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Cognitive dissonance in negotiation: Free choice or counter-attitudinal justification?

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Abstract

Previous research suggests that negotiators inflate their valuation for offers they make and devalue offers they choose not to make due to the psychological process of cognitive dissonance reduction. Research outside of the negotiation context suggests that cognitive dissonance is induced either by being forced to choose among relatively equal options or by having to justify a counter-attitudinal position. A negotiation involves both choice and justification, so it is unclear which process is responsible for inducing cognitive dissonance or preference inflation. We present two studies in which the effect of choosing an opening offer is disentangled from the effects of justifying that choice. Findings indicate that choice and justification have an additive effect on negotiator preference change. We discuss implications of these results for cognitive dissonance theory and the practice of negotiation.

Keywords: Cognitive dissonance, reactance, free-choice, counter-attitudinal justification, negotiation, conflict resolution.

Conventional wisdom assumes that individuals negotiate to get what they want. That is, individuals enter negotiations with a fixed set of preferences, and the process of negotiation involves identifying goods and services that all parties are willing to accept. However, researchers theorize that preferences for negotiation outcomes are in fact dynamic (Bazerman, Tenbrunsel, & Wade-Benzoni, 1998). For example, in a recent experiment by Curhan, Neale, and Ross (2004), individuals who were engaged in an active, face-to-face negotiation generally inflated valuation for offers they made themselves and devalued offers received from their counterparts. These results suggest that the negotiation process involves individuals *changing* what they want as much as obtaining what they want.

Such changes in preferences not only run counter to rational choice theory (Von Neumann & Morgenstern, 1944), but also potentially create barriers to the resolution of conflicts. If negotiators devalue offers they receive and inflate valuation for offers they make, then the exchange of offers could widen, rather than narrow, the “gap” to be bridged between the negotiating parties. The wider the perceived gap between the value of the offer proposed and the value of the offer received, the harder it is for the parties to reach an agreement (Curhan et al., 2004).

A considerable body of research has examined why individuals deflate offers they perceive to have been generated by their counterparts in a dispute, a process known as “reactive devaluation,” (Ross, 1995; Ross & Stilling, 1991; Ross & Ward, 1995; Stilling, Epelbaum, Keltner, & Ross, 1991). Individuals who believe their freedom is threatened are motivated to reaffirm their control and reassert their autonomy (Baer, Hinkle, Smith, & Fenton, 1980; J. W. Brehm, 1966; Heilman & Toffler, 1976). They, therefore, devalue whatever is freely available to them and covet whatever is withheld or denied. To the extent that a counterpart’s offer is regarded as threatening to a negotiator’s freedom, the negotiator might “reactively devalue” the counterpart’s offer and increase valuation for offers that appear to have been withheld (Ross, 1995). Reactive devaluation may be attenuated by pre-rating potential offers or discussing aspects of the negotiation prior to exchanging offers (Curhan

et al., 2004), by receiving concessions gradually over the course of the negotiation (Kwon & Weingart, 2004), or by the presence of a positive relationship among negotiation counterparts (Ward, Gerber, & Ross, 2006).

In contrast to the prevalence of research on reactive devaluation, relatively less research in the context of conflict and negotiation has explored the phenomenon of increases in valuation for offers made in a negotiation (hereafter, “preference inflation”)—in spite of the fact that the latter effect seems to be more robust and of greater magnitude than the former (Bendersky & Curhan, 2003; Curhan et al., 2004). Given that the confluence of these two effects widens the gap to be bridged by the parties, representing a barrier to resolution, it is crucial that we understand the underlying mechanisms of preference inflation as well as those of reactive devaluation.

This paper is a first step in exploring the operation of cognitive dissonance in negotiations. Although prior research has demonstrated that preference inflation occurs (Curhan et al., 2004), the experiments reported here extend research and theory by exploring two potential *mechanisms* underlying preference inflation in negotiation: Namely, free-choice and counter-attitudinal justification. Although each of these mechanisms for inducing cognitive dissonance has been explored extensively in research outside of the negotiations context, the negotiation process represents an opportunity to study both mechanisms within a single paradigm, thereby revealing important relationships between dissonance-induction mechanisms seldom examined simultaneously.

Inducing Cognitive Dissonance

In the few instances where researchers have identified the phenomenon of preference inflation in negotiation, they have attributed it, at least in part, to cognitive dissonance reduction (Bazerman, 2002; Bendersky & Curhan, 2003; Curhan et al., 2004). Dissonance theory asserts that individuals are motivated to reduce cognitive dissonance—a state of psychological discomfort that is aroused when people freely choose to perform a behavior that is discrepant with their attitudes—by

revising their attitudes to be more consistent with their actions (Cooper & Fazio, 1984; Elliot & Devine, 1994; Festinger, 1957; Kiesler & Pallak, 1976; Zanna & Cooper, 1976).

Making an offer in a negotiation involves two processes that correspond roughly to two predominant research methods for inducing cognitive dissonance. We turn now to a brief review of each of these methods.

The Free-choice Method. Making an offer in a negotiation often begins with a choice about *which* offer to put forth. Similarly, the free-choice method induces cognitive dissonance by forcing participants to make a difficult choice. In one of the earliest dissonance experiments, Brehm (1956) demonstrated that individuals who were offered a choice between two appliances they had previously rated as almost equally attractive, increased their valuation for the chosen appliance and decreased their valuation for the forfeited appliance from before to after making their decision. More recently, research by Shultz, Leveiller and Lepper (1999) refined Brehm's original paradigm and found that, for choices among options considered equivalently attractive, dissonance is reduced mostly by devaluing the forfeited option, whereas for choices among options considered equivalently *unattractive*, dissonance is alleviated mostly by inflating valuation for the selected option (see also Shultz & Lepper, 1996). Additionally, Lyubomirsky and Ross (1999) found that chronically happy people are inclined to increase their valuation of selected options but not decrease their valuation of non-selected options, whereas chronically unhappy people derogate non-selected options but do not increase valuation of selected options. Thus, the effects of cognitive dissonance reduction due to freely choosing one option over another may vary based on the attractiveness of the options being considered and the affective disposition of the chooser. One key assumption of this research is that the process of making a choice induces dissonance insofar as it obligates the chooser to accept unattractive features of the elected option and forfeit attractive features of the rejected option (Brehm, 1956). Additionally, more difficult choices (i.e., less discrepancy among pre-choice

assessments) should result in greater dissonance, presuming the options are qualitatively different (Shultz et al., 1999).

The Counter-attitudinal Justification Method. After choosing an offer to put forth to one's counterpart, the negotiation process typically entails some form of justification of that offer, either to one's constituencies or to one's counterpart. The counter-attitudinal justification method — also known as “insufficient justification” (Shultz & Lepper, 1996), “induced compliance” (Cooper & Fazio, 1984; Cooper & Worchel, 1970) or “forced compliance” (Festinger & Carlsmith, 1959) — creates cognitive dissonance by having participants justify, in a similar fashion, a position with which they disagree. For example, in Festinger and Carlsmith's (1959) classic study of cognitive dissonance, participants were instructed to inform fellow students that a tedious peg-turning task was in fact exciting. Participants who did so became more positively predisposed toward the peg-turning task, particularly when they were given relatively small monetary incentives to make the counter-attitudinal assertion in the first place. Cooper and Worchel (1970) refined this experiment, and found that only those participants who were told they had *successfully* convinced their fellow students exhibited a shift in attitudes. When told that the fellow student remained unconvinced, the subjects did not revise their attitudes towards the task. In more recent experiments, Elliot and Devine (1994) determined that psychological discomfort was alleviated for subjects by the act of revising their preferences to be more consistent with the counter-attitudinal position they had just been asked to advocate. In sum, cognitive dissonance is induced when people's counter-attitudinal behavior is done voluntarily, cannot be attributable to external causes, and could produce an aversive event. Dissonance is alleviated when people revise their attitudes to be more consistent with their behavior.

Cross-method Comparison. Although dissonance theory is perhaps the most extensively researched theory in social psychology (Ross & Ward, 1995), almost no studies have compared the dissonance inducing effects of choice and justification within a single research paradigm. In one exception, Bobocel and Meyer (1994) separated out the effects of choice and justification on

escalation of commitment, which is generally interpreted within a self-justification or cognitive dissonance framework (Brockner, 1992; Staw & Ross, 1987). Bobocel and Meyer point out that most previous research confounded choice and public justification. In their experiment, they test the effects of choice, private justification, and public justification separately on deciding to change or continue a previously chosen course of action. They find that choice exerts no significant effect on escalating commitment but that both private and public justification significantly increase escalation of commitment to the same extent. Although they did not directly measure preference valuation, this study suggests that choice and justification may differentially induce cognitive dissonance and implicate preference valuation accordingly.

Cognitive Dissonance in Negotiation

One of the few published efforts to examine cognitive dissonance reduction in negotiation was a study conducted by Curhan et al. (2004) on “dynamic valuation”—or the process of negotiator preference change. In this experiment, researchers demonstrated both preference inflation for offers proposed (or agreed upon) and devaluation of offers received in a face-to-face negotiation simulation. Consequently, the “gap” between proposers’ and receivers’ valuation of offers widened from before to after the point at which offers were exchanged. Experimental manipulations involving pre-rating potential offers and/or engaging in discussions prior to the exchange of offers reduced this gap and increased the likelihood of resolution. Whereas reactive devaluation appeared only upon the initial exchange of offers, preference inflation seemed more robust, recurring every time offers were made. Although Curhan et al. documented multiple instances of dynamic valuation (i.e., reactive devaluation and preference inflation), no underlying mechanisms were identified.

Relatively more research has been conducted on the related process of escalating commitment to a failing course of action (Brockner, Shaw, & Rubin, 1979; Staw, 1976), which is considered a barrier to negotiated agreement (Bazerman, Curhan, & Moore, 2001; Neale & Bazerman, 1991; Thompson, 2001). Escalation of commitment has been attributed both to individual

psychological mechanisms and to competitive motives that could occur during negotiations (Bazerman, 2002). Rather than admitting that past decisions were wrong, individuals increase their psychological commitment to a failing course of action, in part, to reduce cognitive dissonance (Brockner, 1992; Staw & Ross, 1987). The competitive pressures of a conflict or negotiation may exacerbate escalation of commitment by coupling the justification of past decisions with the desire to defeat one's counterpart, even if doing so is personally costly (Brockner & Rubin, 1985; Teger, 1979). Although most research on escalation of commitment has been conducted on investment and personnel decisions or auctions, in the context of negotiations, escalation of commitment seems to be associated with increased entrenchment and unwillingness to make concessions (Diekmann, Tenbrunsel, Shah, Schroth, & Bazerman, 1996).

The research summarized above strongly suggests that preference inflation for offers that are made in negotiation poses a considerable barrier to resolution and warrants additional research. The purpose of the present investigation is to explore the mechanisms of choosing and justifying negotiation offers on the process of preference inflation. We present two studies in which participants pre-rate a menu of potential offer packages a few days prior to engaging in a negotiation. On the day of the negotiation, participants choose an opening offer to put forth to their counterparts and then reevaluate the original menu of option packages, including the offer package selected as well as any non-selected packages. The first study considers only the process of choice whereas the second study includes both choice and justification.

Study 1

Overview and Hypotheses

In our first study, we sought to determine whether or not the process of choosing an opening offer to put forth to one's counterpart in a negotiation was sufficient by itself to induce preference inflation for the selected option and/or deflation of non-selected options. Thus, we had participants choose an opening offer to make in a negotiation from among a menu of twelve potential option

packages that they had rated in advance. Given that previous research using the free-choice induction method has demonstrated that cognitive dissonance can be alleviated by preference inflation of selected options, deflation of non-selected options, or by a combination of both processes (Shultz et al., 1999), we expected participants to inflate their preferences for the selected option package and/or deflate their preferences for non-selected option packages. Therefore, following the methodology of Shultz et al., our formal hypothesis was that selecting an opening offer to put forth to one's counterpart in a negotiation would be associated with an increase in the *difference* in valuation between the selected offer and non-selected offers.

Method

Participants

Participants were 48 employed MBA students at a West Coast university enrolled in a course on Organizational Behavior. Ninety-seven percent of those eligible to participate volunteered to do so. Students' ages ranged from 25-54 years ($M = 31.02$, $SD = 4.41$) and 24% were women.

Procedure

This study was conducted in the context of an in-class negotiation simulation that has been used in previous research (Bayazit & Mannix, 2003; Kurtzberg, 2005; case developed by Valley & Medvec, 1996). The negotiation was concerning a Union-Management labor contract dispute in which the Management had the option of relocating a plant and the Union could strike if no agreement was reached. Each student was randomly assigned to play the Union or the Management role. A week before the class in which we conducted the simulation, all students received one of two sets of confidential background information consistent with their role (i.e., Union or Management). The background information described several negotiation issues in detail (e.g., the location of a new plant, wages, worker autonomy, production quotas, and incentives), including information on relative prioritization of these issues.

Along with their background information, students received a link to a secure, online questionnaire that they were instructed to complete and submit shortly after reading their background information and at least 24 hours prior to the class in which the simulation was to be conducted. The questionnaire comprised a menu of twelve potential option packages that students were instructed to rate in terms of the positivity or negativity of each option from the perspective of their assigned role on scales ranging from 1 (“Terrible”) to 9 (“Excellent”). Hereafter, we refer to these ratings as “pre-ratings.”

Upon arrival to the class in which the simulation was conducted, students received a second questionnaire (on paper) that they were instructed to complete before they left the classroom to begin the simulation. On the first page of the questionnaire was a copy of the original menu of twelve option packages (ordered differently than on the pre-rating questionnaire). Participants were instructed to choose an “opening offer” for their own negotiation from among the twelve options listed on the menu. Hereafter, we refer to the contents of this offer as the “selected option.”

On the second page of the questionnaire, participants completed a distracter task in which they were asked to describe briefly a real-world union-management negotiation similar to the case portrayed in the simulation. Finally, on the third page of the questionnaire, participants reevaluated all twelve option packages (ordered differently than on the pre-rating questionnaire) using the same 9-point scale as before. Hereafter, we refer to these ratings as “post-ratings.”

Rating Spread

Based on research on consumer choice, suggesting that people simplify cognitively complex choices by narrowing the number of options they consider (Bettman, Luce, & Payne, 1998; Bröder, 2000; Gigerenzer & Goldstein, 1996; Payne, 1976), we identified a subset of non-selected options for each participant in order to calculate a measure of his or her “rating spread.”¹ In short, we used the

¹ We also created a measure of “rating spread” which used the average ratings of *all* non-selected options and the results did not change when using this measure.

non-selected option(s) rated most closely to the selected option to represent the “non-selected option”.² Finally, we constructed a measure of the difference in ratings of the selected option versus the non-selected option—hereafter “rating spread.”

Results

Prior to testing our primary hypothesis concerning changes in spread from pre-rating to post-rating, we sought to determine whether participant’s selected option or participant’s role in the simulation had any effect on pre-rating spread or post-rating spread. We therefore applied analysis of variance (ANOVA) to pre-rating spread and post-rating spread with selected option (A through L) and role (Union or Management) as independent factors.³ The main effect of selected option was not significant in either the ANOVA on pre-rating spread or the ANOVA on post-rating spread, all $F_s < 2.05, n.s.$ However, the main effect of role was significant in the ANOVAs on both pre-ratings, $F(1, 47) = 4.46, p < .05$, and post-ratings, $F(1, 47) = 8.22, p < .01$. We, therefore, include role as a factor in subsequent analyses.

To test our primary hypothesis, we subjected rating spread to a 2 (role) X 2 (rating time period) repeated measures ANOVA with the second factor within-subjects. As hypothesized, the ANOVA yielded a significant main effect for rating time period, $F(1, 46) = 25.93, p < .01$. As illustrated in Figure 1, the rating spread increased from .50 ($S.D. = .85$) at pre-rating to 2.28 ($S.D. = 2.39$) at post-rating. The interaction between role and rating time period was not significant, $F(1, 46) = .09, n.s.$

Post-hoc Analyses

After conducting tests of the primary hypothesis concerning rating spread, we assessed whether the increased spread was due primarily to preference inflation of the selected option or devaluation of the non-selected option. Thus, we conducted an analysis of simple effects between

² In all but two cases, the closest non-selected option was rated lower than the selected option.

³ The selected option factor had only 11 levels because one of the options was never selected by our participants.

pre- and post-rating for the selected and closest non-selected offers, with role included as a factor. We found that the change in valuation of the selected offer was not significantly different from zero, $F(1, 46) = 2.44, n.s.$ whereas the change in valuation of the non-selected offer was significantly greater than zero, $F(1, 46) = 29.66, p < .01$. The average rating of the non-selected offer dropped from 7.06 ($S.D. = 1.28$) at pre-rating to 5.63 ($S.D. = 1.89$) at post-rating. Thus, it seems that the increased spread between pre- and post-ratings was due primarily to devaluation of the non-selected offer.

Discussion

These results support our hypothesis that the process of choosing an opening offer to put forth to one's counterpart in a negotiation is associated with an increase in rating spread between selected and non-selected options. This effect suggests that choice by itself is sufficient to induce cognitive dissonance among negotiators and that negotiators respond by coming to value the selected and non-selected options more distinctly from one another. Furthermore, it seems that most of the increase in spread was due to devaluation of the non-selected offer rather than inflation of the selected offer. This finding is consistent with Shultz et al's (1999) finding that dissonance induced by making difficult choices between *attractive* offers is alleviated by devaluing the non-selected option rather than inflating valuation of the selected option. Indeed, the average pre-ratings of selected option ($M = 7.57, S.D. = 1.43$) and non-selected option ($M = 7.06, S.D. = 1.28$) were quite high, suggesting that participants in this study were making a difficult choice among relatively attractive options.

This study has several limitations. First, in an effort to enhance the external validity of the procedure, we chose not to force participants to make a choice between only two specific options, as has been done in previous research using the free-choice method of inducing dissonance (e.g. Brehm, 1956; e.g. Shultz et al., 1999). Since participants were free to choose whichever option package they wished (from a menu of twelve), we had to construct a comparison variable post hoc. Another result

of our methodological choice was that we had no control over which options were selected by our participants. Consequently, the average pre-ratings of selected and non-selected options were quite high, potentially giving rise to a ceiling effect or other methodological artifacts. Secondly, we examined only the effect of *choice* on changes in rating spread; we did not examine how *justifying* that choice might further affect changes in valuation. Study 2 addresses these limitations.

Study 2

Overview and Hypotheses

Our second study builds on Study 1 by forcing participants to choose their opening offer from between two relatively *unattractive* option packages to increase the chances that we would observe preference inflation for the selected offer as well as (or instead of) devaluation of the non-selected offer. Participants engaged in a negotiation simulation as attorneys, each representing the interests of individual parties who opposed one another in a dispute. In our control condition, we aimed to replicate the effect of choice alone on the spread of alternatives. As in Study 1, we hypothesized, based on previous research using the free-choice induction method, that the process of choice by itself would be associated with an increase in spread from pre-rating to post-rating.

Hypothesis 1: Selecting an opening offer to make in a negotiation will be associated with an increase in rating spread.

In addition to replicating the effects of choice, we also added three new experimental conditions to test the effects of various kinds of justification on the spread of alternatives above and beyond the effect of choice alone. Specifically, participants were instructed to justify their choice to their own client, to the opposing client, or to the opposing client specifically on the basis of fairness. The first experimental condition, “choose and justify to own side,” most resembled previous dissonance research using the counter-attitudinal justification method. Participants justified why an option they had previously rated as relatively unattractive for their own side was in fact *good* for their client. Because no monetary compensation was offered in exchange for the justification, and because

“selling” one’s constituent on a fairly unattractive proposal could result in aversive consequences, we expected this form of justification to induce cognitive dissonance that would be alleviated by increasing the rating spread between selected and non-selected options. As in previous research on escalation of commitment (Bobocel & Meyer, 1994), we predicted for all three justification conditions that justifying one’s choice would have a greater effect on preference inflation than would choice alone.

Hypothesis 2a: The process of choosing an opening offer in negotiation and justifying the choice

based on meeting the interests of one’s own side will be associated with an increase in rating spread.

Hypothesis 2b: The process of choosing an opening offer in negotiation and justifying the choice

based on meeting the interests of one’s own side will be associated with a greater increase in rating spread than will the process of choice by itself.

Although there are many negotiation situations involving principal-agent relationships in which the negotiators must justify their offers to their own constituents, we also wanted to examine the kind of justification that tends to occur in a 1-on-1 negotiation situation—i.e., justification aimed at trying to persuade the counterpart to accept an offer. Thus, in the second experimental condition, “choose and justify to other side,” participants justified why their selected option was good for their *counterpart’s* client. Because this condition most closely resembled the form of justification used by participants in the study by Curhan et al. (2004)—i.e., making offers directly to their counterparts—we again expected this form of justification to be related to an increase in rating spread between selected and non-selected options, and we expected this effect to be greater than the effect of choice alone.

Hypothesis 3a: The process of choosing an opening offer in negotiation and justifying the choice

based on meeting the interests of the other side will be associated with an increase in rating spread.

Hypothesis 3b: The process of choosing an opening offer in negotiation and justifying the choice *based on meeting the interests of the other side* will be associated with a greater increase in rating spread than will the process of choice by itself.

Finally, we added a third experimental condition, “choose and justify based on fairness grounds,” to simulate another commonly used form of justification. Raiffa (1982) observed that “most people want to be fair, and they can be persuaded somewhat by fairness arguments” (P. 268). Furthermore, Fisher and Ury (1981) suggest that negotiators should seek out and use fairness arguments in their negotiations. From a dissonance perspective, we reasoned that justification based on fairness grounds would lead to the perception that the selected offer was indeed fair and, based on relevant findings from the justice literature (Lind & Tyler, 1988; Lind & Van den Bos, 2002; Thibaut & Walker, 1975; Tyler & Lind, 1992; Van den Bos, Wilke, Lind, & Vermunt, 1998), the perception that the selected offer was fair would in turn lead to outcome satisfaction. Thus, once again, we expected this form of justification to be related to increased rating spread between the selected and non-selected options, and we expected this effect to be greater than the effect of choice alone.

Hypothesis 4a: The process of choosing an opening offer in a negotiation and *justifying the choice based on fairness grounds* will be associated with an increase in rating spread.

Hypothesis 4b: The process of choosing an opening offer in negotiation and justifying the choice *based on fairness grounds* will be associated with a greater increase in rating spread than will the process of choice by itself.

Based on Bobocel and Meyer’s (1994) research on the effects of choice and different justification processes on escalation of commitment, we did not expect to find differences among the effects resulting from different types of justification.

Method

Participants

Participants were 183 MBA students at a university in the Northeast who were enrolled in a course on Negotiation. Students' ages ranged from 26-39 years ($M = 30.3$, $S.D. = 2.61$) and 29.5% were women. 14 participants were dropped because they did not submit a second questionnaire.

Procedure

Participants prepared for a negotiation simulation in which they were to play the role of an attorney representing an individual party in a dispute between two business partners (Goluke & Groth, 1991; case developed by Patton, Gordon, & Clarkson, 1984). Participants were randomly assigned to represent the lawyers for either Hacker (a computer programmer) or Star (a business manager). All students received background information in advance that was consistent with their respective roles.

Following a procedure similar to Study 1, participants completed an online questionnaire after reading their background information, but at least five hours prior to the class in which they believed the simulation would occur. The questionnaire comprised a menu of ten potential option packages, and participants were instructed to rate the positivity or negativity of each package from the perspective of their assigned role, using a 9-point scale identical to the scale used in Study 1. Once again, hereafter we refer to these ratings as "pre-ratings."

After the pre-ratings had been submitted online, a research assistant identified two option packages for each role to be presented on the second questionnaire. The two option packages for each role were selected on the basis of having been pre-rated similarly to one another and relatively low in comparison with other option packages ($M = 4.98$ and 5.06 for Hacker and $M = 3.71$ and 4.23 for Star; as compared with their overall ratings of $M = 5.81$, $SD = 0.99$ and $M = 4.91$, $SD = 1.42$, respectively). We reasoned that these option packages represented a difficult choice among fairly unattractive options, which would increase the chances that our participants would inflate their preferences for the selected option (Shultz et al., 1999).

Upon their arrival in class, all participants received a follow-up questionnaire (on paper). In all four conditions, participants were first presented with the two packages from which to choose their opening offer to their counterpart. The instructions were as follows:

Imagine that you and Hacker's [Star's] attorney have agreed to resolve this case through a process known as "final offer arbitration."² You and Hacker's [Star's] attorney each independently are to make a final offer that will be shown to a neutral arbitrator. The arbitrator must select either your final offer or the final offer made by Hacker's [Star's] attorney. The arbitrator may not split the difference between the two offers. Whichever offer the arbitrator selects is legally binding upon the parties. Imagine that for some reason you had to choose one of the two offer packages described below as your final offer. Which offer package would you propose?

Hereafter, we refer to the offer selected as the "selected option," and the offer not selected as the "non-selected option."

After indicating their choice, participants proceeded to the second page of the questionnaire in which the experimental manipulations (described below) were presented. Finally, on the third page, participants reevaluated the original ten option packages (ordered differently than on the pre-rating questionnaire) using the same 9-point scale as before. Hereafter, we refer to these ratings as "post-ratings."

Manipulations

We randomly assigned each participant to one of four experimental conditions, which determined the task presented on the second page of the second questionnaire, in between selecting their opening offer package and completing the post-ratings. In the "choose only" condition, which

² We opted to use the context of final offer arbitration (rather than having participants select an opening offer) to increase the external validity for a negotiation task in which participants had to choose between unattractive options. We were concerned that asking participants to choose an unattractive option with which to open a negotiation might induce countervailing cognitive processes, such as reactance.

conceptually was our control condition, participants were instructed to “briefly describe a real world situation that you have heard of that is similar to this case.” In the “choose and justify to self” condition, participants were instructed to imagine that they had to address their own client to argue why the terms of the selected option met their own client’s interests. In the “choose and justify to other” condition, participants were instructed to imagine that they had to address the *opposing* client directly to argue why the terms of the selected option met that client’s interests. Finally, in the “choose and justify on fairness grounds” condition, participants were instructed to imagine that they had to address the opposing client to argue why the terms of the selected option were consistent with objective criteria or standards of fairness. In each experimental condition, participants were instructed to write out exactly what they would say.

Rating Spread

As in Study 1, we constructed a measure of the difference in ratings between the selected option and the non-selected option—hereafter “rating spread.”

Results

As in Study 1, we first sought to determine whether participant’s selected option or participant’s role in the simulation had any effect on pre-rating spread or post-rating spread. The main effect of selected option was not significant in either the ANOVA on pre-rating spread or the ANOVA on post-rating spread, all $F_s < 2.40$, *n.s.* However, the main effect of role was significant in the ANOVA on post-rating spread, $F(1, 168) = 28.50$, $p < .01$, although not in the ANOVA on pre-rating spread, $F(1, 168) = 1.98$, *n.s.*, Thus, we include role as a factor in subsequent analyses, as we had done in Study 1.

A 2 (role) X 4 (condition) X 2 (rating time period) repeated measures ANOVA applied to rating spread with the third factor within-subjects revealed a significant main effect for rating time period, $F(1, 168) = 42.16$, $p < .01$. Averaging across all four conditions, the rating spread increased

from .71 ($S.D. = 2.25$) to 2.00 ($S.D. = 2.12$). There was a significant interaction of role with rating time period, $F(1, 168) = 7.53, p < .01$, such that both pre-rating spread and post-rating spread were smaller for the Hacker role (M pre-rating spread = .48, $S.D. = 2.02$, M post-rating spread = 1.23, $S.D. = 1.88$) than for the Star role (M pre-rating spread = .96, $S.D. = 2.47$, M post-rating spread = 2.84, $S.D. = 2.05$). The condition by rating time period interaction also was significant, $F(3, 166) = 2.80, p < .05$, suggesting (as explored below) that the difference in spread over time varied as a function of experimental condition. The three way interaction of rating time period, role and condition was not significant, $F(3, 166) = .12, n.s.$

To test hypotheses 1, 2a, 3a, and 4a, we applied planned contrasts to the main effect of rating time period within each experimental condition, retaining role as a factor. Pre-ratings and post-ratings for each of the four experimental conditions can be seen in Figure 2. In the “choose only” control condition (Figure 2a), rating spread increased from .80 ($S.D. = 2.46$) to 1.13 ($S.D. = 2.16$), but this change was not statistically significant, $F(1, 168) = .56, n.s.$ Thus, hypothesis 1 was not supported. In support of hypothesis 2a, rating spread in the “choose and justify to self” condition (Figure 2b) increased significantly from .84 ($S.D. = 2.18$) to 2.47 ($S.D. = 1.80$), $F(1, 168) = 16.46, p < .01$. In support of hypothesis 3a, rating spread in the “choose and justify to other” condition (Figure 2c) increased significantly from .86 ($S.D. = 1.85$) to 2.28 ($S.D. = 2.21$), $F(1, 168) = 13.05, p < .01$. In support of hypothesis 4a, rating spread in the “choose and justify on fairness grounds” condition (Figure 2d) increased significantly from .31 ($S.D. = 2.50$) to 2.18 ($S.D. = 2.06$), $F(1, 168) = 19.90, p < .01$.

We tested hypotheses 2b, 3b, and 4b by applying planned contrasts to the difference between each experimental condition and the control condition on the repeated measure (i.e., the change in spread from pre-rating to post-rating), once again retaining role as a covariate. In support of hypothesis 2b, the change in spread for the “choose and justify to self” condition was significantly greater than the change in spread for the control condition, $F(1, 168) = 5.17, p < .05$. The change in

spread for the “choose and justify to other” condition also was greater than the change in spread for the control condition, but this effect was not statistically significant, $F(1, 168) = 3.79, p < .10$. Thus, hypothesis 3b was not supported. In support of hypothesis 4b, the change in spread for the “choose and justify on fairness grounds” condition was significantly greater than the change in spread for the control condition, $F(1, 168) = 6.97, p < .01$. Additional planned contrasts comparing changes in spread across the three justification conditions revealed no significant differences, all $F_s < .60, n.s.$

Post-hoc Analyses

We again evaluated whether the rating spread in each condition was due primarily to preference inflation of the selected option or devaluation of the non-selected option. Thus, we conducted a simple effects analysis between pre- and post-rating for the selected and closest non-selected offers in each condition, with role included as a factor. Results indicate that the selected offer was inflated in the choose only condition, $F(1, 161) = 5.47, p < .05$, the choose and justify to self condition, $F(1, 161) = 18.92, p < .01$, the choose and justify to other condition, $F(1, 161) = 19.48, p < .01$, and the choose and justify on fairness grounds condition, $F(1, 161) = 11.59, p < .01$. By contrast, the non-selected offer was devalued only in the choose and justify on fairness grounds condition, $F(1, 161) = 5.91, p < .05$, all other $F_s < 1.90, n.s.$ Thus, as we had expected, by constraining participants’ choice to two unattractive options, we induced preference inflation of the selected option.

Discussion

The results of Study 2 support most of our hypotheses concerning the effects of choice and justification on preference inflation. In general, participants in this study inflated their valuation for offers made, and justification of those offers had an additive effect on preference inflation. However, Study 2 did not replicate the effect of choice alone on rating *spread*. Participants in the choose only condition significantly inflated their valuation for the selected option but *also* inflated their valuation of the non-selected option. We speculate that this inflation of non-selected options stemmed from

the final-offer arbitration context of Study 2. Participants may have believed that *both* options were candidates for inclusion in the final agreement because the non-selected option could have been put forth by the counterpart, and thus available for selection by the arbitrator as the binding agreement. Indeed, Curhan et al. (2004) found preference inflation for options that were believed to become the final agreement.

The experimental condition involving justification of one's choice on the grounds that the selected option benefited one's counterpart did not give rise to significantly more preference inflation than in the choose only control condition. Because this form of justification concerned the interests of the counterpart whereas preferences were elicited with respect to one's own interests, participants may not have felt as much cognitive dissonance (i.e., their public behavior might not have seemed to be as discrepant from their privately held attitudes).

General Discussion

While preference inflation among negotiators who make offers has been identified as a robust effect in previous research (Curhan et al., 2004), it has not received as much attention as reactive devaluation. Since both types of dynamic valuation can exacerbate the gap between negotiating parties, the current research contributes to our understanding of a potentially dysfunctional psychological barrier to resolving disputes.

These two studies represent a first step in exploring some of the mechanisms associated with preference inflation in negotiation. Taken together, the studies suggest that both the process of choosing an offer to put forth to one's counterpart and the process of justifying that offer induce cognitive dissonance additively, and that negotiators respond by coming to value their selected offers more positively and/or their non-selected offers more negatively.

Justification (coupled with choice) appears to induce considerable preference inflation. The results suggest, therefore, that justification is a powerful dissonance inducing process in negotiations.

While choice may contribute to cognitive discomfort, it does not appear to be as robust an effect as justification.

Furthermore, these studies extended the findings of Shultz et al (1999) to the negotiations context. Our results suggest that the dissonance induced by choosing between attractive offers is alleviated by devaluing the non-selected offer, whereas the dissonance induced by choosing between unattractive offers (and justifying that choice) is alleviated primarily by inflating preference valuation for the selected offer. Thus, the attractiveness of the options under consideration affected the valuation changes that resulted.

A limitation of these studies is that we did not have a situation in which participants justified without choosing, so we cannot compare the effect of choice against the effect of justification when each process occurs *alone*. We contemplated adding another experimental condition to Study 2 in which participants were instructed to justify an option they had not personally chosen. However, we opted not to do so for two reasons. First, we felt it was unrealistic to force a negotiator to justify an offer they had no part in selecting. Second, we reasoned on theoretical grounds that having an option assigned in this fashion would induce psychological reactance, and hence devaluation rather than preference inflation (Brehm & Brehm, 1981). Indeed, this conjecture was supported by a pilot study. Nevertheless, this is a topic that could be explored further in future research.

Nonetheless, this research context allowed us to explore simultaneously two classic methods for inducing cognitive dissonance that have been used in previous research. Together with Bobel and Meyer (1994), our research suggests that the induced compliance paradigm in cognitive dissonance research may produce more reliable preference changes and behavioral effects than the free-choice paradigm.

From an applied perspective, our results suggest that negotiators should be especially cognizant of the effects of justifying their offers on preference inflation for those offers. This research, therefore, provides a caveat to the common prescription that negotiators should use

objective criteria and standards of fairness to justify their offers to their counterparts (Fisher & Ury, 1981). Although the use of objective criteria might increase the attractiveness of the offer to the counterpart, it may also increase the attractiveness of the offer to the proposer, thereby enhancing her commitment to her position and perhaps eroding her flexibility.

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Figure 1

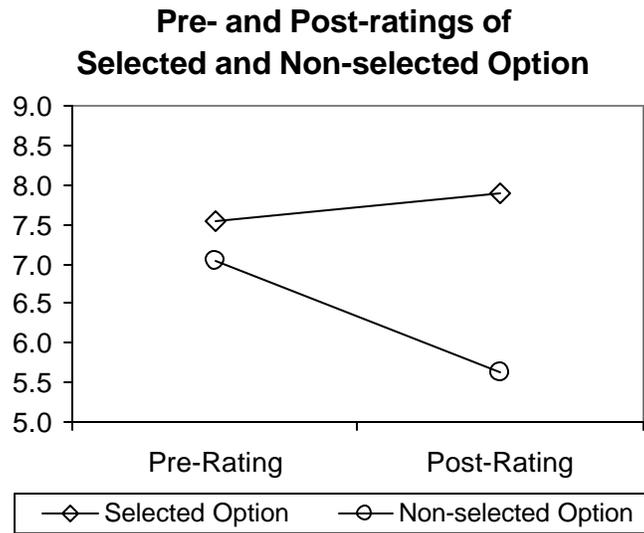


Figure 2

