 4 could rule out the alternative explanation that framing effects are due to distinct movement on different resources. Instead, we can conclude that the anchor framing effect on final outcomes is directly caused by differential motivation adjustment that results from first offers versus first requests.

General Discussion

We developed and empirically tested a Motivated-Adjustment Model of Anchoring to elucidate the role of motivational processes in anchoring. The anchoring literature, both within and outside of negotiations, has primarily relied on cognitive processes. In contrast, we integrated

research on framing and anchoring to demonstrate that an opening proposal elicits powerful motivation forces that crucially impact anchoring potency. We tested our MAMA by framing opening proposals as first offers that focused the responder on resources to be gained versus as first requests that focused the responder on own resource to be given up.

Four experiments provided consistent empirical support for the model. We replicated the seminal anchoring and first-mover effects across experiments (Galinsky & Mussweiler, 2001; Loschelder, Stuppi, & Trötschel., 2014) and extended this well-established finding by demonstrating that motivational forces crucially affected the anchoring effect. Consistent with our Motivated-Adjustment Model, the anchoring effect emerged only when opening proposals minimized responders' concession aversion by presenting the proposal as a gain to the responder. In contrast, the anchoring effect was eliminated and even reversed when the framing of an opening proposal induced high levels of concession aversion by presenting the offer as a request that emphasized losses to the recipient. Specifically, first requests as opposed to first offers motivated responders to make aggressive counterproposals, which in turn reduced the first-mover advantage. We found this moderating impact of proposal framing in two non-interactive experiments with an expert and a novice sample (Experiment 1-2) and on parties' final claimed value in dyadic, interactive negotiations (Experiment 3-4).

Mediation analyses across our experiments revealed that first requests led responders to make more aggressive counterproposals, which reduced the anchoring effect. In addition, Experiment 4 provided insights in the underlying psychological process that accounted for the behavioral mediator. Responders felt more concession aversion following first requests, which then accounted for more aggressive counterproposals. By integrating work on framing and anchoring, we offer new insights into when anchoring effects occur and why.

Future Research and Implications for Practice

The present research proposes that mixed-motive tasks and classical decision-making tasks differ in important ways. Whereas a classical decision task does not evoke a motivation to adjust away from an anchor, in negotiations, anchor framing evokes adjustment motivation (i.e., concession aversion) that pulls people farther away from an anchor. Further research is needed to examine how anchoring effects in negotiations are similar to and different from anchoring effects in decision-making tasks, such as the standard anchoring paradigm. It seems

especially important to disentangle the interplay of motivational and cognitive processes on anchoring.

We believe that our Motivated Adjustment Model of Anchoring contributes to recent research that aims to disentangle motivational and cognitive processes involved in anchoring effects. For example, Simmons, LeBoeuf, and Nelson (2010) found that accuracy motivation could play a role in reducing anchoring effects under specific conditions (e.g., when people are certain about the direction of adjustment). Such approaches seem particularly fruitful in order to integrate competing theoretical accounts (e.g., Selective Accessibility and Insufficient Adjustment). They also encourage research on more parsimonious models of the anchoring effect. As some scholars have noted, the mechanisms established in the literature do not have to be exclusive of each other: "In fact, the proposed processes are not mutually incompatible and it is possible that in some cases the anchoring effect may be a result of different processes working in parallel" (Bahník & Strack, 2016, p. 97). Recent research on the liberating potential of powerlessness (Schaerer, Swaab, & Galinsky, 2015) and the moderating effects of opponents' social value orientation (Loschelder et al., 2016) might provide first indications for factors that could further strengthen parties' motivation to adjust away from an opening anchor.

We believe that framing-induced concession aversion can potentially have detrimental effects as well, such as costly stubbornness in integrative negotiations. In an integrative context, elevated concession aversion could lead to less integrative agreements or even to painful impasses. Future research should therefore examine the framing and anchoring processes in the domain of integrative negotiations (see Gunia et al., 2013).

Our Motivated-Adjustment Model of Anchoring also provides broad implications for practitioners. Experiment 1 found that the framing of first proposals affected how much seasoned experts moved away from an initial anchor. For practitioners, the results are clear: when making first proposals, frame them as offers and not as requests to lower concession aversion and to maximize the power of moving first and making an ambitious first offer. This framing effect might be especially consequential in negotiations with institutional bids, where parties' proposals are per se framed as offers vs. requests, such as in collective bargaining between union and management. In this context, the union's proposal is often framed as a request, which could create concession aversion in management. Finding ways to frame these proposals as offers may smoothen labor negotiations.

Concluding Thoughts

Prior research has predominantly focused on cognitive anchoring mechanisms originally rooted in decision-making. Mixed-motive tasks, such as negotiations, naturally entail motivation forces that shape parties' judgments and behaviors. The current findings presented and tested the Motivated-Adjustment Model of Anchoring, which integrates the literatures on framing and anchoring to highlight how motivational processes impact anchoring processes. When an opening proposal was framed as an offer that highlighted gains to a responder, it elicited little concession aversion and the anchoring effect of ambitious offers and moving first was replicated. However, when an opening proposal was framed as a request that highlighted losses to the responder, it elicited high concession aversion and the anchoring impact was eliminated and the first-mover advantage reversed. The present MAMA model offers a richer and more complete understanding of how motivation and cognition play out in anchoring effects.

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Footnotes

[1] In a pilot study with one hundred nineteen participants from Amazon's Mechanical Turk (44 women, 75 men; mean age = 34.92, *SD* = 10.71), we tested whether the motivation to adjust

away from the anchor would impact the anchoring effect in decision-making contexts. Participants were randomly assigned to the experimental conditions in a 2 (Anchor Value: *high* vs. *moderate*) x 2 (Anchor Frame: *offer* vs. *request*) between-factors design. Participants were asked to estimate the actual costs of different commodities in two well established (Janiszewski & Uy, 2008; Zhang & Schwarz, 2013) and two adapted standard anchoring paradigms (see Appendix A for instructions). The analysis of two anchor-frame manipulation check items showed that the manipulation was successful: A 2 x 2 x 2 (Anchor Frame x Anchor Value x Item) ANOVA with repeated measure on the latter factor revealed the predicted Frame x Item interaction effect, $F(1, 115) = 15.01$, $p < .001$, $\eta_p^2 = .115$ (all other Fs < 2.26, $p > .135$). As expected, separate 2 x 2 (Frame x Value) ANOVAs for each item revealed significant main effects for Anchor Value only, with all four Fs(1, 115) > 6.68, ps < .011, $\eta_p^2 > .055$. All other main and interaction effects were not significant (Anchor framing: Fs < 1.85, ps > .177; interaction effects: Fs < 2.02, ps > .158). Bringing to focus either the price or the commodity by framing the estimation task as an offer vs. a request did not influence participants' estimates; nonetheless, the anchor value strongly impacted participants' estimates. These findings corroborate our assumption that the motivation to adjust from the anchor plays a much less vital role in classic estimation tasks that, by definition, are less amenable to motivational forces.

[2] The data for experts' negotiation expertise stem from 36 participants of the first workshop in the local chamber of crafts. Due to the data protection policy, the local chamber of crafts did not allow us to assess experts' years of negotiation experience in the second workshop.

Appendix

Appendix A: Pilot Study

In the following we report instructions for the estimation tasks that participants received in the pilot study (adapted from Janiszewski & Uy, 2008, Zhang & Schwarz, 2013).

Task 1. An electronic store offers a Samsung JU7100 Plasma TV for $5,760.
You want to estimate the actual cost of a large screen high-definition Samsung JU7100 Plasma TV. Keep in mind that the electronic store offers the Plasma TV for $5,760.

Task 2. An electronic store offers a Samsung BD-F7500/EN 3D Blu-ray Player for $300. You want to guess the actual cost of a Samsung BD-F7500/EN Blu-ray Player, which is 3D compatible. Keep in mind that the electronic store offers the Blu-ray-Player for $300.

Task 3. A butcher offers eight pounds original Tajima cattle of cobe roast beef for $1,490. You want to guess the actual cost of cobe roast beef, which is from original Tajima cattle and weighs 8 pounds. Keep in mind that the butcher offers the cobe roast beef for $1,490.

Task 4. A koi shop offers a koi for $590. You want to guess the actual cost of a koi, which is bred by Oya and is an Asagi. Keep in mind that the koi shop offers the koi for $590.

Appendix B: Experiment 1

Instructions. You are the general manager of the boat manufacturing company "Breakwaters". Currently, you are working on a special order of a motorboat and you are searching for a high-performance boat engine. In the following, you will be negotiating with a specific supplier for boat engines over an appropriate engine. The engine should not cost you more than €25,000 in order to keep the planned budget balanced. One year ago, a comparable engine had a price of €17,000. However, this relatively low price is no reliable information because there has been a huge technical development in boat engines during the last year. Now, it is your task to negotiate the lowest possible price for the boat engine in order to achieve the best possible profit on the motorboat.

Appendix C: Experiment 2

Instructions. Please imagine the following situation. You are the CEO of the pharmaceutical company "Bio-Pharma". The market in the pharmaceutical industry is highly competitive. Therefore, you are planning to extend your product range. For this extension, you need a specific chemical plant. Building a new plant would cost your company €25 million. But this procedure would take up a lot of time. An investigation revealed that the company "Seltek" is about to sell an appropriate plant. Seltek purchased the plant for approximately €17 million some years ago. However, this relatively low price is no reliable information because that purchase was transacted during a real estate crisis. Now, it is your task to negotiate the lowest price possible for the plant.

Appendix D: Experiment 3

Instructions to sellers and buyers. ***Seller.*** Please imagine the following situation: You will be negotiating about the price of stocks with another person called [name]. You have been randomly assigned the role of the stock seller. Your opponent, [name], has been assigned the role of the stock buyer. Prior to the negotiation with the buyer you need to use your credit to buy stocks from the instructor. Afterwards, you can then sell these stocks to the counterparty. Thereby, you can make profits. You can keep all profits that you will make from selling stocks. You will only negotiate with the buyer about the amount of money, which you will receive [the number of stocks, which you will give up]. The amount of stocks is set to be 15 [price is set to be €3.00]. Thus, you have to sell stocks to the buyer in order to make profits for yourself. During the negotiation, the minimum selling price is €1.50 and you can agree upon prices of up to €4.40. You can negotiate a very good deal by receiving as much money as possible for yielding 15 stocks [by giving up as few stocks as possible]. Please raise your hand right now to buy stocks from the instructor. Please wait until the instructor comes to you. In the following negotiation, you will request a specific amount of money from the buyer for 15 stocks in each round [offer a specific number of your stocks for the amount of €3.00 in each round]. In other negotiations of this kind it has been proven that concentrating on the money of the counterparty that you want to receive could be strategically helpful [on your own money that you are willing to give up]. Therefore, it might be advantageous during the negotiation to concentrate on the money of the counterparty [on your own stocks]. In the following, please insert a test-request [offer] to familiarize yourself with the negotiation program. The stock buyer will not receive this test-request [offer].

Buyer. Please imagine the following situation: You will be negotiating about the price of 15 stocks with another person called [name]. You have been randomly assigned the role of the stock buyer. Your opponent, [name], has been assigned the role of the stock seller. In the following negotiation, you can use your credit to buy stocks from the counterparty. Thereby, you can minimize losses. The acquired stocks can be returned to the instructor after the purchase. The amount of money that you paid for the stocks determines the amount of money that you will receive from the instructor for reselling. You will only negotiate with the seller about the amount of money, which you will give up [the number of stocks, which you will receive]. The amount of stocks is set to be 15 [price is set to be €3.00]. Thus, you have to buy stocks from the seller, before you can resell the stocks you bought to the instructor. During the negotiation, the minimum selling price is €1.50 and you can agree upon prices of €4.40. You

can negotiate a very good deal by giving up as less money as possible for receiving 15 stocks [by receiving as much stocks as possible for yielding €3.00]. In the following negotiation, you will offer the seller a specific amount of money for 15 stocks in each round [request a specific number of the seller's stocks for the amount of €3.00 in each round]. In other negotiations of this kind it has been proven that concentrating on the amount of your own money that you are willing to give up could be strategically helpful [on the seller's stocks that you want to receive]. Therefore, it might be advantageous during the negotiation to concentrate on your own money [on the counterparty's stocks]. In the following please insert a test-offer [request] to familiarize yourself with the negotiation program. The stock seller will not receive this test-offer [request].

Appendix E: Experiment 4

Instructions to sellers and buyers. ***Seller.*** Please imagine the following situation: You will be negotiating about the price of stocks with another person called [name]. You have been randomly assigned the role of the stock seller. Your opponent, [name], has been assigned the role of the stock buyer. Prior to the negotiation with the buyer you need to use your credit to buy stocks from the instructor. Afterwards, you can then sell these stocks to the counterparty. Thereby, you can make profits. You can keep all profits that you will make from selling stocks. Stocks that you did not invest during the negotiation will be returned to the instructor for the purchase price. You will negotiate with the buyer about both the amount of money that you will receive and the specific amount of stocks. Thus, you have to sell stocks to the buyer in order to make profits for yourself. During the negotiation, the minimum selling price is €1.50 and you can agree upon prices of up to €4.40. You can negotiate a very good deal by receiving as much money as possible for yielding a small amount of stocks [by giving up as few stocks as possible for a large amount of money]. Please raise your hand right now to buy 30 stocks for €3.00 from the instructor. Please wait until the instructor comes to you. In the following negotiation, you will request a specific amount of money from the buyer for a specific amount of stocks in each round [offer a specific amount of your stocks for a specific amount of the buyer's money]. In other negotiations of this kind it has been proven that concentrating on the money of the counterparty that you want to receive could be strategically helpful [on your own stocks that you are willing to give up]. Therefore, it might be advantageous during the negotiation to concentrate on the money of the counterparty [on your own stocks]. In the following, please

insert a test-request [offer] to familiarize yourself with the negotiation program. The stock buyer will not receive this test-request [offer].

Buyer. Please imagine the following situation: You will be negotiating about the price of stocks with another person called [name]. You have been randomly assigned the role of the stock buyer. Your opponent, [name], has been assigned the role of the stock seller. In the following negotiation, you can use your credit to buy stocks of from the counterparty. Thereby, you can minimize losses. The acquired stocks can be returned to the instructor after the purchase. The amount of acquired stocks determines the amount that you will receive from the instructor for reselling. You will negotiate with the seller both the amount of money that you will give as well as the specific amount of stocks. Thus, you have to buy stocks from the seller, before you can resell the stocks you bought to the instructor. During the negotiation, the minimum selling price is €1.50 and you can agree upon prices of up to €4.40. You can negotiate a very good deal by giving up as less money as possible for receiving a large amount of stocks [by receiving as much stocks as possible for yielding a small amount of money]. In the following negotiation, you will offer a specific amount of money to the seller for a specific amount of stocks in each round [request a specific amount of stocks from the seller for a specific amount of money]. In other negotiations of this kind it has been proven that concentrating on the amount of your own money that you are willing to give up could be strategically helpful [on the seller's stocks that you want to receive]. Therefore, it might be advantageous during the negotiation to concentrate on your own money [on the seller's stocks]. In the following please insert a test-offer [request] to familiarize with the negotiation program. The stock seller will not receive this test-offer [request].

Chapter 4: Money Makes the World Go Round: Pecuniary Power in Negotiations

[Um Geld verhandelt die Welt: Die Macht des Monetären in Verhandlungen]

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Stellen Sie sich vor, Sie werden im Bewerbungsgespräch gefragt, wie Ihre Gehaltsvorstellungen aussehen. Oder ein Interessent für Ihren gebrauchten ’97er Golf fragt, welchen Preis Sie dafür haben wollen und ob das die „Verhandlungsbasis“ sei. Mit und um Geld verhandelt die Welt. In unzähligen Verhandlungen spielt die Ressource Geld eine zentrale Rolle und beeinflusst das Erleben und Verhalten der Verhandlungsparteien. Neben den skizzierten Auto- und Gehaltsverhandlungen spielt auch in Erbschafts-, Scheidungs- oder Eigentumsverhandlungen das „liebe“ Geld eine zentrale Rolle. Aber welchen Einfluss hat Geld eigentlich auf die Zugeständnisbereitschaft und das Verhandlungsergebnis? Wer befindet sich in einer vorteilhafteren Position, die KäuferInnen mit ihrer Ressource Geld oder die VerkäuferInnen mit ihren Ressourcen wie Waren oder Dienstleistungen? Wir wollen im Folgenden einige praktische Hinweise zum wirkungsvollen Umgang mit Geld in Verhandlungen geben – sowohl für Parteien, die über Geld verfügen (z. B. KäuferInnen oder ArbeitgeberInnen), als auch für Parteien, die andere Ressourcen einbringen, um diese in bare Münze zu verwandeln (z. B. VerkäuferInnen oder ArbeitnehmerInnen).

Erinnern Sie sich an Ihre letzte Verhandlung? Wer war Ihr Verhandlungspartner bzw. Ihre Verhandlungspartnerin? Worüber haben Sie verhandelt? Haben Sie mit einem Arbeitskollegen über die Aufgabenverteilung der nächsten Woche verhandelt? Mit Ihrer Nachbarin über die Pflege der gemeinschaftlichen Grundstücksgrenze? Oder mit Ihren Kindern über deren Schlafenszeit? Wenngleich alltägliche Verhandlungen weitaus häufiger gar nicht ums Geld kreisen, denken die meisten Personen bei Verhandlungen aus ihrer persönlichen Erfahrungswelt zunächst ans Bare. So erinnern Sie sich möglicherweise an eine Verhandlung zum Kauf oder Verkauf Ihres Autos, an eine Gehaltsverhandlung mit dem

oder der Vorgesetzten oder an eine Basarverhandlung im Urlaub. Die Verhandlung ist bei vielen Menschen in ihrer persönlichen Erfahrungswelt gedanklich stark mit der Ressource Geld verknüpft, während andere Ressourcen zunächst eine untergeordnete Rolle spielen.

Empirische Studien, die sich mit dem Verhalten und Erleben von Parteien im Kontext von Verhandlungen befassen, zeigen vielfach, dass die Ressource „Geld" das Verhandlungsgeschehen stärker beeinflusst als andere Ressourcen (z. B. Appelt, Zou, Arora & Higgins, 2009; Neale, Huber & Northcraft, 1987). Eine zentrale Frage, die sich aus diesen Befunden ergibt, ist, warum Geld im Kontext von Verhandlungen eine so bedeutsame Rolle spielt und warum andere Ressourcen, wie etwa ein Gebrauchsgegenstand, eine Ware, eine Dienstleistung oder die Arbeitskraft, häufig in den Hintergrund treten. So neigen Menschen dazu, die Verhandlung über ein Fahrrad, einen Gebrauchtwagen oder einen PC nicht als „Warenverhandlung" sondern als „Preisverhandlung" zu bezeichnen. Ebenso wird eine Verhandlung im beruflichen Kontext nicht als „Arbeitsverhandlung" sondern als „Gehaltsverhandlung" bezeichnet, obwohl die Ressource Arbeit eine mindestens ebenso gewichtige Rolle spielt wie die Ressource Geld bzw. Gehalt.

Wenngleich es offensichtlich erscheint, dass Geld das Verhandlungsgeschehen stärker beeinflusst als andere Ressourcen, hat sich die Verhandlungsforschung bisher nur sehr wenig mit dessen spezifischer Wirkung beschäftigt. Angesichts der bedeutsamen Wirkung von Verhandlungsressourcen (Geld, Waren, Dienstleistungen, Informationen etc.) und deren Einfluss auf kognitive, motivationale und emotionale Prozesse, wurde kürzlich ein Verhandlungsmodell vorgestellt, welches die Rolle von Ressourcen systematisch beleuchtet. In diesem Ansatz namens Resource-Oriented-Negotiation (kurz ‚RON'; Trötschel, Höhne, Peifer, Majer & Loschelder, 2014) werden verschiedene Merkmalsdimensionen von Ressourcen klassifiziert, die einerseits dazu dienen können, die Auswirkung bestimmter Ressourcen, wie beispielsweise Geld, besser zu erklären; andererseits ergeben sich eine Reihe von praktischen Implikationen, wie man Ressourcen strategisch einsetzt, um auf möglichst effiziente Art zu einer Einigung zu kommen.

Ziel der folgenden Darstellung ist es, die Rolle des Geldes als eine der bedeutsamsten Ressourcen im Kontext von Verhandlungen systematisch zu beleuchten und die psychologischen Auswirkungen dieser Ressource auf das Verhandlungsgeschehen zu erläutern. Hierzu sollen zunächst einige Befunde zur Wirkung von Geld vorgestellt werden. Einerseits wird die Rolle des Geldes als bedeutsame Bezugsgröße für die Entstehung psychologischer Prozesse, wie die Entstehung einer Gewinn- vs. Verlustorientierung, diskutiert. Anderseits wird die Rolle des Geldes als eine universelle, multifunktional einsetzbare Ressource in

Verhandlungen hervorgehoben. Im Anschluss an die Darstellung der empirischen Befunde zur Wirkung der Ressource Geld werden die aus Sicht des RON-Ansatzes spezifischen Charakteristika des Geldes dargestellt, um eine Reihe von praktischen Empfehlungen für den effektiven Umgang mit Geld in Verhandlungen zu geben.

Die Wirkung des Geldes in Verhandlungen

Obwohl zahlreiche Studien den Erfolg von Verhandlungen anhand monetärer Profite erfassen (Gelfand, Fulmer & Severance, 2010), hat die psychologische Forschung erst in den letzten Jahren damit begonnen, der spezifischen Wirkung des Geldes eine größere Aufmerksamkeit zu schenken. Hierbei wurde einerseits beobachtet, dass Geld eine dominierende Bezugsgröße in Verhandlungen ist, die das Gewinn- und Verlusterleben von Menschen maßgeblich beeinflusst. Andererseits wurde festgestellt, dass Geld eine multifunktionale, universell einsetzbare Ressource darstellt, die zur Befriedigung vielfältiger Bedürfnisse genutzt werden kann und einen großen Einfluss auf das Erleben und Verhalten von Menschen ausübt.

Geld als Bezugsgröße: Verlust- und Gewinnerleben in Verhandlungen

Betrachtet man den individuellen Nutzen, den KäuferInnen und VerkäuferInnen in einer Verhandlungerzielen, so schneiden KäuferInnen typischerweise besser ab als VerkäuferInnen (z. B. McAlister, Bazerman & Fader, 1986; Neale et al., 1987). Dies lässt sich unter anderem durch sogenannte „Framing-Effekte“ erklären. Durch Framing wird einem möglichen Verhandlungsergebnis ein bestimmter subjektiver Bezugsrahmen (Frame) gegeben: So kann aus KäuferInnensicht während einer Verhandlung sowohl der Gewinn der Ware in den gedanklichen Fokus rücken („Gewinn-Frame“), als auch der Verlust des dafür aufgewendeten Geldes („Verlust-Frame“). Diese Gewinn- und Verlustorientierung hat in Verhandlungen weitreichende Auswirkungen auf das psychologische Erleben und Verhalten der Parteien: Verlustorientierte im Vergleich zu gewinnorientierten Parteien haben eine erhöhte Zugeständnisaversion (De Dreu, Carnevale, Emans & van de Vliert, 1995) und agieren folglich unnachgiebiger (z. B. Trötschel & Gollwitzer, 2007). Das hat wiederum zur Folge, dass Verlustorientierte in Verhandlungen mit gewinnorientierten Parteien bessere Ergebnisse erzielen (De Dreu et al., 1995). Übertragen auf Preisverhandlungen bedeutet dies, dass

KäuferInnen den Verlust des Geldes und VerkäuferInnen den Gewinn des Geldes vor Augen haben, wodurch wiederum KäuferInnen in Preisverhandlungen unnachgiebiger verhandeln (z. B. Appelt et al., 2009; Neale et al., 1987).

Diese Annahme zur Gewinn- und Verlustorientierung in Verhandlungen haben wir jüngst in einer Serie von Studien getestet (Trötschel, Loschelder, Höhne & Majer, 2014). In verschiedenen Untersuchungsbedingungen wurde die Aufmerksamkeit der KäuferInnen und VerkäuferInnen entweder auf die Ressource Geld oder die Ware gelenkt. Wenn beispielsweise der Preis bereits vor Beginn der Verhandlung festgelegt ist und die Parteien nur noch über die zu liefernde Ware verhandeln, wird aus einer klassischen Preisverhandlung eine Warenverhandlung. In einer solchen Warenverhandlung wird anstelle des Geldes, der Gewinn oder Verlust der Ware in den Vordergrund rückt. In Warenverhandlungen zeigten sich nun die VerkäuferInnen verlustorientierter und waren weniger zugeständnisbereit als die KäuferInnen. In der vergleichbaren Preisverhandlung – festgelegte Ware und zu verhandelnder Preis – zeigte sich das bekannte Muster: Die verlustorientierten KäuferInnen waren weniger zugeständnisbereit als die VerkäuferInnen und erzielten höhere Profite. Ähnliches zeigt sich auch, wenn die Wahrnehmung der KäuferInnen und VerkäuferInnen durch die Formulierung von Angeboten und Forderungen entweder auf die Ressource Geld (VerkäuferIn: „Ich fordere einen Preis X für die Ware Y“; KäuferIn: „Ich biete Dir einen Preis X für die Ware Y“) oder die Ware (VerkäuferIn: „Ich biete Dir die Ware Y für den Preis X“; KäuferIn: „Ich fordere die Ware Y für einen Preis X“) gelenkt wurde.

Die Befunde dieser Studien zur Fokussierung unterschiedlicher Ressourcen (z. B. Geld vs. Ware; Trötschel, Loschelder et al., 2014) stehen im Einklang mit bisherigen Erkenntnissen aus Forschungsarbeiten zu Preisverhandlungen und dem sogenannten Besitztumseffekt (Endowment-Effekt; z. B. Kahneman, Knetsch & Thaler, 1990; Thaler, 1980). Auf den ersten Blick liefern die beiden genannten Forschungstraditionen widersprüchliche Befunde: Während Studien zu Preisverhandlungen zeigen, dass KäuferInnen verlustfokussiert sind und somit weniger Zugeständnissemachen, legt die Forschung zum Besitztumseffekt den gegenteiligen Schluss nahe — nämlich, dass VerkäuferInnen (z. B. BesitzerIn einer Tasse) stärker auf ihre Verluste fokussieren. Bei genauer Betrachtung dieser beiden Forschungsansätze wird offensichtlich, dass in den Studien zu Preisverhandlungen die Ressource Geld die Bezugsgröße der sozialen Interaktion ist, während in den Forschungsarbeiten zum Besitztumseffekt die Ware (z. B. eine Tasse) den Referenzpunkt der Aufgabenstellung darstellt.

Geld als multifunktionale, universell nutzbare Ressource

Unabhängig von den Befunden zum Besitztumseffekt (Kahneman et al., 1990), zeigten eine Vielzahl an Studien, dass Geld eine sehr einflussreiche Ressource in der sozialen Interaktion zwischen Menschen ist. Im Vergleich zu anderen Ressourcen wird Geld eine größere Aufmerksamkeit geschenkt (z. B. Appelt et al., 2009). Geld wird als eine multifunktionale Ressource wahrgenommen, die gegen eine Vielzahl anderer Ressourcen getauscht werden kann (z. B. Lea & Webley, 2006). Geld kann fundamentale menschliche Bedürfnisse wie Sicherheit oder Macht befriedigen (Zhang, 2009) und beeinflusst schließlich bedeutsame psychologische Prozesse, wie etwa die subjektiv wahrgenommene Selbstwirksamkeit (Vohs, Mead & Goode, 2008). Vor dem Hintergrund dieser Bedeutsamkeit des Geldes ist es wenig erstaunlich, dass KäuferInnen, die im Besitz dieser mächtigen Ressource sind, einen Verhandlungsvorteil besitzen. Neale und KollegInnen (1987) weisen auf die psychologische Wirkung der „universellen" Ressource Geld im Verhandlungsgeschehen hin: Parteien, die im Besitz der multifunktionalen Ressource Geld sind, fühlen sich im Vergleich zur Gegenpartei häufig mächtiger, einflussreicher und weniger verpflichtet, die Transaktion (Geld für Ware oder Dienstleistung) abzuschließen als die Gegenpartei, die nicht im Besitz der Ressource Geld ist. Ähnliches gilt auch für andere Verhandlungen, in denen Geld eine zentrale Rolle spielt — etwa für Gehaltsverhandlungen. Auch hier wird Geld gegen einenicht-monetäre Ressource getauscht. Genauer gesagt, ein Gehalt wird für die Arbeitskraft der Mitarbeiterin oder des Mitarbeiters gezahlt. Aufbauend auf den weiter oben dargestellten Befunden lässt sich vermuten, dass auch in Gehaltsverhandlungen die Macht des Monetären zu Tage tritt — die Ressource „Geld", mit ihrem multifunktionalen Charakter wird das Verhandlungsgeschehen dominieren. Es leitet sich gleichzeitig eine Empfehlung für ArbeitnehmerInnen in Gehaltsverhandlungen ab: Aufbauend auf den Befunden zum Besitztumseffekt sollten ArbeitnehmerInnen versuchen, das Augenmerk der Verhandlung auf diejenigen Ressourcen zu lenken, in deren Besitz sie selbst sind: Welche Qualifikationen und Weiterbildungen rechtfertigen das Gehalt, welche Projekte, Erfolge und KundInnen bringen ArbeitnehmerInnen in das Unternehmen ein? Das Gehaltssynonym „Verdienst" geht nicht von ungefähr auf das Verb „verdienen" zurück und lenkt den Fokus zurück auf die Ressource, die ein/-e ArbeitnehmerIn in die Verhandlung einbringen kann.

Praktische Implikationen und Merkmale des Geldes

Inwiefern es VerkäuferInnen oder ArbeitnehmerInnen gelingt, den Fokus des Geschehens weg von der dominierenden Ressource Geld zu lenken, hängt im Wesentlichen von den Merkmalen der anderen involvierten Ressourcen ab. Im Folgenden werden drei bedeutsame Merkmale von Ressourcen – nämlich Teilbarkeit, Besitz und Präferenz – vorgestellt und im Hinblick auf ihre praktische Relevanz in Verhandlungen mit Geld diskutiert (vgl. RON; Trötschel, Höhne et al., 2014).

Teilbarkeit

Das erste bedeutsame Merkmal von Ressourcen liegt in ihrer Teilbarkeit. Geld ist dabei ein typisches Beispiel für eine teilbare Ressource. So lässt sich ein Geldbetrag von 100 Euro in unterschiedliche Teilbeträge (10 €, 1 €) bis zur kleinsten Einheit von 1 Cent aufteilen. Im Gegensatz hierzu ist die Ressource eines gebrauchten ’97er Golfs nicht in kleine Teile der gleichen Ressource teilbar. Die Teilbarkeit von Ressourcen hat weitreichende Auswirkungen auf das Verhandlungsgeschehen. So verlagert sich das Geschehen häufig stark auf teilbare Ressourcen wie Geld, da in Hinblick auf diese Ressourcen leichter Zugeständnisse gemacht werden können (und zwar in beliebig kleinen Schritten). Es liegt in der Natur der Sache, dass nur dann verhandelt werden kann, wenn es auch verschiedene, kleinschrittige Einigungsoptionen gibt. So bewegen sich KäuferIn und VerkäuferIn typischerweise auf der Preisdimension in vielen kleinen Schritten aufeinander zu. Bei der Ressource Ihres VW Golf existiert kein (großer) Spielraum für Zugeständnisse (der Wagen wird der Käuferin bzw. dem Käufer ganz überlassen oder eben nicht).

Der Spielraum für Zugeständnisse vergrößert sich jedoch dann, wenn die nicht-monetäre Ressource ebenfalls teilbar ist: GemüsehändlerInnen können beispielsweise verschiedene Waren in unterschiedlichen Mengen anbieten. Die Aufmerksamkeit wird unweigerlich auf die Ware gelenkt. Und auch ein/-e ArbeitnehmerIn kann (und sollte) in einer Gehaltsverhandlung die Aufmerksamkeit weg vom Gehalt und hin zur geleisteten Arbeit lenken. Befinden Sie sich demnächst wieder in einer Gehaltsverhandlung, überführen Sie auf den ersten Blick unteilbare Ressourcen in teilbare Ressourcen. Vereinbaren Sie beispielsweise Zielvereinbarungen und Boni für verschiedene Teilprojekte anstatt für Ihre gesamte, ungeteilte Arbeitskraft. Es ergeben sich zusätzliche Einigungsoptionen, wenn Sie Ihre Arbeitskraft nicht

als eine Gesamtressource, sondern als eine Zusammensetzung verschiedener „Teil"-Ressourcen betrachten.

Zusammenfassend lässt sich sagen, dass Parteien, die im Besitz von teilbaren Ressourcen sind, einen Vorteil genießen, da sich das Verhandlungsgeschehen primär auf diesen Ressourcen abspielt. Zudem lassen sich auf diesen Ressourcen hoch präzise Angebote formulieren, die wiederum vorteilhafte Auswirkungen auf die Wahrnehmung durch den Empfänger haben (Loschelder, Stuppi & Trötschel, 2014). Parteien, die nicht im Besitz von teilbaren Ressourcen sind, sollten folglich versuchen, ihre Ressourcen in teilbare Ressourcen zu überführen oder weitere Ressourcen in die Verhandlung einzubringen.

Besitz

Der Besitz der Ressourcen ist in den bisher genannten Beispielen festgelegt: KäuferIn oder ArbeitgeberIn besitzen die Ressource Geld, VerkäuferIn oder ArbeitnehmerIn besitzen andere Ressourcen wie Waren, Güter, Dienstleistungen oder ihre Arbeitskraft. Verhandelt wird in den genannten Beispielen stets der Austausch dieser Ressourcen (s. Austauschverhandlungen). Geld kann aber auch in anderen Verhandlungsformen das Verlust- und Gewinnerleben systematisch beeinflussen: So spielt Geld häufig eine bedeutsame Rolle in sogenannten Verteilungsverhandlungen, wie etwa in Erbschaftskonflikten, in denen ein gemeinschaftlicher Besitz (ein Erbe) zwischen den Parteien verteilt werden muss. Aber auch in Beitragsverhandlungen kann Geld eine bedeutsame Rolle spielen: So verhandelt möglicherweise eine Eigentümergemeinschaft darüber, wer welche Geldbeiträge zur Sanierung einer Immobilie leisten soll. Auch hier kommt erneut die Verlust- und Gewinnorientierung der Parteien ins Spiel: Insbesondere in Beitragsverhandlungen sind Parteien stark verlustfokussiert und folglich wenig zugeständnisbereit (z. B. wird jede/-r MiteigentümerIn einen Geldbeitrag zur Sanierung der gemeinsamen Immobilie als individuellen Verlust erleben).

Dieses subjektive Augenmerk auf Verluste, das eine Einigung stark erschweren kann, gilt es zu verändern. Die Parteien werden in einen gewinnorientierten Zustand versetzt und zu Zugeständnissen bewegt: So sollte die Aufmerksamkeit der Parteien in einer Beitragsverhandlung auf das Gemeingut gelenkt werden (z. B. das gemeinsame Wohneigentum). Hierdurch werden die jeweiligen Geldbe(i)träge als Gewinn für das Gemeingut wahrgenommen. Umgekehrt sollte die Aufmerksamkeit in Verteilungsverhandlungen weg vom Verlust der Anteile am Gemeingut (Erbe), hin zum

individuellen Nutzen der jeweiligen Partei gelenkt werden, so dass der individuelle Gewinn der betroffenen Parteien in den Vordergrund tritt.

Präferenz

Schließlich ist zu berücksichtigen, dass Ressourcen von Parteien nicht immer gleich bewertet werden. Tatsächlich gewichten die meisten Parteien die Ressource Geld am stärksten, wodurch die Verhandlung einen distributiven Charakter erhält. Distributive Verhandlungen haben eine starre Ertragsstruktur: der Nutzen einer Partei führt zu gleichwertigen Kosten bei der Gegenpartei (ein „Nullsummenspiel"). Ein typisches Beispiel hierfür ist die eingangs erwähnte Preisverhandlung über den '97er VW Golf. Ein niedrigerer Preis zugunsten der Käuferin bzw. des Käufers geht mit gleichwertigem Verlust für die Verkäuferin bzw. den Verkäufer einher. Distributive Verhandlungen sind häufig solche, bei denen nur ein Gegenstand – wie etwa der Preis – verhandelt wird.

Integrative Verhandlungen entstehen, wenn mehrere Gegenstände in das Geschehen einbezogen werden und sich hieraus ergibt, dass die Parteien unterschiedliche Präferenzen hinsichtlich der Gegenstände besitzen. Integrative Verhandlungen haben eine variable Ertragsstruktur: Die Parteien können ihren Nutzen vergrößern, ohne dies auf gleichwertige Kosten der Gegenpartei zu tun. Verhandeln ArbeitnehmerIn und ArbeitgeberIn ausschließlich über das Gehalt, so wird die Verhandlung zu einer Situation mit distributiver Ertragsstruktur, welches einem Nullsummenspiel entspricht. Durch seine Multifunktionalität kann Geld jedoch leicht in andere Ressourcen eingetauscht werden: Überführen die Parteien das Geld in andere Ressourcen, wie beispielsweise einen Firmenwagen, ein Diensthandy, Weiterbildungen oder Zuschüsse zur Altersvorsoge, so können sich neue Einigungsoptionen ergeben: Beispielsweise haben viele Unternehmen besondere Konditionen mit Automobilherstellern ausgehandelt, zu denen sie Firmenwagen günstiger beziehen können als die MitarbeiterInnen. Auch der Aufbau einer betrieblichen Gesundheitsförderung ermöglicht es ArbeitnehmerInnen und ArbeitgeberInnen integrative Einigungen zu finden, die über eine einseitige monetäre Entlohnung hinausgehen (weniger Krankheitstage und kostenlose Sportangebote).

Fazit

Geld spielt in vielen Verhandlungen eine wichtige Rolle und dominiert aufgrund seines multifunktionalen, universell nutzbaren Charakters das Geschehen. Parteien sollten sich, sobald Geld auf den Verhandlungstisch gelangt, wie etwa in Preis- oder Gehaltsverhandlungen, über die Macht des Monetären bewusst sein. Hierbei spielen nicht nur die Merkmale der Ressource Geld (Teilbarkeit, Besitz und Präferenz), sondern auch die Merkmale der anderen verhandelten Ressourcen (z. B. Waren, Arbeitskraft, Informationen) eine zentrale Rolle. Betrachtet man Geld nicht ausschließlich als monetäre Ressource, sondern als eine "verwandelbare" Ressource, so ergeben sich für Ihre zukünftigen Preis- und Gehaltsverhandlungen vielfältige neuartige Einigungsmöglichkeiten.

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Chapter 5: The Role of Professional Experience in Attitudes Towards Ethically Questionable Bargaining Tactics – How Old Stagers Promote Sustainable Business Relationships

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Abstract

In business contexts, individuals establish social relationships over long periods of time. Recurrent negotiations shape these relationships. Ethically questionable negotiation tactics potentially lead to short-term success by maximizing the individual gain. However, questionable tactics pose high risks for sustainable business relationships and outcomes in recurrent negotiations. Abundant research revealed vertical individualistic values as a central predictor of unethical bargaining behavior. Parties high in individualistic values engage more in unethical negotiation tactics. The current research investigates the potentially mitigating role of professional experience in attitudes towards ethically questionable negotiation tactics. Specifically, we examine whether professional experience impacts the strong link between vertically individualistic values and questionable bargaining behavior. We predict that employees' experience should be negatively associated with their attitudes towards ethically questionable tactics. Beyond that, for individuals with long-term professional experience vertically individualistic values should be less positively associated with questionable tactics than for individuals with short-term professional experience. We analyze a dataset of 207 individuals with a professional experience ranging from 1 to 50 years. Extending prior research, our findings reveal that professional experience is negatively related to negotiators' endorsement of ethically questionable tactics. We show that professional experience is a significant moderator of the link between vertical individualism and one of the severest questionable bargaining tactics. The findings highlight the key role that professional experience plays in ethical bargaining behavior and sustainable business relationships.

Keywords: Negotiation ethics, business relationships, ethically questionable bargaining tactics, professional experience

> The wolves sent messengers to the sheep, offering to swear a sacred oath of everlasting peace if the sheep would just agree to hand over the dogs for punishment. It was all because of the dogs, said the wolves, that the sheep and the wolves were at war with one another. The flock of sheep, those foolish creatures who bleat at everything, were ready to send the dogs away but there was an old ram among them whose deep fleece shivered and stood on end. 'What kind of negotiation is this!' he exclaimed. 'How can I hope to survive in your company unless we have guards? Even now, with the dogs keeping watch, I cannot graze in safety.' (Gibbs, 2002, Fable 31).

The principle of fables revolves around the ethics of the protagonist's behavior and illustrates the key message by actions of prototypical animals. For instance, the wolf generally features a deeply individualistic (selfish) motivation and commonly engages in unethical behaviors (Eder, 2010). Accordingly, in the described Aesopian fable, the wolf follows its individualistic motivation and uses ethically questionable bargaining tactics in order to extract the maximum gain by all available means.

Certainly, fables are interpretable in multiple ways, but in this case the ram's high age attains significant distinction. The characterization of the high age is a common surrogate for experience and wise decision-making. In the present Aesopian fable, the old stager detects the unethical bargaining behavior, but how would he actually behave in the negotiation process? Would the old stager rather use ethically questionable negotiation tactics as well or would he interact with the counterpart in a moral and genuine way?

In accordance with the characters in ancient Greek fables, current psychological research suggests that individualism, particularly the cultural value of vertical individualism is strongly associated with competition (De Dreu & Carnevale, 2003) and ethical questionable negotiation strategies (Erkus & Banai, 2011). Negotiators who endorse vertically individualistic values are characterized by a high concern for their performance in competitions with others and by a preference for status hierarchies (Singelis, Triandis, Bhawuk, & Gelfand, 1995). Consistent with previous research, a plethora of studies shows that a negotiator's vertical individualistic value is the central predictor of unethical negotiation tactics (e.g., Goelzner, Banai, & Stefanidis, 2011). However, the use of ethically questionable negotiation tactics may

lead to the extraction of all possible profits in the short term, but hinder sustainable business relationships in the long term (Curhan, Elfenbein, & Xu, 2006; Volkema & Rivers, 2012).

First evidence on factors that may impact the strong link between individualism and ethically questionable behavior stems from decision making research (O'Fallon & Butterfield, 2005). Studies indicate that experienced managers display higher ethical judgements (Weeks, Moore, McKinney, & Longenecker, 1999) and hold higher moral standards than less experienced managers (Chavez, Wiggins III, & Yolas, 2001). With respect to negotiations, important questions arise from this line of research. Does professional experience have beneficial effects on ethically questionable tactics in negotiations? Does professional experience even moderate the detrimental effect of vertical individualism and ethically questionable negotiation tactics?

Noteworthy, negotiations differ in general from other decision-making contexts in terms of their mixed-motive nature. Specifically, negotiation situations activate individualistic values by pronouncing the belief that the available profits are fixed and, thus, negotiators compete over the maximization of individual gains (Pinkley, Griffith, & Northcraft, 1995; Thompson & Hastie, 1990). Additionally, many negotiations (as opposed to one-time decisions) are important links in the chain of a sustainable relationship between business partners (Gelfand, Major, Raver, Nishii, & O'Brien, 2006; Thompson, 1990). Sustainable relationships are characterized by longer-term, stable and mutually beneficial interactions (Reynolds, Fischer, & Hartmann, 2009). Given this important role of sustainable business relationships one may criticize that the majority of empirical studies in the field of psychology used student samples to examine ethical decision-making (O'Fallon & Butterfield, 2005). Putting in great effort, we recruited a sample of professionals from different industries that varies widely on the range of professional experience (i.e., 207 individuals with 1 to 50 years, mean professional experience $M = 21.43$, $SD = 11.78$). We systematically investigate the beneficial and moderating role of professional experience on the universal link of vertically individualistic values and ethically questionable bargaining tactics. In addition to our theoretical contribution, we offer practical implications on how organizations increase integrity in important negotiations.

Literature review

Ethically questionable negotiation tactics

Pruitt and Carnevale (1993) define strategy in negotiation as a plan of action specifying broad objectives and the general approach that should be taken to achieve them. Strategies are translatable into specific tactics that negotiators use to reach their goals (Pruitt & Carnevale, 1993). These tactics classify into five categories: traditional competitive bargaining, attacking the opponent's network, false promises, misrepresentation, and inappropriate information gathering (Lewicki & Robinson, 1998; Robinson, Lewicki, & Donahue, 2000). While traditional competitive bargaining can still be seen as an ethical negotiation tactic, the other four tactics are perceived to be seriously unethical (Al-Khatib, Rawwas, Swaidan, & Rexeisen, 2005). Erkus and Banai (2011) developed a more parsimonious concept of ethically questionable bargaining tactics. They differentiate between three groups of questionable tactics; namely pretending, deceiving, and lying. In this classification, pretending resembles traditional competitive bargaining, which at the same time reflects the socially most acceptable tactic on their scale of severity. Within this framework, lying is the socially least acceptable negotiation tactic. The scalability of severity displays an important informational aspect in the measurement of questionable negotiation tactics (Banai, Stefanidis, Shetach, & Özbek, 2014; Goelzner et al., 2011; Stefanidis, & Banai, 2014; Stefanidis, Banai, & Richter, 2013). This escalating scale of severity is in line with research that suggests a continuum of tactics ranging from passive to active (Fulmer, Barry, & Long, 2012). Whereas pretending and deceiving may be categorized as passive emotion management tactics, lying requires an active distortion of factual information. Hence, lying may involve the high risk of being objectively discoverable and verifiable by the counterparty. Consequently, lying may be viewed as more ethically offensive.

Negotiators, who use ethically questionable negotiation tactics, may face both positive, but primarily negative consequences. Unethical bargaining tactics potentially lead to better short-term outcomes, but at the same time, parties risk long-term business relationships (Curhan, Elfenbein, & Xu, 2006). Thereby, they potentially decrease financial outcomes (Reitz, Wall, & Love, 1998). Besides this risk of losing sustainable business relationships, ethically questionable negotiation tactics likely cause distrust that strongly impact an organization's public relations and public image (Cramton & Dees, 1993). Prior research has put a lot of effort in investigating factors that may reduce the use of ethically questionable bargaining tactics due to their crucial impact on social and economic outcomes (Schroth, 2008).

Vertical and horizontal individualism-collectivism

Researchers assume that cultural values strongly influence perceptions about ethical negotiations (Triandis, 2001; Volkema 2004; Lee, Brett, & Park, 2012). One of the most widely used measurements of cultural values categorizes samples of different countries on an individualism-collectivism continuum (e.g., German people tend to be highly individualistic by scoring 67 on the index of individualism, but are not as individualistic as U.S. people, who score 91 on the same index; Hofstede, 1980). However, this classic conceptualization of cultural values provides only limited information especially in complex social contexts (Probst, Carnevale, & Triandis, 1999). Another problem of research on cultural values is the wide spread use of geographical locations as a surrogate for culture (Gelfand & Dyer, 2000). This approach does not allow to detect specific profiles of *intracultural variation* that account for important differences within cultural divergent countries.

In order to close this academic void, researchers developed an extended measurement to account for intracultural variations within specific countries (Singelis, Triandis, Bhawuk, & Gelfand, 1995; Triandis & Gelfand, 1998). This measurement of intracultural values adds a horizontal-vertical dimension to the classic individualism-collectivism continuum by Hofstede (1980). By combining these factors, the scale allows to detect intracultural variations and to assess a cultural profile of a specific country which the individualism-collectivism continuum cannot account for. The additional horizontal-vertical dimension describes individuals according to their preference for equal status (horizontal) versus hierarchy (vertical). Hence, the combination of the vertical-horizontal dimensions and the individualistic-collectivistic dimensions is reflected in four distinct concepts.

Horizontal individualism (HI) specifies the desire to separate oneself from others who are equal and to be unique. Competition and the will to perform better than relevant others are outstanding attributes of vertical individualism (VI). For instance, participants indicate their agreement with statements such as *winning is everything*. Horizontal collectivism (HC) values the interdependence between oneself and others who are equal and the connectivity to the in-group. Finally, vertical collectivism (VC) emphasizes tradition and respect for the family hierarchy as important characteristics (Kemmelmeier et al., 2003).

A plethora of studies suggest that vertical individualism is the most central predictor of the endorsement of pretending, deceiving, and lying tactics (Erkus, & Banai, 2011; Goelzner et al., 2011; Stefanidis et al., 2013; Banai et al., 2014; Stefanidis, & Banai, 2014). Other studies corroborate this finding in different social contexts. In social dilemma games, vertical individualism strongly impacted cooperation and competition behavior (Probst, Carnevale, &

Triandis, 1999). Research on different conflict management styles revealed that vertical individualism strongly predicted dominating as a conflict management style (Kommaraju, Dollinger, & Lovell, 2008). Overall, these findings converge in a *(intra)cultural universal,* which suggests that idiocentrism is linked to deception in most cultures (Triandis, 2001). Consistent with this, Hypothesis 1 assumes a replication of this universal link between vertical-individualistic values and the endorsement of ethically questionable negotiation tactics.

> *Replication Hypothesis 1: Professionals who score high on vertical individualism will tend to endorse pretending (H1a), deceiving (H1b) and lying negotiation tactics (H1c) more than those who score low on vertical individualism*.

Professional experience

Prior research indicates that an individual's tenure in a profession may have a marginal or even significant impact on ethical decision-making (O'Fallon & Butterfield, 2005). However, the reported pattern is far from being crystal clear. We conceptualize individuals' professional experience by the years of tenure in their respective profession. Thus, professional experience typically comes inseparably along with negotiation experience in diverse negotiation situations (e.g., salary negotiations, customer to business negotiations, business to business negotiations, personnel negotiations, collective bargaining, and others).[1]

With respect to negotiation research, first evidence exists that professional experience may be negatively linked to ethically questionable behavior. For instance, in two studies MBA students with increasing work experience tended to evaluate five different self-reported inappropriate negotiation strategies (SINS) as more inappropriate (Robinson et al., 2000; Ma, 2010). However, importantly, the reported findings are based on student samples with not more than 3-5 years of professional experience on average. A groundbreaking cross-cultural study on unethical behaviors (ethically ambiguous negotiation tactics, EANTs; Rivers & Volkema, 2013) within a Chinese vs. an Australian sample revealed negative correlations between professional experience and unethical behaviors in negotiations. Although the average professional experience with 11 years (Australian sample) and 19 years (Chinese sample) was higher than in the studies by Robinson et al. (2000) and Ma et al. (2010), this very important study did not intend to systematically examine differences in average professional experience (e.g., by controlling for other factors such as gender, education, and employment relationship). Instead, Rivers and Volkema (2013) focused especially on cross-cultural effects on unethical

bargaining behavior. The present research seeks to investigate the relationship between professional experience and unethical negotiation tactics in a sample with an extensive range of professional experience (1-50 years) and the same cultural background. Based on first evidence from previous research (Robinson et al., 2000; Ma, 2010; Rivers & Volkema, 2013) we concluded the following hypothesis:

Hypothesis 2: More experienced professionals will tend to endorse pretending (H2a), deceiving (H2b) and lying negotiation tactics (H2c) less than novice professionals.

In light of the fact that recurrent negotiations and sustainable business relationships are key interactions for an individuals' career, we raise a crucial issue. Does professional experience impact the detrimental effect of vertical-individualistic values on attitudes toward ethically questionable negotiation tactics? Negotiators may perceive major relationship risks in the use of questionable bargaining tactics that depend on the negotiators temporal orientation (Volkema & Rivers, 2012). Whereas the short-term oriented negotiator may perceive the risk of losing respect, support, and a positive reputation, the long-term oriented negotiator may perceive the risk of impairing the expansion of social and business networks. Considering these risks to sustainable relationships, we suggest a different cost-effect estimate of novice versus experienced professionals. Less experienced professionals might underestimate the costs of using ethically questionable negotiation tactics that may lead to break ups of sustainable business relationships in favor of short-term outcomes (Curhan et al., 2006; Reitz et al., 1998). Experienced professionals might value these risks as more adverse, because a sustainable business network and future contracts may become more apparent than for less experienced professionals. Additionally, experienced professionals have already invested more in their business relationships (MacCrimmon & Wehrung, 1990). Consistently, the use of questionable negotiation tactics depends on perceived reputational risks, which are much higher for negotiators with many years of tenure than for less experienced professionals (Ma & Parks, 2012). Indeed, first evidence shows that the approval of misrepresenting information is negatively associated with reputation (Fulmer et al., 2008). In light of losing positive reputation, we suggest that even the strong link between vertical-individualism and questionable bargaining tactics is impacted by a negotiator's professional experience. Thus, we conclude our moderating assumption in Hypothesis 3.

Moderation Hypothesis 3: Professional experience will serve as a significant moderator for the effect of vertical individualism on the endorsement of pretending (H3a), deceiving (H3b) and lying tactics (H3c) with increasing experience resulting in a reduced tendency to endorse ethically questionable negotiation tactics.

Present research

Prior research on intracultural values has demonstrated that especially vertical individualistic values reliably predict negotiators' attitudes towards pretending, deceiving and lying tactics. Our study systematically tackles the question whether professional experience adds predictive value to individuals' attitudes towards ethically questionable negotiation tactics. We investigate the research question in a negotiation context that naturally increase the salience of maximizing individual gains and, thus, activate negotiators' individualistic values. The underlying sample represents the whole range of professional experience from 1 to 50 years of tenure in various industries in Germany. Given the overly strong link of vertical individualistic values and questionable tactics in negotiations, we further investigate whether professional experience may be a significant moderator of this strong link. We predict that professional experience has the potential to mitigate the detrimental impact of vertical individualistic values in negotiations on attitudes towards questionable tactics. We discuss the findings in view of the fact that the use of ethically questionable tactics matters for sustainable business relationships.

Method

Data collection and analysis

The present research provides data about the profile of intracultural values in a professional German sample as a predictor of attitudes towards ethically questionable negotiation tactics. With respect to investigating culture in negotiations, we followed the call by Gelfand and Dyer (2000) to shift the focus from studying "locations" to profiles of shared cultural values. The online-survey included existing translations of the constructs (Goelzner et al., 2011). We recruited the participants via trade directories and social or business networks (e.g., the confederation of young entrepreneurs). Employees or self-employed persons from small to large-sized private organizations were invited to participate. The recruited professionals operated in various sectors, mainly in the healthcare system, service industry, consulting industry, manufacturing or media sector. We analyzed data of 207 completed questionnaires. The mean age was 46.8 years (age range: 24-73; *SD* = 12.17) and the mean professional experience was 21.4 years (professional experience range: 1-50; *SD* = 11.78). Therefore, we followed the call from researchers who suggested to include more experienced negotiators in

the samples and to extend the age range (Ma, 2010; Volkema, 1999). 68.00% of the respondents were males (see Table 2). Half of the participants were employed in organizations; the other half were self-employed.

In order to evaluate the measures, we conducted principal components analysis with varimax rotation (Buehner, 2011). Kaiser-Meyer-Olkin measures confirmed the sampling adequacy and Bartlett's test of sphericity indicated sufficiently large correlations between items to run principal components analysis. Correlation and regression analyses were used to examine the predicted relationships between variables. The regression analysis was controlled for gender, education and employment relationship. To ensure reliability, Cronbach's alpha as measure of internal consistency was assessed for each scale (Churchill, 1979). A recommended procedure was used for reducing method biases (Podsakoff, MacKenzie, Lee, and Podsakoff, 2003). The participants were informed about the assured anonymity, that there were no right or wrong answers and that they should answer the questions as honestly as possible.

Construct measures

Ethically questionable negotiation tactics. We measured ethically questionable negotiation tactics with the seventeen-item instrument 'high ball tactics' (Lewicki, Saunders, & Bary, 2006). Subjects were asked to imagine a negotiating situation that would be very important to them and their business (Goelzner et al., 2011). While considering such a negotiation situation, we instructed them to indicate each tactic's degree of ethical appropriateness in the negotiation. Participants rated ethically questionable negotiation tactics on a seven-point Likert-type scale ranging from 1 (not at all appropriate) to 7 (very appropriate). An item for the subscale pretending would be: 'Pretend that an issue of little or no importance to you is quite important'. We conducted a principal component analysis on the 17 items and found a three-factor structure of ethically questionable negotiation tactics. The three-factor solution explained 53.76% of the overall variance. Table 1 shows the factor loadings after rotation.

Table 1. Factor analysis results for the ethically questionable negotiation tactics

Item	Rotated Factor Loadings		
	Deceiving	Lying	Pretending
Deny the validity of information, which your opponent has that weakens your negotiating position, even though the information is true and valid.	.69		
Make an opening demand so high/low that it seriously undermines the other party's confidence in his/her ability to negotiate a satisfactory settlement.	.66		
Overwhelming the other party with so much information that they have trouble determining which factors are important and which are merely a distraction.	.63		
Pretend to be disgusted at a comment from the other party.	.61		
Make an opening demand that is far greater than what you really hope to settle for.	.60		
When the other party and you agree, except on a small cost, then you will offer to split the cost to close the deal.	.59		
Convey a false impression that you are in absolutely no hurry to come to a negotiated agreement, thereby trying to put time pressure on your opponent to concede quickly.	.56		
Use a tight unnecessary deadline to get a quick agreement from the other party.	.54		
Strategically express anger toward the other party in a situation where I am not really angry.	.52		
Act as if the decision of the other party is one of agreement even though they have not expressed agreement yet.	.44		
Promise that good things will happen to the other party if s/he gives you what you want, even if you know that you cannot (or will not) deliver these things when the other's cooperation is obtained.		.84	
In return for concessions from the other party now, offer to make future concessions that you know you will not follow through on.		.78	
Gain information about the other party's negotiation position by cultivating his friendship through expensive gifts, entertaining, or personal favors.		.64	
Intentionally misrepresent information to the other party in order to support your negotiating arguments or positions.		.58	
Get the other party to think that you like him/her personally despite the fact that you don't really.			.80
Express sympathy with the other party's plight although in truth you don't care about their problems.			.78
Pretend that an issue of little or no importance to you is quite important.			.64
Eigenvalue	3.79	2.94	2.41
% of variance	22.30	17.27	14.19
Cronbach's α	.85	.75	.71

Extraction method: principal component analysis. Rotation method: Varimax with Kaizer normalization

Ten items loaded the strongest on the first factor, deceiving, and explained 22.30% of the variance. The second factor, lying, included four items and explained 17.27% of the variance. The third factor, pretending, consisted of three items and explained 14.19% of the variance. Cronbach's alpha ensured the reliability with the three components' Cronbach's α .85, .75, and .71 respectively.

Cultural values. We measured the cultural value, horizontal and vertical individualism-collectivism with the 32-item instrument (Singelis et al., 1995). Subjects were asked to rate their degree of agreement or disagreement on a nine point Likert-type scale

ranging from 1 (strongly disagree) to 9 (strongly agree). A Sample item for the factor horizontal individualism included: 'I am a unique individual'; for vertical individualism 'It annoys me when other people perform better than I do'; for horizontal collectivism 'The well-being of my co-workers is important for me' and for vertical collectivism 'I would do what would please my family, even if I detested that activity'. Four factors remained after revision and purification.[2]

The first factor, named horizontal collectivism, included six items and explained 18.17% of the variance. The second factor, vertical individualism, included five items and explained 15.74% of the variance. The third factor, vertical collectivism, included four items and explained 12.92% of the variance and the fourth factor included four items and explained 11.71% of the variance. Again, Cronbach's alpha test was used to verify reliability of the four components. The Cronbach's α were .83, .82, .77, and .71. Table 2 shows means and standard deviations across all variables including intracultural values.

Table 2. Scale means, standard deviations, inter-correlations, and *Cronbachs's alphas*

			Correlations									
Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Pretending	3.02	1.22	*0.71*									
2. Deceiving	2.93	1.01	.53**	*0.85*								
3. Lying	1.52	0.74	.37**	.50**	*0.75*							
4. Horizontal Individualism	6.03	1.57	.15*	.21**	.12	*0.71*						
5. Vertical Individualism	4.62	1.63	.24**	.36**	.33**	.38**	*0.82*					
6. Horizontal Collectivism	7.51	1.12	-.05	-.10	-.09	0.02	0.02	*0.83*				
7. Vertical Collectivism	5.31	1.86	-.11	-.02	.00	-.13	.16*	.19**	*0.77*			
8. Professional Experience	21.43	11.78	-.37**	-.23**	-.36**	-.16*	.01	-.03	.16*			
9. Gender [a]	0.68	0.47	-.14*	.07	.01	-.06	.17*	-.13	.24**	.20**		
10. Education[b]	3.88	1.03	-.04	-.07	.02	-.05	-.04	.13	.15*	.01	-.05	
11. Employment Relationship[c]	0.5	0.5	.16*	.14*	.17*	-.01	-.03	-.09	.00	-.23**	-.13	-.13

Notes: n=207; * p < 0.05 (2-tailed); ** p < 0.01 level (2-tailed); [a] 0 = female, 1 = male; [b] 0 = the lowest rank, 5 = the highest rank;
[c] 0 = self-employed, 1 = employed

Correlational analysis

Table 2 presents means, standard deviations, the scale inter-correlation matrix, and Cronbach's alpha of all variables. Pretending tactics showed the highest score (M = 3.01, SD = 1.22), deceiving tactics the second highest score (M = 2.93, SD = 1.01) and lying tactics the lowest score (M = 1.52, SD = 0.74) indicating the tactics' escalating scale of severity (Erkus & Banai, 2011). We examined scale inter-correlations with respect to our Replication Hypothesis H1. Vertical individualism was found to be positively and significantly correlated with all three ethically questionable negotiation tactics, pretending (H1a), deceiving (H1b), and lying (H1c). Horizontal individualism was significantly correlated with pretending and deceiving, while horizontal and vertical collectivism showed no significant relationships with questionable negotiation tactics. As expected in Hypothesis H2, professional experience was negatively correlated with all three negotiation tactics, pretending (H2a), deceiving (H2b), and lying (H2c); more experienced professionals showed a significantly lower propensity to endorse ethically questionable negotiation tactics.

Regression analysis

We conducted hierarchical multiple regression analyses to test the predicted hypotheses separately on every dependent variable. After controlling for gender, education, and employment relationship effects in the first step, horizontal and vertical individualism, horizontal and vertical collectivism, and employee experience were entered into the second step.[3] For every regression analysis the risk of multicollinearity was checked by assessing Tolerance and Variance Inflation Factor (VIF) diagnostics. As the VIF values were low (VIF < 1.266) and the tolerance high (tolerance > .79), it was inferred that the predictor variables were not correlated. Durbin-Watson test was used to examine whether the residuals were uncorrelated (Durbin-Watson statistics were between 1.803 and 2.199). We visually checked histograms and normal probability plots. Tables 3a-c show the results of the hierarchical regression analysis results for pretending, deceiving and lying tactics.

Table 3a. Hierarchical regression analyses on pretending tactics

	PRETENDING			
	1. STEP		2. STEP	
Variable	β	*t*	β	*t*
Gender[a]	-0.13	-1.79	-0.11	-1.55
Education[b]	-0.02	-0.35	0.00	0.00
Employment Relationship[c]	0.14	1.97	0.07	1.09
Horizontal Individualism			-0.03	-0.43
Vertical Individualism			.29***	4.07
Horizontal Collectivism			-0.06	-0.95
Vertical Collectivism			-0.08	-1.08
Professional Experience			-.33***	-4.91
R^2		.04*		.22***
Adj. R^2		.03*		.19***
ΔR^2		.04*		.18***
F-statistic		2.83*		9.34***

Table 3b. Hierarchical regression analyses on deceiving tactics

	DECEIVING			
	1. STEP		2. STEP	
Variable	β	*t*	β	*t*
Gender[a]	0.09	1.25	0.07	0.98
Education[b]	-0.05	-0.66	-0.02	-0.30
Employment Relationship[c]	.15*	2.07	0.10	1.54
Horizontal Individualism			0.05	0.76
Vertical Individualism			.34***	4.83
Horizontal Collectivism			-0.09	-1.29
Vertical Collectivism			-0.03	-0.38
Professional Experience			-.21**	-3.13
R^2		0.03		.21***
Adj. R^2		0.02		.18***
ΔR^2		0.03		.18***
F-statistic		2.08		9.23***

Table 3c. Hierarchical regression analyses on lying tactics

	LYING			
	1. STEP		2. STEP	
Variable	β	*t*	β	*t*
Gender[a]	0.04	0.53	0.02	0.36
Education[b]	0.05	0.70	0.07	1.05
Employment Relationship[c]	.18*	2.60	0.10	1.62
Horizontal Individualism			-0.07	-1.00
Vertical Individualism			.36***	5.29
Horizontal Collectivism			-0.10	-1.58
Vertical Collectivism			-0.01	0.12
Professional Experience			-.36***	-5.47
R^2		0.03		.27***
Adj. R^2		0.02		.24***
ΔR^2		0.03		.23***
F-statistic		2.30		12.62***

Notes: n = 207; standardized regression coefficients are shown; * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$;
[a] 0 = female, 1 = male; [b] 0 = the lowest rank, 5 = the highest rank; [c] 0 = self-employed, 1 = employed

Moderation analysis

To test Hypothesis 3, we used the PROCESS macro for testing moderations (Hayes, 2013). Pretending, deceiving, and lying were then regressed on, vertical individualism, professional experience, and the interaction variable (see Table 4).

Table 4. Moderation analysis on questionable negotiation tactics

	PRETENDING			DECEIVING			LYING		
Variable	*B*	*SE*	*t*	*B*	*SE*	*t*	*B*	*SE*	*t*
VI	.131	.097	1.348	.212**	.081	2.624	.253***	.057	4.454
Professional Experience	-.049*	.019	-2.556	-.023	.016	-1.425	-.001	.011	-0.070
VI x Professional Experience	.002	.004	.598	.001	.003	.205	-.005*	.002	-2.063
R^2			.20***			.19***			.25***
ΔR^2 (Interaction)			.00			.00			.02*
F-Statistic			16.51***			15.44***			22.97***

Notes: n = 207; unstandardized regression coefficients are shown; * p ≤ .05, ** p ≤ .01, *** p ≤ .001

Bootstrapping analysis corroborated the Moderation Hypothesis H3 for lying tactics (H3c). The findings revealed that professional experience moderated the effect of vertical individualism on the endorsement of lying tactics (B = -.005; SE = .002; p <.05). However, our analyses did not support H3a for pretending and H3b for deceiving tactics. For a closer inspection of the interaction effect on the endorsement of lying tactics, we examined conditional effects of the predictor vertical individualism at different values of the moderator professional experience. Vertical individualism significantly predicted lying tactics at 3 years and the 10th percentile (B = .23; SE = .051; p < .001), at 12 years and the 25th percentile (B = .20; SE = .035; p < .001), at 22 years and the 50th percentile (B = .15; SE = .028; p < .001), at 30 years and the 75th percentile (B = .11; SE = .034; p = .001), and at 35 years at the 90th percentile (B = .09; SE = .042; p = .039) of professional experience (pick-a-point approach; Bauer & Curran, 2005). Importantly, this link was stronger for less experienced professionals than for highly experienced professionals. Specifically, the Johnson-Neyman technique for probing interactions (Preacher, Bauer, & Curran, 2006; Hayes, 2013) revealed that when professional experience was below $JN_{Professional\ Experience}$ = 35.54 the conditional effect of vertical individualism on lying tactics was statistically significant. Figure 1 displays regression lines at the 10th, 25th, 50th, 75th, 90th percentile of professional experience for predicting lying tactics through vertical individualism.

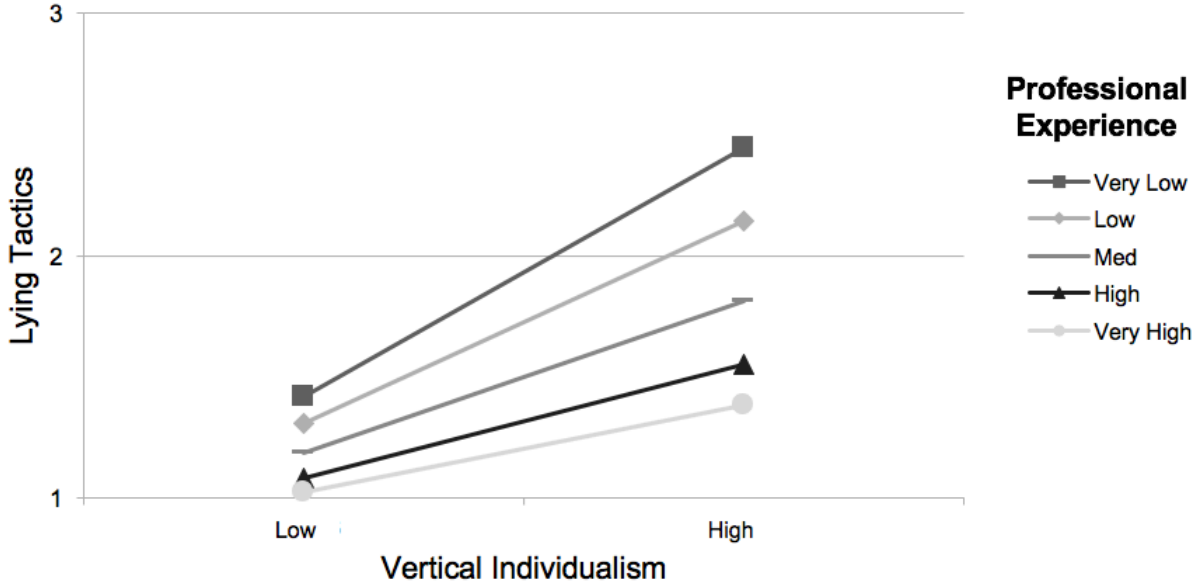

Figure 1. Moderation analysis: Figure 1 shows the interaction effect of vertical individualism x professional experience on lying tactics. The strength of the positive link between vertical individualism and lying tactics decreased along increasing percentiles (10th, 25th, 50th, 75th, 90th) of professional experience.

Discussion

The present study investigates cultural values and professional experience as important determinants of the endorsement of questionable negotiation tactics at the German workplace. We contribute to prior research in that our findings revealed a strong negative link between professional experience and attitudes towards ethically questionable negotiation tactics. Over all, with increasing professional experience negotiators tended less to endorse ethically questionable negotiation tactics. Negotiators' professional experience even moderated the strong link between vertical individualism and the severest lying tactic. The strength of the link between vertical individualism and lying tactics decreased and even vanished by the years of negotiators' professional experience. Many years of professional experience reduced their endorsement towards lying tactics even, when they strongly appreciated vertically individualistic values.

To our knowledge, the present study is the first that investigates ethically questionable negotiation tactics within a sample of an extended range of professional experience (from 1 to 50 years). By studying individuals with a broad range of professional experience, we contribute to a better understanding on how appropriate professionals validly perceive questionable bargaining tactics. Besides this important contribution on the key role of professional experience for the appropriateness of ethically questionable bargaining tactics the present research replicated and thus confirmed previous research. Our findings corroborated that vertical individualism significantly predicted pretending, deceiving, and lying tactics. Aspiring uniqueness, seeking for competition and the will to perform better than relevant others determined professionals' tendency to use ethically questionable negotiation tactics. Other cultural values did not predict negotiators' attitudes towards ethically questionable negotiation tactics. Further, we provide empirical support for the prevalence of three distinct questionable bargaining tactics. Descriptively, negotiators accepted pretending more than deceiving tactics, and both were more accepted than the severest lying tactics (see results section). This order of acceptance indicates that lying on your counterpart is perceived as the most harmful tactic to sustainable business relationships. This finding resonates with the distinction by Fulmer and colleagues (2009), in which lying may require an active distortion of facts and, thus, may pose the high risk of objective falsification.

In order to explain the moderating effect of professional experience, we suppose as a potential mechanism that experienced professionals perceive much higher reputational-risks when they lie on their counterpart than inexperienced professionals (see Ma & Parks, 2012).

Considering many years and an enormous energy spent on building up social networks, experienced professionals should certainly avoid to destroy their reputation in order to foster sustainable business relations. In contrast, less experienced professionals might lack the perception of reputation and, instead, may focus on short-term outcomes in order to climb the career ladder. In other words, "It takes 20 years to build a reputation and 5 min to ruin it. If you think about that you will do things differently" (Buffet, n.d.). Ruining of one's own reputation opposes the definition of sustainable behavior as a behavior that can be continued and maintained at a certain level and rate (Scott, Amel, Koger, Manning, 2015). Alternatively, experienced negotiators might perceive that lying tactics only poses high risks on the closing of future contracts implying severe economic consequences. To avoid regret negotiators perception of the risk of future economic losses may further increase (Cooke, Meyvis, & Schwartz, 2001). Here, we may only speculate on the psychological process that drives the impact of professional experience on the link between vertical individualism and questionable tactics. Future research should focus more on these potentially underlying mechanisms.

Practical implications

The current research has broad implications especially for firms and departments that are interested in assessing, evaluating and improving their professionals' negotiation behavior, such as human resource management and development, change management or organizational development. Those institutions should consider professional experience as a source for promoting integrity in negotiations. For instance, they would be well advised to implement tandem teachings of experienced and novice professionals. Experienced professionals could strengthen novices' focus on long-term outcomes and sustainable business relationships in order to minimize the perils of adopting questionable negotiation tactics. Therefore, the measurement's characteristic of the escalating scale of severity is an important instrument for teachings and trainings in business negotiations. Organizations could directly benefit from identifying tendencies to questionable tactics in order to improve professionals' integrity.

Importantly, organizations should also focus on the cultural characteristics of the individual that they send out to lead important negotiations. Negotiators who strongly appreciate vertical individualistic values pose risks to the organization's business relationships. Preferred cultural values and professional experience in the organization can be informative for the degree of ethicality of negotiation tactics one will tend to use.

Limitations and future research

We designed the present study as an online survey, which might limit the generalizability of our sample to the German workplace. Our aim was to identify intracultural variation and professional experience as determinants for ethically questionable negotiation tactics. In addition, we attempted to follow the call by Ma (2010), who encouraged to include professional negotiators as participants in their samples in order to get deeper insights especially from those experienced professionals. Nevertheless, future research should examine professional experience more closely with respect to intercultural variations.

Another limitation is that we only assessed participants' attitudes towards questionable negotiation tactics instead of real negotiation behavior. Attitudes were used only as an indicator of real world negotiation performance. Thus, future research should also focus on actual negotiation behavior in the field and in the laboratory. Observational data could also provide insights in the determinants of ethically questionable negotiation tactics in live communication, in joint gains, in impasses and subjective evaluations.

Conclusion

The present study provides a deeper understanding of cultural values and professional experience as predictors of ethically questionable negotiation tactics. We found strong support for the mitigating potential of professional experience on negotiators' endorsement of ethically questionable negotiation tactics. In addition, our study reveals the important moderating role of professional experience even on the 'cultural universal' of vertical individualism and the endorsement of lying tactics. These findings offer new insights in how professional experiences shape attitudes towards ethically questionable negotiation tactics. We suggest that negotiators with increasing professional experience focus more on the social value of an outcome (Curhan et al., 2006) and on the sustainability of their business relations by resisting unethical bargaining. Professional experience appears to be a powerfully intangible resource when sustainable business relations are at stake. Thus, this study draws a more complete and richer picture of predictors of questionable negotiation behavior. From a practical perspective, we emphasize the importance of professional experience in private and public organizations in order to balance risks posed on ones' integrity.

Compliance with Ethical Standards: This study has not received any funding.

Ethical Approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent: Informed consent was obtained from all individual participants included in the study.

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