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ABSTRACT

We examined the effect of mindful attention on negotiation outcomes in distributive negotiations across four experiments. In Studies 1 and 2, participants who performed a short mindful attention exercise prior to the negotiation claimed a larger share of the bargaining zone than the control condition participants they negotiated with. Study 3 replicated this finding using a different manipulation of mindful attention. Study 4 again replicated this result and also found that mindful negotiators were more satisfied with both the outcome and the process of the negotiation. We discuss theoretical and practical implications, limitations, and future directions.

Keywords: Distributive Negotiation; Mindful Attention; Mindfulness; Negotiation; Negotiation Performance; Negotiation Satisfaction; Value Claiming

INTRODUCTION

Negotiation is a process through which two or more parties come together to either create something that neither party can by itself, or to resolve a dispute about something (Lewicki, Barry, Saunders & Minton, 2003). How well we negotiate has important implications for professional and personal success. Not surprisingly, researchers and practitioners alike have been keenly interested in understanding the determinants of negotiation success. Recently, scholars have argued that mindfulness may enhance negotiation performance (e.g. Brach, 2008; Kopelman, Avi-Yonah, & Varghese, 2012; Kuttner, 2008). For example, Riskin (2002) argues that mindfulness practices can enhance awareness and dissociate negotiators from adversarial mindsets laden with anxiety. Kopelman et al. (2012) propose that mindfully handling emotions in negotiations will lead to better negotiation performance. However, to the best of our knowledge, no systematic empirical research so far has experimentally tested such ideas or examined the influence of mindfulness, and specifically mindful attention, on negotiation performance.

We conceive of mindful attention as a dimension of the broader construct of mindfulness. Mindfulness, as it is currently used in modern research, has been defined and operationalized in a variety of different ways and no consensus is in sight (for insightful discussions of these issues, see e.g., Chiesa, 2012; Grossman, 2008; Mikulas, 2011). Some authors have treated mindfulness as a unidimensional construct, whereas others have proposed multidimensional conceptualizations. These conceptualizations include dimensions such as intention, present-moment attention, awareness, decentering, openness, acceptance, non-reactivity, non-judgment, and others (e.g., Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006; Bishop et al., 2004; Brown & Ryan, 2003; Kabat-Zinn, 1994).

An unfortunate consequence of this state of affairs is that the term mindfulness may not be understood in the same manner by different people. Chiesa (2012) proposed what we consider to be a useful suggestion to help address this concern. Specifically, he argued that rather than referring to measures of mindfulness, researchers should name them according to the specific psychological characteristics that they assess and that are considered to be dimensions of mindfulness. In the spirit of this idea, the present manuscript specifically refers to mindful attention rather than mindfulness globally (but using the shorter expression "mindful negotiator").

While there is no consensus on a definition of mindfulness, there is broad agreement that mindful attention is a fundamental dimension of mindfulness (Chiesa, 2012). Mindful attention is said to have the following characteristics. First, it shows a strong focus on the present moment, contrasting it from mind wandering, daydreaming, worries about the future and ruminations about the past (e.g., Kabat-Zinn, 1994). Further, this attention to the present moment includes both the external, such as the activity one is currently engaging in (e.g., reading this manuscript at this present moment) as well as the internal, such as the bodily feelings one is experiencing (e.g., tension due to an uncomfortable sitting position) (e.g., Glomb, Duffy, Bono, & Yang, 2011).

Also, mindful attention has been described as sustained (Rapgay & Bystrisky, 2009). Sustained attention is the capacity to maintain vigilance over time, from moment to moment to moment (Posner & Rothbart 1992). Empirical evidence supports the idea that mindfulness practice is associated with such sustained attention (Chiesa, Calati, & Serretti, 2011). For example, Valentine and Sweet (1999) found that mindfulness meditators exhibited greater sustained attention than control condition participants. Similarly, Chambers, Lo, and Allen (2008) found that participants in a 10-day intensive mindfulness meditation retreat performed better on

measures of working memory and sustained attention than a comparison group. Other research suggests that mindfulness training may increase performance on the attentional subsystems of orienting and alerting (although the effect may depend on the specific form of mindfulness training; Jha, Krompinger, & Baime, 2007).

Finally, mindful attention is sometimes referred to as "bare" attention, or "just noticing" (Kabat-Zinn, 1994; Rapgay & Bystrisky, 2009). Bare attention implies a reduction in mental commentary accompanying one's attention. Weick and Sutcliffe (2006) describe this quality of attention as follows: "When people watch events that are loaded with surplus meaning, their seeing tends to be distracted, not focused on the here and now, deprived of details that would give a clearer picture, and confused by normalizing that leaves too many details unexplained" (p. 521).

Different aspects of mindfulness may affect negotiation performance (and other outcomes) through different mediating processes (e.g., Glomb et al., 2011). In this research, we focus specifically on mindful attention. Given that mindful attention allows a negotiator to sustain attention over time (Chiesa et al., 2011), mindful negotiators may be better able to keep their mind on the task at hand, rather than getting distracted. This may allow them to process more verbal and nonverbal cues from the counterpart, relative to less mindful negotiators. Further, improved performance on attentional subprocesses of orienting and alerting (Jha et al., 2007) may help negotiators pay attention to what is important in a negotiation whereas less mindful negotiators may miss out on more of the crucial information, such as resistance or preference of a counterpart towards certain offers.

In addition to this externally focused attention, an increase in internally focused attention may allow mindful negotiators to be more aware of their emotional and gut reactions as they

arise during the negotiation. This, in turn, may allow them to make better choices with regards to whether to accept a certain offer, for example. It may also allow them to better regulate their emotions based on the needs of the negotiation situation.

These processes may be further facilitated by the reduction in mental commentary (Kabat-Zinn, 1994; Rapgay & Bystrisky, 2009). Such a reduction may allow negotiators to perceive information about the negotiation situation and their counterpart more clearly, with less bias (Weick & Sutcliffe, 2006). Some empirical research indeed suggests that mindfulness reduces biases in cognitive processing and judgment (Kiken & Shook, 2011).

The purpose of the present research is to examine the role of mindful attention in a particular type of negotiation, i.e., in distributive negotiations. In distributive negotiations, the bargaining zone is fixed and the better the outcome of one negotiator, the worse the outcome of the other negotiator(s). Therefore, the task is one of value claiming (that is, agreeing on the distribution of the fixed bargaining "pie"). We hypothesize that mindful negotiators will achieve more favorable outcomes in a distributive negotiation as compared to their control condition counterparts. This paper reports initial tests of this hypothesis across four laboratory experiments.

STUDY 1

Method

Participants

One hundred fourteen undergraduate students at a Singaporean university participated in exchange for course credit. Two dyads were excluded because the negotiators did not reach agreement, leaving 110 participants. Participants average age was 21.4 years (SD = 1.71) and 70% were female.

Procedure and Design

Participants engaged in a single-issue distributive negotiation simulation. The experiment manipulated one factor within-dyads: participants were randomly assigned to either engage in a mindful attention exercise or in a control task before the negotiation. Participants were matched such that within a dyad an individual in the mindful attention condition negotiated with an individual in the control condition (i.e., mindful attention was manipulated within-dyad). Roles were randomly assigned and counterbalanced such that about half the participants in each condition were buyers and the other half sellers. To control for possible order effects, participants engaged in the mindful attention exercise or control condition task either before or after preparing for the negotiation. As analyses showed that this order factor did not have a main or interaction effect on the results, we report below results collapsed across the two orders.

The simulation was a negotiation between a salesperson for a coffee distributor and a hotel purchasing agent. Negotiators were given information about their reservation (worst) price, which was $3.75 per pound of coffee for buyers and $3.15 per pound for sellers. The bargaining zone was $.60. Negotiators were given 15 minutes to reach an agreement.

Manipulation

Experimental condition. The mindful attention exercise was a shortened and adapted version of the well-known mindful raisin eating task used at the beginning of the Mindful attention-Based Stress Reduction program (MBSR; Kabat-Zinn, 2003), which has been used in other experimental research before (Heppner et al., 2008). In this six-minute audio-guided exercise participants were guided to eat raisins mindfully with their entire attention focused on this present-moment experience (a full transcript of the exercise is available from the first author upon request). The purpose of this exercise was to bring participants' attention fully to the present moment.

Pre-testing suggested that negotiators required some rationale for performing this task as part of a study on negotiation. Therefore, we included the following as part of written instructions read before the audio-guided task. The written instructions first explained that the task was a mindful attention exercise and that it was "designed to help you become deeply aware of the present moment" and that they were going to mindfully eat some raisins as part of this task. Second, as a rationale for doing this before the negotiation, the general instructions said "So, you might wonder 'how does eating raisins relate to negotiations?' Well, the point is not about the raisins, but about the mindfulness, about becoming more aware of what is going on in the present moment, rather than having the mind wandering off to the future or the past."

Control condition. In order to control for the possibility that eating raisins as such might have an effect on participants' distributive outcome (e.g., through increased blood sugar level), participants in the control condition performed a raisin taste test, supposedly as an unrelated task. The task was designed such that reading the instructions, tasting the raisins, and completing the questionnaire would take approximately the same time as the mindful attention exercise in the experimental condition.

Measures

Distributive outcome. Objective distributive outcome was based on the favorability of agreement reached. Specifically, we calculated each negotiator's bargaining surplus as the difference between the reservation price ($3.15 for the seller, $3.75 for the buyer) and the negotiated price. For example, if the negotiators agreed on a price of $3.30 for a pound of coffee, the seller's bargaining surplus would be 3.30 - 3.15 = .30, and the buyer's bargaining surplus would be 3.75 - 3.30 = .45. As can be seen, the seller's and the buyer's bargaining surplus are completely dependent on each other and on the agreed price and always add up to .60, the size of

the bargaining zone. Therefore, we analyzed the data at the dyad level to take this dependency into account.

Manipulation check. As a check of the manipulation, participants' state of mindful attention was assessed right after completion of the raisin eating task (mindful attention task or taste test) with an 8-item 5-point Likert-scale anchored at 1: strongly disagree and 5: strongly agree ($\alpha = .69$). Items were adapted from existing trait measures of mindfulness (Brown & Ryan, 2003; Baer et al., 2006) to fit the current context requiring a state measure, as well as the current sample. Participants were asked to respond to the items with respect to their current state of mind just before they started with the questionnaire. Example items are "I was aware of whether my muscles were tense or relaxed" and "I was preoccupied with the future or the past" (reverse-coded). The entire scale appears in the Appendix.

Results and Discussion

Manipulation Check

As expected, the manipulation check revealed that the mindful attention exercise indeed led to increased mindful attention after the manipulation ($M = 3.72$, $SD = .55$) than the raisin tasting test (control condition) ($M = 3.38$, $SD = .45$), $F(1, 104) = 11.93$, $p = .001$, $\eta_p^2 = .10$.

Experimental Effect

We conducted a repeated-measures analysis of covariance (ANCOVA), with condition (mindful attention or control) as within-dyad factor and bargaining surplus as repeated dependent variable, controlling for role assignment (control condition is buyer or seller) as covariate. The analysis revealed a significant positive effect of mindful attention on distributive outcome, $F(1, 53) = 4.63$, $p < .04$, $\eta_p^2 = .08$, such that mindful negotiators outperformed ($M = .34$, $SD = .16$, or about 57% of the bargaining zone) their control condition counterparts ($M = .26$, $SD = .16$, or

about 43% of the bargaining zone).

Study 1 supported the prediction that mindful attention leads to better distributive outcome, consistent with our prediction. To address several potential confounds, we conducted Study 2 making several changes to the design and materials used. Thus, the purpose of Study 2 was to see if the results of Study 1 are robust to changes in the framing and instructions to the experimental and control conditions.

STUDY 2

Method

Study 2 employed the same experimental design and negotiation simulation as Study 1. The experimental and control conditions were changed as follows. First, in Study 1, participants in the experimental condition received audio-guided instructions as part of the manipulation, whereas participants in the control condition received only written instructions. In order to make the experimental and the control conditions more similar and address this potential confound, participants in the control condition in Study 2 also received audio-guided instructions for their task. Second, in Study 1 participants in the mindful attention condition received a rationale linking the raisin eating task to the negotiation (for details on the rationale given, see above) whereas the raisin taste test in the control condition was framed as an unrelated task. To address this potential confound, in Study 2 the framing for the task in the control condition was changed. Specifically, rather than framing the task as an unrelated raisin taste test as in Study 1, now participants were told the following:

> While negotiating, it is important not to be distracted by an empty stomach. An empty stomach could make you lose focus on the negotiation. Therefore, we have provided you with a box of raisins. Feel free to eat as many raisins as you like. … This should make

sure that you are able to keep your attention focused on the negotiation and not get distracted by an empty stomach.

Forty-two undergraduate students at a Singaporean university participated in exchange for course credit. One dyad was excluded because the negotiators did not reach an agreement, leaving 40 negotiators. Participants' average age was 21.8 (SD = 2.32), and 57% were female.

Results and Discussion

A repeated-measures analysis of covariance (ANCOVA), with condition (mindful attention or control) as within-dyad factor and bargaining surplus as repeated dependent variable, controlling for role assignment (control condition is buyer or seller) as covariate, again revealed a significant positive effect of mindful attention on distributive outcome, $F(1, 18) = 8.71$, $p < .01$, $\eta_p^2 = .33$, such that mindful negotiators outperformed ($M = .34$, $SD = .19$, or about 57% of the bargaining zone) their control condition counterparts ($M = .26$, $SD = .19$, or about 43% of the bargaining zone). As in Study 1, mindful negotiators claimed about 31% more of the fixed bargaining zone (.60) than their counterparts.

Study 2 replicated the results of Study 1 and again supported the prediction that mindful attention leads to more value claiming in distributive negotiations. These results suggest that the findings of Study 1 were not due to certain methodological confounds that were addressed in Study 2.

STUDY 3

One limitation of both Studies 1 and 2 is that the mindful attention exercise, while well established in mindfulness research and practice, was unrelated to the negotiation task. From a practical perspective, it would be important to know whether the advantage of mindful attention can also result from a negotiation-related mindful attention exercise. Theoretically, a conceptual

replication of the earlier findings would enhance generalizability. Therefore, in Study 3, we use a negotiation-related mindful attention manipulation.

The control condition of this study was designed to induce a certain level of distractedness. Thus, negotiators were made to engage in an unrelated filler task just before the negotiation that took their mind away from the negotiation. We expected that mindful negotiators would perform better than distracted (control condition) negotiators.

Method

Participants

One hundred undergraduate students at a Singaporean university participated in exchange for course credit. One dyad was excluded from the analyses because the negotiators failed to reach an agreement, leaving 98 participants. Participants' average age was 21.5 (SD = 2.02), and 57% were female.

Procedure and Design

The experimental design and negotiation task were the same as in Study 1. Participants were again randomly assigned to either a mindful attention condition or a control condition. Participants in the experimental condition were first given fifteen minutes to read the negotiation instructions and prepare for the negotiation. They then engaged in a brief mindful attention exercise. Finally, they were paired with a control condition negotiator and started to negotiate. In the control condition, participants engaged in a business simulation filler task to take their mind off the negotiation. Roles (buyer or seller) were counterbalanced.

Manipulation

Mindful attention condition. We developed a brief mindful attention exercise that was designed to bring participants full attention and awareness to the upcoming negotiation in order

to allow participants to be more mindful during the negotiation. Negotiators in the mindful attention condition performed the following mindful attention exercise for about three minutes.

> Focus your thoughts on the upcoming negotiation. Concentrate on your role in the negotiation and how you will act. Keep all thoughts out of your mind that are unrelated to the upcoming task. Collect your concentration as much as possible in preparation for the negotiation. You might want to focus your mind on the negotiation, your negotiation strategy, your plan, and your actions.

This manipulation was designed to increase mindful attention during the negotiation task, not necessarily during the actual exercise, unlike the manipulation in Study 1. In other words, one could argue that by encouraging the participant to focus on the upcoming negotiation, the person's mind is taken away from the present moment and into the future (i.e., the upcoming negotiation). While this is correct, it is important to keep in mind that the goal was to raise present-moment attention and awareness during the actual negotiation task.

Control condition. When testing for experimental effects, it matters not only what participants in the experimental condition do, but also what participants in the control condition do, as the control condition serves as the baseline to which experimental participants are compared. Following this logic, we designed the control condition so as to take participants' mind off the negotiation, essentially making them more distracted, which is a state of low mindful attention. This control condition also mimicked the common situation in which negotiators (having prepared for the negotiation at some earlier time) are busily occupied with something else until right before the negotiation starts.

Thus, control group participants engaged in a filler task while the experimental group

participants engaged in the mindful attention exercise. The task was a business simulation in which individuals were required to route memos to different divisions of a company and also judge the urgency with which to respond to the requests made in the memos (adapted from Reb, Goldman, Kray, & Cropanzano, 2006).

Measure

Distributive outcome. Objective distributive outcome was again measured as the bargaining surplus of a negotiator, that is, the difference between the agreed price and the negotiator's reservation price.

Results and Discussion

A repeated-measures ANCOVA, with condition as within-dyad factor, controlling for role (control condition is buyer or seller) as covariate revealed a significant effect of the experimental manipulation on distributive outcome, $F(1, 47) = 17.78$, $p < .001$, $\eta_p^2 = .27$. As in the previous two studies, mindful negotiators performed better ($M = .33$, $SD = .14$, or about 55% of the bargaining zone) than their control condition counterparts ($M = .27$, $SD = .14$, or about 45% of the bargaining zone).

The results of Study 3 replicated those of the previous two studies in that negotiators in the mindful attention condition again outperformed their control condition counterparts. Study 3 extends Studies 1 and 2 by using a different manipulation of mindful attention. Whereas the manipulation in the previous studies consisted of an adaptation of a commonly used mindful attention exercise, the Study 3 manipulation was designed specifically for the negotiation context and may therefore have had more face validity for participants. Also, a different control condition task was used. Specifically, control participants engaged in a filler task, simulating a situation in which attention is directed away from the task at hand.

STUDY 4

The purpose of Study 4 was to replicate the results of Study 3 using the same manipulation of mindful attention focused on the negotiation, but a different control condition, as described below. A second purpose was to explore the influence of mindfulness on subjective negotiation outcomes. It has been argued that objective measures of negotiation outcomes should be complemented by subjective measures to provide a fuller picture of the outcomes of a negotiation (e.g., Curhan, Elfenbein, & Xu, 2006). Past research suggests that objective negotiation outcome and negotiation satisfaction are related (Gillespie, Brett, & Weingart, 2000), but distinct, constructs (Novemsky & Schweitzer, 2004). Therefore, as another contribution of Study 4, we added two subjective measures of negotiation satisfaction: satisfaction with outcome and satisfaction with process.

Finally, Study 4 includes measures of the negotiators' aspiration level. Negotiator aspiration level has been found to be an important predictor of negotiation outcomes such that negotiators with higher aspirations consistently achieve better outcomes (e.g., Zetik & Stuhlmacher, 2002). To explore the possibility that the mindful attention manipulation affects distributive outcome by increasing aspiration level relative to the control condition, Study 4 examined the effect of the experimental manipulation on negotiator aspirations.

Method

Participants

Ninety-four undergraduate students at a Singaporean university participated in exchange for course credit. Participants' average age was 21.4 (SD = 1.71), and 67% were female.

Procedure and Design

Study 4 closely resembled Study 3, using the same design, negotiation exercise, materials,

and experimental procedure. As before, participants were randomly assigned to either a mindful attention condition or a control condition. The experimental manipulation was again implemented after participants were given time to prepare for the negotiation, but before they were paired with their counterpart for the actual negotiation. As in Study 3, in the mindful attention condition, participants were again asked to bring their attention and awareness to the upcoming negotiation. Those in the control condition followed the same process but were asked to continue to prepare and plan for the negotiation during the period of time that the experimental condition performed the mindful attention exercise. Roles (buyer or seller) were counterbalanced.

Control Condition

Participants in the control condition were asked to "continue to prepare and plan for the negotiation" until their counterpart was ready to negotiate. In this way, this condition was consistent with traditional negotiation advice that emphasizes planning (e.g., Lewicki et al., 2003).

Measures

Distributive outcome. Objective distributive outcome was again measured as the bargaining surplus.

Negotiation satisfaction. Negotiation satisfaction was assessed on the two dimensions of negotiation outcome and negotiation process. Three items were averaged to measure satisfaction with outcome: "I am satisfied with the outcome of the negotiation", "I am satisfied with my performance in this negotiation" and "I negotiated well" (α = .90). Two items were averaged to measure satisfaction with process: "I am satisfied with the process of this negotiation" and "I enjoyed the negotiation" (r = .65). The ratings were made on 7-point Likert-scales (anchored at 1: completely disagree and 7: completely agree).

Negotiator aspirations. We included two measures of negotiator aspirations that were assessed just before the negotiation (and after the manipulation). First, on a 7-point (1-7) scale, participants indicated how motivated they were to perform well in the upcoming negotiation. Second, participants stated the target price that they were trying to achieve. Because buyers prefer low prices and sellers high prices (as expressed in the amount paid per pound of coffee), we re-scored responses such that the measure indicates the difference between a negotiator's reservation price (3.75 for buyers and 3.15 for sellers) and the target price. Higher values on this measure reflect a higher aspiration level.

Results

Effects of Mindful Attention on Bargaining Surplus

As in the previous studies we conducted a repeated-measures ANCOVA with condition (mindful attention or control) as within-dyad factor and bargaining surplus as repeated dependent variable, controlling for role assignment (control condition is buyer or seller) as covariate. This analysis revealed a significant effect of the experimental manipulation on the bargaining surplus achieved, $F(1, 45) = 11.61$, $p = .001$, $\eta_p^2 = .21$. As predicted, mindful negotiators achieved a higher bargaining surplus ($M = .34$, $SD = .12$, or about 57% of the bargaining zone) than their less mindful counterparts ($M = .26$, $SD = .12$, or about 43% of the bargaining zone).

Effects of Mindful Attention on Negotiation Satisfaction

We first examined whether the satisfaction measures were dependent on which dyad respondents were assigned to following the procedure described in Kashy and Kenny (2000). For both satisfaction measures we found no significant effect of dyad, both *p*s > .56, and therefore analyzed the data at the individual level. An ANCOVA controlling for role as a covariate found that mindful negotiators were more satisfied with the negotiation outcome ($M = 5.44$, $SD = .95$)

than control group negotiators (M = 4.87, SD = 1.18), $F(1, 91) = 7.07$, $p < .01$, $\eta_p^2 = .07$. Negotiators in the mindful attention condition were also more satisfied with the negotiation process (M = 5.61, SD = .94) than negotiators in the control condition (M = 5.23, SD = 1.03), $F(1, 91) = 3.37$, $p < .05$ (one-tailed), $\eta_p^2 = .04$.

Effect of the Experimental Manipulation on Negotiator Aspirations

To examine the possibility that the experimental manipulation may have affected negotiator aspirations, we conducted two ANCOVAs with the experimental condition as between-subject factor, controlling for role (buyer or seller) as covariate. These analyses revealed that negotiator motivation was high and not significantly different in both the mindful attention (M = 5.38, SD = 1.11) and the control condition (M = 5.19, SD = .97), $F(1, 91) = .75$, *ns*, $\eta_p^2 = .008$. Also, target prices were not significantly different between the two conditions, $F(1, 90) = .56$, *ns*, $\eta_p^2 = .006$ (mindful attention condition, M = .66, SD = .26, control condition, M = .63, SD = .22). These results suggest that a difference in motivation between the two experimental conditions is an unlikely explanation of the effect of mindfulness on distributive outcomes in this negotiation.

Discussion

Study 4 replicated the positive effect of mindful attention on distributive outcome, again supporting our hypothesis. As in the previous studies, mindful negotiators managed to get a larger share of the bargaining zone. Study 4 also extends the previous two studies by showing that the effect of mindful attention was not limited to the objective value claimed but also held for subjective measures of satisfaction as well: mindful negotiators were more satisfied than control condition negotiators with the outcome of the negotiation as well as with the process of the negotiation. These findings are consistent with past research suggesting that objective

negotiation outcome and negotiation satisfaction are related (Gillespie et al., 2000), but distinct, constructs (Novemsky & Schweitzer, 2004). The convergence in results between objective and subjective measures is suggestive of the reliability of the experimental effect.

GENERAL DISCUSSION

Practitioners and scholars have argued that being fully in the present moment (i.e., being mindful) during negotiations may lead to better negotiation performance (e.g. Brach, 2008; Kuttner, 2008; Riskin, 2002), but little empirical research has addressed this issue. To begin to remedy this gap in the literature we conducted four studies that examined the effect of mindful attention on negotiation performance in a single-issue distributive negotiation. In all experiments negotiators who first engaged in a short manipulation to induce mindful attention were paired with control group counterparts. Negotiation outcomes were assessed using both an objective measure of distributive outcome (all studies) and subjective measures of negotiation satisfaction (Study 4).

In Studies 1 and 2, negotiators in the mindful attention condition engaged in an adapted version of a well-known mindful attention exercise that involves mindfully eating raisins (Kabat-Zinn, 2003), a task which has been used in other experimental research as well (Heppner et al., 2008). Mindful negotiators were then paired with paired control group negotiators who had engaged in a "raisin taste test" (Study 1) or had been given a rationale for eating some raisins (Study 2) during the same time. Results of both studies showed that mindful negotiators outperformed their control group counterparts and claimed more of the fixed negotiation zone ("bargaining pie").

Study 3 replicated this finding using a different manipulation of mindful attention: participants in the mindful attention condition engaged in a brief exercise before the negotiation

to bring their full attention and awareness to the upcoming negotiation (control group participants continued to prepare for the negotiation during the same time). Study 4 again replicated the effect of mindful attention on negotiation performance. Study 4 also established the positive effect of mindful attention on two subjective measures of negotiation satisfaction: satisfaction with outcome and satisfaction with process. Finally, Study 4 provided evidence that differences in aspirations could not explain the effect of mindful attention on negotiation performance.

Theoretical Contributions

Our main finding is that mindful attention improved performance in distributive negotiation. While the role of attention and awareness has been an important topic in the study of cognition (e.g., Kahneman, 1973; Pashler, Johnston, & Ruthruff, 2001), negotiation researchers have generally failed to consider how negotiators' mental states and processes of attention and awareness influence the negotiation process. However, in theoretical work, Bazerman and Chugh (2006) recently explored how "bounded awareness" may negatively influence negotiations. In contrast to the negative influence of bounded awareness, our research suggests that having attention mindfully focused on the present moment improves negotiation performance.

Negotiation scholars have long suggested that negotiation preparation is crucial for negotiation success (Craver, 2002; Latz, 2004; Thompson, 2001). Lewicki et al. (2003), for example, state:

> We believe that effective strategizing, planning, and preparation are the most critical precursors for achieving negotiation objectives. With effective planning … most negotiators can achieve their objectives; without them, results occur more by chance than by negotiator effort. Research on negotiation preparation to date has focused on the

cognitive, informational aspects of analysis and planning (p. 30).

This tendency reflects a more general concern with cognition and rationality in negotiations (Neale & Bazerman, 1991; Raiffa, 2002). One of the limitations of the traditional approach is that it focuses on reaching a decision, or plan (through data collection and analysis), but pays little attention to problems of implementation (e.g., Beach, 1990), assuming that once a course of action has been selected, implementation is trivial. This neglects that implementation (i.e., the actual negotiating) carries its own challenges. These challenges are often of an emotional (e.g., controlling one's emotional reactions) and attentional nature (e.g., not getting distracted from the task at hand). Thus, it stands to reason that activities that help negotiators deal with these challenges, such as mindfulness exercises, improve negotiation performance.

The present research confirms the importance of attentional aspects of negotiation preparation. More research should examine the importance of putting oneself into the right state of mind for a negotiation. In addition to focusing on attentional preparation, this research should also examine emotional preparation. For example, negotiators may try to put themselves into certain emotional states before a negotiation (Barry, 1999; Kopelman, Rosette, & Thompson, 2006). Interestingly, as our results suggest, attentional and emotional factors may be intertwined, such that, for example, placing one's mind on the present moment reduces negotiator anxiety.

Another interesting possibility is that a mindful state of mind results in greater awareness of how and when biases are about to affect negotiators' judgments (Neale & Bazerman, 1991). This possibility relates to common advice decision analysts give on how to deal with the cognitive biases that affect decision and negotiation behavior: "… the best protection against all psychological traps - in isolation or in combination - is awareness. Forewarned is forearmed." (Hammond, Keeney, & Raiffa, 1998, p. 58). Thus, increasing one's level of attention and

awareness may help recognize and avoid cognitive biases in negotiations – as well as in other domains such as individual decision making. Consistent with this reasoning, Kiken and Shook (2011) recently found that mindful attention leads to a lower negativity bias, or the tendency to weigh negative information more heavily than positive.

Our research also contributes to the literature on mindfulness. Beneficial effects of mindfulness have been previously found mainly for health-related dependent variables such as pain relief, stress, and anxiety (e.g., Chiesa & Serretti, 2009; Delmonte, 1985; Eberth & Sedlmeier, 2012), for basic attentional performance (e.g., MacLean et al., 2010), and for sports performance (e.g., Kimiecik & Jackson, 2002). Our results suggest that the benefits of attending mindfully to the present moment may extend to complex social interactions. These results call for further research on the role of mindful attention, and mindfulness more broadly, in other complex social activities such as group or organizational decision making.

Practical Implications

The present results suggest that practicing mindful attention exercises might be an effective and inexpensive way to improve negotiation performance. While researchers have studied various factors that affect negotiation performance, many of them are largely outside the control of the negotiator (such as situational variables or variables related to the counterpart). The present research examined a variable that individuals have control over: whether they engage in a mindful attention exercise before an upcoming negotiation or not. This method of preparation is extremely inexpensive and can be performed in most environments. Moreover, our results suggest that the mindful attention exercise could be either focused on the negotiation itself or even be an unrelated mindful attention practice, such as the raisin eating task used in Studies 1 and 2.

Limitations and Future Directions

The present studies are not without their limitations. Perhaps the most obvious limitation is our focus on one aspect of mindfulness only: mindful attention. While this was done in an effort to allow for a clearer defined construct, it obviously raises the question how other dimensions of mindfulness relate to negotiation performance. Logically, they can be positively related, unrelated, or even negatively related. As an example of the latter, the acceptance dimension of mindfulness may be associated with a greater probability of accepting the position and arguments of the negotiation counterpart, as a result leading to poorer negotiation performance.

Future research should also explore mediating mechanisms. One promising direction would be to examine self-regulation (e.g., Shapiro, Carlson, Astin, & Freedman, 2006). Glomb et al. (2011) argued that the main benefit of mindfulness is "improved self-regulation of thoughts, emotions, behaviors, and physiological reactions" (p. 123). Research supports a positive relation between mindfulness and emotion and behavior regulation (e.g., Brown & Ryan, 2003). For example, Chatzisarantis and Hagger (2007) found that mindfulness moderates the relation between intention and action such that more mindful individuals' intentions are more likely to be translated into action. Being mindful of the negotiation situation as well as one's emotional reaction to it may allow negotiators to better regulate their emotions (such as anxiety, greed, fear, and anger) and actions (such as offers, counteroffers, and reactions to threats), and enable negotiators to carry out their intentions.

One emotion that may be useful to regulate is anxiety. The prospect as well as the process of negotiating can cause anxiety and stress (Adler, Rosen, & Silverstein, 1998; Allred, Mallozzi, Matsui, & Raia, 1997; Bluen & Jubiler-Lurie, 1990). Such anxiety not only feels unpleasant, but can also negatively affect negotiations. Consistent with this idea, Brooks and Schweitzer (2011)

recently showed that negotiator anxiety can lead to poorer negotiation performance. This can happen through a process referred to as "choking under pressure" in which anxiety diverts limited attentional and working-memory resources away from performing the task at hand (Beilock, 2010). Two recent meta-analyses found that mindfulness training leads to reduced levels of state and trait anxiety (Chiesa & Serretti, 2009; Eberth & Sedlmeier, 2012). This may happen by lessening ruminative and reflexive self-focused attention (Brown, Ryan, & Creswell, 2007) as well as reducing cognitive elaboration of negative thoughts (Weick & Sutcliffe, 2006). When mindful attention is focused on the task itself, a person may disengage from thoughts about the task and from worries about task performance and outcomes, resulting in lower anxiety (Leary, Adams, & Tate, 2006).

Another possible pathway is through empathy and attunement. Research suggests that higher mindfulness is associated with these and related variables (Chiesa & Serretti, 2009; Kabat-Zinn, 2003). In this way, mindfulness may help negotiators better understand their counterparts through more accurate perception, interpretation, and understanding of verbal and non-verbal communication about the counterpart's motivations, intentions, and emotions. The receptive attentiveness may also lead to increased interest in the partner's thoughts, emotions, and welfare, leading to a better negotiation process and a win-win orientation. This may be less useful in distributive negotiation context, such as in the present study, relative to integrative negotiation settings.

This raises an interesting question regarding boundary conditions and moderating variables. One possibility is that the influence of mindfulness dimensions on negotiation performance is moderated by variables such as the type of negotiation. The present research focused on distributive negotiations and in such negotiations, mindful attention may be particularly valuable.

Such negotiations can be distinguished from situations in which bother parties can be better off by negotiating integratively ("win-win" situations). One can wonder whether mindfulness also has a positive impact in such situations, as well as which aspects of mindfulness may be particularly useful in such negotiations. Attitudinal dimensions of mindfulness such as openness, for example, may be more beneficial to negotiation performance in integrative situations than in distributive situations.

Finally, the four experiments consisted in simulated negotiations in a laboratory setting, rather than real-life negotiations, and participants were students, rather than professional negotiators. Also, participants were not screened through a formal psychiatric / psychological assessment before participating. While this methodology is very common in research on negotiations and provides a large degree of control, there are concerns about the generalizability and external validity of the findings. Future research should extend the current findings by using both laboratory and field methods, more carefully screened samples of more experienced negotiators, and a wider variety of manipulations and measures of mindfulness and negotiation outcomes. Such research should also use longer mindfulness interventions, such as the Mindfulness-based Stress Reduction training (Kabat-Zinn, 2003), as compared to the brief laboratory manipulations used in the current studies. This could be combined with an examination of longer-lasting changes in negotiation behaviors and outcomes.

Conclusion

The current studies are the first, to our knowledge, to show an effect of mindfulness on performance in distributive negotiations. Across four laboratory experiments using different brief mindfulness manipulations as well as different control conditions, participants in the mindfulness condition consistently outperformed their control condition counterparts with respect to the

distributive negotiation outcome they achieved, and also scored higher on measures of negotiation satisfaction. Our research contributes both to the literature on negotiation, highlighting the role of attention and awareness for negotiation performance, as well as the literature on mindfulness, suggesting the value of studying mindfulness in social interactions. Future research that uses different interventions, manipulations, and measures of mindfulness, examines a broader variety of negotiation situations, such as integrative negotiations, and studies mediators and moderators will allow us to learn more about the influence of different dimensions of mindfulness on negotiators and negotiations, as well as about mediating mechanisms and potential boundary conditions.

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APPENDIX

Mindfulness State Scale, Study 1

Below is a collection of statements about your current state of mind. Please rate each of the following statements using the scale provided with respect to your experience at the time just before you started to work on this survey. Please rate each statement according to what *really reflects* your experience rather than what you think your experience should be. Please treat each item separately from every other item.

1	2	3	4	5
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree

1. I was aware of whether my muscles were tense or relaxed.
2. I noticed the sensations of my body.
3. I was aware of sounds or aromas in the environment.
4. I was aware of my emotions without having to react to them.
5. I was aware of my thoughts without getting lost in them.
6. I was fully in the present moment.
7. I was preoccupied with the future or the past. (reverse-coded)
8. I wasn't focused on what was happening in the present. (reverse-coded)

Table 1: Means and Standard Deviations of All Dependent Variables, Studies 1-4

	Mindfulness		Control	
	Mean	*SD*	*Mean*	*SD*
Study 1				
Measured State Mindfulness	3.72	.55	3.38	.45
Negotiation Outcome	.34	.16	.26	.16
Study 2				
Negotiation Outcome	.34	.19	.26	.19
Study 3				
Negotiation Outcome	.33	.14	.27	.14
Study 4				
Negotiation Outcome	.34	.12	.26	.12
Satisfaction with Outcome	5.44	.95	4.87	1.18
Satisfaction with Process	5.61	.94	5.23	1.03