**Negotiation and Conflict Management Research** 

# Do Past Perceptions Shape Future Behaviors? Subjective Value and Behavior Styles in a Multi-Round Negotiation

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#### Keywords

subjective value, behavior styles, multi-round negotiation.

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#### **Abstract**

This study examines how negotiation subjective value (SV)—relationship SV, process SV, instrumental SV, and self-SV—in a previous round affects negotiation behavior styles—integrating, compromising, obliging, avoiding, and dominating—in the next round through two studies. Study 1 asked the respondents to complete a questionnaire based on a recalled multi-round negotiation, and 169 samples were valid. In Study 2, 205 participants totally filled out the questionnaire after a simulated negotiation. Both results point out as follows: (a) relationship SV positively relates to all five negotiation styles, and its relationship with integrating, compromising, obliging, and avoiding styles is strongest among four branches of SV; (b) process SV is only positively related to integrating; (c) instrumental SV negatively relates to uncooperative styles—avoiding and dominating—and the relationship with dominating style is strongest; (d) self-SV relates to both integrating and dominating which looks like incompatible. We finally discuss the implications, limitations, and future research.

# Introduction

Conflict, which is defined as a perception of incompatibility between values, needs, interests, or actions, is inherent in our daily life (Zarankin, 2008). Negotiation—a decision-making process in which people mutually decide how to allocate scarce resources (Pruitt, 1983) is most efficient to solve conflict among mediation, dispute resolution boards, and arbitration. Meanwhile, negotiation will lead conflict to play the destructive (Rose & Shoham, 2004) or constructive role (Koza & Dant, 2007), which actually depends on negotiators' negotiation behavior style. Based on the dual-concern model (Rahim, 2010), negotiation behavior styles are refined as integrating, compromising, obliging, dominating, and avoiding. Thus, finding the influences of negotiators' behavior styles choice is important, because it may provide some theoretical support for how to promote cooperative styles of negotiators in practice.

Traditionally, researchers and other practitioners have focused much on the economic product of negotiation and consider it the only impact factor on negotiators especially their behavior (Thompson, 1990). However, with more scholars increasingly paying attention to social–psychological outcomes in negotiations (Bazerman, Curhan, & Moore, 2001), the great importance of the subjective value (SV) in

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negotiation—namely the social, perceptual, and emotional outcomes from a negotiation on negotiator—is recognized gradually. Specifically, negotiators' satisfaction, their relationship, and mood formed in one negotiation affect both parties' thoughts, judgments, and behavior in future negotiation (Forgas, 1998; Loewenstein, Thompson, & Bazerman, 1989). Furthermore, Curhan, Elfenbein, and Eisenkraft (2010) conducted a two-round negotiation study proving that the subjective value negotiators generated in Round 1 affect objective performance, the desire to negotiate with the same counterpart, and positive or negative economic feedback in the next round.

Although much research has shown that negotiation histories influence negotiators' behaviors. However, either these studies focus less on social—psychological outcomes or they only pay attention to someone aspect of social—psychological outcomes, such as satisfaction, trust, or relationship. There lacks a systematical and specific research on how the comprehensive framework of social—psychological outcome, namely subjective value (SV), in the previous round influences negotiators' behavior style in the next round. Therefore, this study mainly focuses on how instrumental SV, self-SV, process SV, and relationship SV, respectively, impact the five negotiation behavior styles—integrating, obliging, compromising, dominating, and avoiding—in the next round. Besides, some negotiation behavior style may be influenced by several SV, so that we want to make a comparison between the separate and exclusive contributions every SV make. This study uses two studies to examine these. Study 1 asks the respondents to complete a questionnaire about a recent multi-round negotiation case they experienced, and Study 2 uses a simulated negotiation to test it further aiming at extending the negotiation theory and providing some support for negotiators in practice.

# **Theoretical Background**

# **Negotiation Outcomes**

Negotiation outcomes include both economic and social—psychological outcomes. The former which is objective entails the product of negotiation, such as whether parties reach an agreement, how much value is created, and how to allocate resources. The latter is viewed as subjective outcome involving parties' attitudes and perception, such as satisfaction and affection (Curhan et al., 2010; Thompson, 1990). Earlier studies on negotiations thought that economic outcomes were the only index to measure negotiation results. However, not all the negotiators treat maximizing the economic outcomes as their ultimate goal, and economic measures do not exist in all cases. Therefore, scholars have increasingly paid attention to social—psychological outcomes in negotiations since the 1990s (Thompson, 1990).

Thompson (1990) pointed out that the social–psychological measures consist of three important elements based on social perception: negotiators' perceptions of the bargaining situation, the other party or bargaining opponent, and themselves. The perception of negotiation situations is about the judgments of and feelings about bargaining processes and outcomes (Thompson, 1990), such as the fairness or justice, structure and scripts, communication, and information sharing (Brockner & Wiesenfeld, 1996; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Pinkley, 1990). Perception of one's negotiation opponent is the perception and impression formation applied to the other party, which is a dyadic feeling containing negotiators' thought of their counterparts and their own relationships with those counterparts (Thompson, 1990). For example, this factor includes their perceptions of the other party's trustworthiness, fairness, intelligence, sociability, skill, ability, cooperativeness, and competitiveness, as well as the relationship and their willingness to interact with the other party in future (Fortgang, Lax, & Sebenius, 2003; Morris, Larrick, & Su, 1999; Naquin & Paulson, 2003; Tinsley, O'Connor, & Sullivan, 2002). Similarly, self-perceptions include negotiators' judgments of their own interests, values, goals, and risk preferences based on their interactions with others, and social comparisons between the self and the other party (Snyder & Higgins, 1997). Some research measures the social–psychological outcomes based on

negotiator satisfaction (Naquin, 2003; Novemsky & Schweitzer, 2004), the relationships between negotiators, trust, and the affective terms such as negotiator moods (Schweitzer, Hershey, & Bradlow, 2006).

But these definitions and measurements of the social–psychological outcomes are not systematic, so Curhan, Elfenbein, and Xu (2006) created a comprehensive framework named "subjective value" based on the framework of Thompson (Thompson, 1990), which integrates the former lines of negotiation research on related topics. They defined the concept of SV as the social, perceptual, and emotional consequences of a negotiation. SV encompasses four factors, namely instrumental SV (Ins SV), self-SV (Sel SV), process SV (Pro SV), and relationship SV (Rel SV). Instrumental SV is the subjective perception of the economic outcome such as the outcome satisfaction and distributional fairness (Curhan et al., 2006). Based on the perceptions of the self in Thompson's framework, self-SV refers to the feelings about the self, comprising saving or losing face and living up to one's own standards. Process SV involves the perception of the fairness, voice, and efficiency in the negotiation process similar to the perceptions of the negotiation situation (Curhan et al., 2006; Thompson, 1990). Finally, relationship SV is similar to perceptions of the other party including good impressions, mutual trust, and solid ground for the future cooperation (Curhan et al., 2006; Thompson, 1990). In this paper, subjective value is used as the main framework of social–psychological outcomes when testing the relationship between previous-round outcome and next-round behavior.

# **Negotiation Behavior Styles**

Negotiation behavior styles are often based on their conflict management style (Perdue, Day, & Michaels, 1986). Based on the managerial grid, Blake, Mouton, and Bidwell (1962) and Blake and Mouton (1970) classified conflict management styles as forcing, withdrawing, smoothing, compromising, and problem solving by the degrees of concern for production and people, which are the earliest two-dimensional models of conflict management styles. Ruble and Thomas (1976) separated these conflict management styles from the fixed managerial styles and the underlying values proposed by Blake and Mouton (1970) using a new taxonomy so that the conflict management styles were classified as competing, collaborating, compromising, avoiding, and accommodating by the two dimensions of assertiveness and cooperativeness. Then, he took the intentions of the party into account (Thomas & Pondy, 1977), and the dimensions of assertiveness and cooperativeness were refined in intentional terms as satisfying one's own and the other's concerns (Thomas, 1992). In addition, Rubin, Pruitt, and Kim (1994) pointed that there are five strategies—contending, yielding, problem solving, withdrawing, and inaction when people cope with conflict.

Similarly, Rahim and Bonoma (1979) differentiated the styles according to two basic dimensions: concern for self and concern for others, which actually describe the motivational orientations of a party when exposed to a conflict. Concern for self represents the degree (high or low) to which a person attempts to satisfy his or her own concerns. Concern for others represents the degree (high or low) to which a person wants to satisfy the concerns of others. Based on the two dimensions, and five styles—integrating, obliging, compromising, dominating, and avoiding, the dual-concern model was rephrased (Rahim, 2010).

As shown in Figure 1, the five styles are further described below.

*Integrating* (both high concern for self and others) style means collaboration and information sharing to come up with a decision acceptable to both parties.

*Obliging* (low concern for self but high concern for others) style is the tendency to satisfy the needs of the other and even allow concessions.

Compromising (moderate concern for both self and others) style means a balance of "give and take" whereby both parties try to propose a middle course to break deadlocks and reach a decision jointly.

*Dominating* (high concern for self but low concern for others) style means one party tends to use their authority, influence, or expertise to make a decision in their own favor.

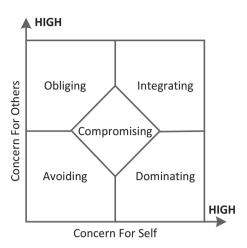


Figure 1. Negotiation behavior styles—the dual-concern model.

Avoiding (low concern both for self and others) style involves staying away from disagreement with the other, hard feelings, and even open discussion of mutual differences.

Integrating, compromising, and obliging styles which are viewed as cooperative styles could create frequent, open discussion, and mutual exchange between the two negotiating parties, which may eventually contribute to beneficial resolutions and constructive conflict (Afzalur Rahim, Magner, & Shapiro, 2000). Dominating and avoiding are often considered as uncooperative behaviors leading to inefficiency and deadlocks, namely the destructive conflict. The results above are both suitable at the personal and organizational levels (Nelson, Bronstein, Shacham, & Ben-Ari, 2015). Thus, whether the conflict is destructive or constructive is greatly influenced by the negotiation styles negotiator take. Thus, what influence negotiators' behavior style is very important to lead conflict to be constructive.

# **Negotiation Outcomes and Negotiation Behavior Styles**

In social psychology research, researchers have pointed out that a negotiators' satisfaction as assessed through negotiation outcomes, impression and reputation of the other party, and feelings of their own—some important aspects of SV have influence on negotiators' behavior.

On one hand, previous dealings affect current agreements with respect to one aspect of SV. Some scholars have found that negotiators' bargaining histories with a particular partner from both objective and subject perspectives could influence what each says and does the next time they negotiate together (Walton & McKersie, 1965). High SV can lead a negotiator to create value for the pair, reduce the use of uncooperative strategies, and encourage information sharing (Elfenbein & Curhan, 2012). For example, negotiators with high satisfaction are more likely to reach a current agreement and negotiate with the partner again (Oliver, Balakrishnan, & Barry, 1994). The good impression and reputation of the counterpart formed previously can create a comfortable environment within which to share information and have an open discussion (Bazerman, Curhan, Moore, & Valley, 2000). Negotiators are more willing to reveal valuable information and compromise with a counterpart with whom they have built a trusting and positive relationship (Druckman & Broome, 1991). Research has also shown that both good and bad moods generated from the previous negotiation affect negotiators' thoughts and judgments, which further affects their negotiation behavior styles (Forgas, 1998; Forgas & George, 2001).

On other hand, SV formed in current negotiation has a great impact on future economic outcomes (Curhan et al., 2006; Elfenbein & Curhan, 2012), and the effect may through a negotiator's future behaviors (Novemsky & Schweitzer, 2004). A study of job offer negotiations shows that employees who achieve high SV are be more likely to be high in compensation satisfaction, job satisfaction, and low in turnover intention, and this influence can even last for a year (Elfenbein & Curhan, 2012). Negotiators who reach an impasse have less cooperative intention for their behaviors, and it is more difficult for them to reach an agreement in the next negotiation. Even if they come to an agreement later, their joint value is always lower than those who have initial agreements (O'Connor, Arnold, & Burris, 2005).

Scholars have also examined the consequences of SV when the same negotiators worked together on multiple occasions. They pointed out that SV plays a large role in a multi-round negotiation (Curhan et al., 2010). The two-round negotiation study proved that positive subjective value negotiators generated in Round 1 promote their desire to negotiate with the same counterpart the next time and even evoke economic rewards in Round 2.

The research above has tested how previous dealings affect current agreements with respect to one aspect of SV, or how current negotiation has a long-term effect on future deals, or even on the continuous influence of SV in multi-round negotiation. While these studies mainly focus on one aspect of SV, such as satisfaction, trust, or relationship, a systematical research about the influence of previous-round SV on the next round's negotiation is still lacking. In particular, how instrumental SV, self-SV, process SV, and relationship SV, respectively, impact the five negotiation behavior styles—integrating, obliging, compromising, dominating, and avoiding—in the next round, which is the main focus of this study.

# **Research Hypotheses**

As scholars have pointed out that negotiators' bargaining histories concerning whether they reach an agreement or impasse influence negotiators' future behaviors, instrumental SV, which contains negotiators' satisfaction of the economic outcome and distributive fairness (Curhan et al., 2006), also plays an important role. Some researchers have reported that both outcome satisfaction and distributive fairness predict people's responses. One party with high outcome satisfaction is more likely to accept another's proposal (Kass, 2008) and reach a current agreement (Oliver et al., 1994). High distributive fairness is a signal of the outcome fairness which promotes people to value the other party and care much about them and their outcome (Folger & Konovsky, 1989; Konovsky, Folger, & Cropanzano, 1987). Besides, distributive fairness is not only of benefit to reduce opportunistic behaviors, but it also may reduce people's concern for their immediate outcomes (Lind, 2001). Thus, people with high outcome satisfaction and distributive fairness, namely high instrumental SV, positively adopt the cooperative style.

On other hand, only when there is a bargaining zone can both negotiators reach agreements. However, although it is impossible for the negotiators to know the floor price of the other negotiator before the negotiation, they always calculate it through their own cognition, perception, and thinking. Negotiators consistently underestimate the size of the bargaining zone in negotiations, namely the small-pie bias (Larrick & Wu, 2007). High instrumental SV in the previous round reminds the negotiators that they may be involved in small-pie bias, which may help them to calculate other party's floor price to be more reasonable, and the bargaining zone they perceived will become larger. So that they think there are more benefits to obtain and will be more active in negotiation, rather than avoiding the issue. Thus, we posit the following hypothesis:

*Hypothesis 1a:* Instrumental SV in the previous round is positively related to the cooperative styles (integrating, compromising, and obliging) in the next round.

*Hypothesis 1b:* Instrumental SV in the previous round is negatively related to the uncooperative (dominating and avoiding) styles in the next round.

Self-SV refers to whether one has behaved in accordance with his own principles or values and whether one feels competent of himself (Curhan et al., 2006). Thus, it can be seen that the self-SV focuses much on the negotiators themselves, especially their feelings or mood. Actually, as mood is people's attitude and behavior response to object, positive or negative moods have a powerful impact on negotiators' attitudes, the way they speak and communicate, and their thoughts and judgments (Forgas & George, 2001; Olekalns & Druckman, 2014).

On one hand, mood influences the process of thinking; this means that positive moods promote a more internally driven, top-down, flexible, and generative processing style (Bless, 2000). Positive moods may signal that everything is going well. Thus, a positive mood promotes behaviors such as information sharing, helping counterparts, and offering constructive ideas.

On other hand, mood also influences the content of thinking. A good mood would help negotiators to recall, select, and interpret more positive information from memory (Bower & Forgas, 2001) and to generate a more optimistic and cooperative approach, while a negative mood promotes people forming a more critical and pessimistic view of their counterpart and results in a more pessimistic and competitive approach rather than a compliant one (Forgas, 1998).

Therefore, once negotiators consider that self-SV is high, they feel they can handle matters according to their own principles or values and be satisfied with their performance in the first round, with the result that negotiators develop more positive emotions and behave more actively and cooperatively. Thus, we posit the following hypothesis:

*Hypothesis 2a:* Self-SV in the previous round is positively related to the cooperative styles (integrating, compromising, and obliging) in the next round.

*Hypothesis 2b:* Self-SV in the previous round is negatively related to the uncooperative styles (dominating and avoiding) in the next round.

Process SV includes whether one party has been heard and treated justly, and whether the process is efficient. Conventional wisdom says, "It is not only what you do, but how you do it." The complicated social situation of the negotiation has great influence on the interaction, negotiation process, and outcomes (Bazerman et al., 2000).

Process SV, on one hand, influences negotiators' responses. People who feel that the procedures adopted by their counterparts in decision-making were fair react relatively positively regardless of the economic or psychological outcome (Brockner & Wiesenfeld, 1996). A higher level of procedural justice promotes more information sharing between both negotiating parties (Hollander-Blumoff & Tyler, 2008). Fair treatment in the process maximizes the negotiators' likelihood of achieving a fair and positive outcome (Thibaut & Walker, 1975).

Besides, an individual's decision-making is also affected by their perception of the fairness of the process and the treatment they receive from others (Druckman & Wagner, 2016). Procedural justice helps people avoid this zero-sum game by positing their request as legitimate and defensible. A high degree of fairness, as judged by negotiators, prevents them from the fixed-pie bias and greatly contributes to integrative bargaining (Hollander-Blumoff & Tyler, 2008). Finally, research has also directly pointed out that the procedural justice is positively related to cooperative behavior in project dispute negotiation.

We infer, therefore, that negotiators with high process SV perceive more fairness, justice, and effectiveness (Curhan et al., 2006), which promote information sharing and help them to respond positively, thereby resulting in more cooperative behavior.

*Hypothesis 3a:* Process SV in the previous round is positively related to the cooperative styles (integrating, compromising, and obliging) in the next round.

*Hypothesis 3b:* Process SV in the previous round is negatively related to the uncooperative styles (dominating and avoiding) in the next round.

As for relationship SV, it comprises one party's overall impression and trust of the other, and a good or bad foundation for a future relationship (Curhan et al., 2006). The relationship between negotiating parties affects the judgment and preferences of negotiators (Loewenstein et al., 1989), negotiation processes, and outcomes (Halac, 2014).

Negotiators with negative relationship would be more concerned with their own payoff and want to get more than their counterpart (Loewenstein et al., 1989). To be more specific, if a party leaves a bad reputation on the counterparts, this leads their counterparts to be reluctant to share information and adopt fewer integrative styles, and even more importantly, to adopt control behavior styles which significantly decrease negotiators' individual and joint outcomes (Tinsley et al., 2002). Positive impressions and harmonious relationships developed from previous cooperation with the other party contribute to information sharing, altruism, integrative styles, and even concessions and compromises, which make for a fairer outcome or a higher quality deal for both parties (Bazerman et al., 2000; Valley, Neale, & Mannix, 1995). In addition, trust plays a positive role in open-minded and cooperative discussions, thus strengthening the relationship between negotiators. People with high trust develop cooperative goals overall, whereas low trust fosters closed-minded interaction, bad relationships, and even deadlock (Tjosvold, Wan, & Tang, 2016).

As relationship SV involves positive impressions, trust, and a solid foundation for working together in future (Curhan et al., 2006), we can speculate that negotiators who have formed a positive impression of their counterparts and developed a mutual trust with the other party perceive their relationship SV as high. They are prone to developing a purely work relationship into a sincere friendly relationship and to paying close attention to fairness for both sides which contributes to some compromises or concessions, and reduces the use of competitive and controlling tactics in the next round.

*Hypothesis 4a:* Relationship SV in the previous round is positively related to the cooperative styles (integrating, compromising, and obliging) in the next round.

*Hypothesis 4b:* Relationship SV in the previous round is negatively related to the uncooperative styles (dominating and avoiding) in the next round.

# Study 1

## Method

## Sample and Data Collection

We collected the data used in Study 1 via a survey questionnaire distributed among practitioners who work in the top 100 owner and contracting enterprises in mainland China and who were involved in training programs in universities. The training programs refer to courses in project contract management and negotiation that were held in universities. After getting permission from these respondents, we distributed and collected questionnaires on site to ensure a good response rate with high quality. To reduce respondents' recall issues, we asked them to recall a recent multi-round negotiation case that left a deep impression and we also prompted them three times that in the questionnaire SV was their perception of the previous round and the answer about their own behavior style was only the feedback from the next round.

The survey lasted four months, and we distributed nearly 200 paper-based questionnaires on site and 150 electronic questionnaires by email. We obtained 153 paper-based questionnaires and 32 email responses for a total response rate of 52.9% (185/350). After deleting records with missing or unmatched

data referring to the no serious answer obviously such as responder choose all the items as the same number, or the reverse item and the normal items were all greater than 4 or less than 4, a total of 169 valid records were selected, thus representing an effective response rate of about 91.35% (169/185). Descriptive statistics for the sample are presented in Table 1.

#### Measurement

Subjective Value of Negotiation Outcome. The subjective value inventory (SVI) developed by Curhan et al. (2006), which has been used widely as a tool with good reliability and validity in both China and the West (Curhan, Elfenbein, & Kilduff, 2009; Elfenbein, Curhan, Eisenkraft, Shirako, & Baccaro, 2008; Lu, Zhang, & Fu, 2016), was adopted to measure subjective value. To ensure a proper translation of the SVI, we translated the original English inventory into Chinese and then translated the Chinese items into English again. Then, we compared it with the original English inventory to find any translation errors. We also referred to the Chinese translations of other Chinese scholars (Lu et al., 2016) to do some revision. We revised our translation and formed the final inventories of subjective value by the methods above. Besides, a reversed coded item for both instrumental SV and self-SV was set up to screening the valid data. However, considering Chinese people are more moderate, they will not do some extreme choice even they view the reversed coded items are opposite to regularly coded items. Thus, we moved these two reversed coded items out of the measurement calculation in later analysis to make the result more accurate. Every branch of SV contains four items, and examples are, "Did this negotiation positively impact your self-image or your impression of yourself?" (self-SV), and "How satisfied are you with your own outcome—that is, the extent to which the terms of your agreement (or lack of agreement) benefit you?" (Instrumental SV). The response format was a seven-point Likert scale with 1 = strongly disagree and 7 = strongly agree.

*Negotiation Behavior.* In this research, negotiation behavior refers to the conflict management strategies between colleagues. As to the conflict behavior scale, we adopted an 18-item scale derived from the Rahim Organizational Conflict Inventory-II (ROCI-II) to measure the five types of conflict behavior.

Table 1
Descriptive Statistics of Samples in Study 1

Characteristic	Number	Percentage
Project location		
Domestic (in China)	114	67
Abroad (in other countries)	55	33
Enterprise type		
Owner	16	9
Contractor	137	81
Designing company	3	2
Subcontractor	10	6
Others	3	2
Contracting mode		
DB (Design & Build)	88	52
EPC (Engineering & Procurement & Construction)	74	44
Others	7	4
Lasting time		
Less than half a year	9	5
Half to one year	20	12
One to two years	44	26
More than two years	96	57

Note. N = 169.

And the translation methodology of ROCI-II is the same as SVI. Sample items are "I try to investigate an issue with others to find a solution that will be acceptable to everyone involved" (Integrating) and "I try to find a middle course to resolve an impasse." (Compromising). A seven-point Likert scale was used with 1 = strongly disagree and 7 = strongly agree.

As integrating, compromising, and obliging styles are viewed as cooperative styles, we average the items of them as the value of cooperative styles. Similarly, we can average the items of dominating and avoiding as the value of uncooperative styles in the future test.

Control Variables. In an attempt to eliminate the influence of other factors on negotiation behavioral strategy, several control variables were selected. The project was classified as domestic and abroad, and they were labeled as 0–1 binary variable. The contracting modes encompassed EPC (Engineering & Procurement & Construction), DB (Design & Build), and others, and they were labeled as 0–2 variable. We controlled for the duration of project by classifying the duration as less than half a year, half a year to a year, a year to two years, and more than two years.

## Reliability and Validity Analysis

Reliability. To assess the internal consistency and reliability of the scales, we examined Cronbach's alpha of all constructs (including four dimensions of subjective value of negotiation outcome and four dimensions of negotiation behavior), respectively, via SPSS 20.0. As Table 2 shows, Cronbach's alpha value of all constructs was range from .74 to .93 and greater than the .7 benchmark, thus indicating that all the multiple-item scales used in this research had sufficient and satisfactory internal consistency and reliability (Robinson et al., 1991).

*Validity*. First, we used the EFA to test the construct validity of the scale. As shown in Table 3, the KMO of all scales is above 0.79 and the Bartlett's test levels (all = 0.00) are significant, which indicate a satisfactory validity of the measure.

In addition, a confirmatory factor analysis (CFA) with structural equation modeling was employed to explore the validity of the constructs (Anderson & Gerbing, 1988). As for subjective value of negotiation outcome, the CFA fit statistics were  $\chi^2/df = 1.95$  (<2) and the goodness-of-fit indices were as follows: GFI = 0.90 ( $\geq$ 0.9); CFI = 0.95 (>0.9); TLI = 0.94 (>0.9); IFI = 0.95 (>0.9); RMSEA = 0.08 ( $\leq$ 0.08). As for negotiation behavior, the CFA fit statistics were  $\chi^2/df = 1.84$  (<2), and the goodness-of-fit indices were as follows: GFI = 0.87 (close to 0.9); CFI = 0.91 (>0.9); TLI = 0.88 (close to 0.9); IFI = 0.91 (>0.9); RMSEA = 0.07 (<0.08). The indices indicate a satisfactory fit of the model to the data.

Table 2
The Cronbach's Alpha of the Scale in Study 1

Scale	Cronbach's alpha
All scales in questionnaire	.887
Negotiation SV	.932
Instrument SV	.838
Self-SV	.766
Process SV	.844
Relationship SV	.879
Behavior styles	.834
Integrating	.793
Compromising	.763
Avoiding	.799
Obliging	.801
Dominating	.742

Table 3
The Construct Validity of the Scale in Study 1

Statistics	Whole scale	Subject value scale	Behavior style scale
KMO	0.825	0.923	0.79
Sig. Bartlett's test	0.000	0.000	0.000

We used three indices, which are standard factor loading (SFL), construct reliability (CR), and average variance extracted (AVE), to assess the convergent validity. The results shows that all the SFL values are above the 0.5 benchmark and the AVE for every construct (instrumental SV's AVE = 0.65; self-SV's AVE = 0.53; process SV's AVE = 0.60; relationship SV's AVE = 0.65; integrating's AVE = 0.55; compromising's AVE = 0.52; avoiding's AVE = 0.50; obliging's AVE = 0.52; dominating's AVE = 0.51) was above the 0.5 cutoff (Fornell & Larcker, 1981). The CR values for each construct (instrumental SV's CR = 0.85; self-SV's CR = 0.77; process SV's CR = 0.85; relationship SV's CR = 0.88; integrating's CR = 0.83; compromising's CR = 0.76; avoiding's CR = 0.80; obliging's CR = 0.81; dominating's CR = 0.76) range from 0.75 to 0.88 and are all above the 0.7 benchmark. All three indices indicate that the measurements demonstrated good convergent validity.

To test the discriminant validity, we compared the square root of AVE with the off-diagonal correlation coefficients. As shown in Table 4, the square root value of AVE of each construct is higher than the off-diagonal correlation coefficients, which indicates adequate discriminant validity of the measurements.

#### Common Method Variance

One important issue with all self-report data is the common method variance (CMV) (Podsakoff & Organ, 1986). Therefore, we informed all the respondents that their responses would be confidential and for academic research purposes only to reduce common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In addition, we first conducted a Harmon's single factor test to check it. We performed an exploring factor analysis on all independent and dependent variables. The results show that the top nine factors (we measured a total of nine independent and dependent variables through the questionnaire) can explain 71.94 percent of total variance, which is more than 60 percent, and there is no one factor which can explain more than 30 percent of the total variance.

In addition, we used the most rigorous tests based on confirmatory factor analysis (CFA) to assess and control for CMV (Podsakoff et al., 2003). We added an unmeasured latent method factor in the CFA model, making each item an indicator of both its substantive trait and the latent method factor. Then, we compared the new model fit indices and factor loading of each indicator with the basic model to verify the extent of changes to the model fit. Our results show that the model fit indices become limited better with the latent method factor (e.g., as for subjective value of negotiation outcome,  $\chi^2/df$  is decreased from 1.95 to 1.78 (change of 8%); GFI is increased from 0.90 to 0.91 (change of 0.8%); CFI is increased from 0.95 to 0.96 (change of 0.9%); IFI is increased from 0.95 to 0.96 (change of 0.9%). As for negotiation behavior,  $\chi^2/df$  is decreased from 1.84 to 1.64 (change of 11%); GFI is increased from 0.87 to 0.88 (change of 1.4%); CFI is increased from 0.91 to 0.93 (change of 2.5%); IFI is increased from 0.91 to 0.93 (change of 2.4%). All the model fit indices' changes are lower than the average level of 25 percent observed by Williams, Cote, and Buckley (1989), and 16 percent observed by Carlson and Perrewé (1999) which indicates that our research did not suffer from a serious disturbance of CMV.

## Results

Table 4 displays the means, standard deviations, and correlations among the variables in this research. The same as other research results (Zhang, Chen, & Sun, 2015) concerning the five negotiation behavior styles, the highest value of means is for the integrating style (M = 5.52, SD = 0.91), followed by

Table 4 Descriptive Statistics and Pearson Correlation Matrix Among the Variables in Study 1

1. Project location 0.33 0.27 2. Contracting mode 0.53 0.60 5.3* 3. Lasting time 2.34 .89 .43* .17 4. Instrumental SV 4.39 1.4102 .0815 .81 5. Self-SV 4.73 1.2004 .0005 .53* .73 6. Process SV 4.54 1.2406 .0017 .67* .70* .77 7. Relationship SV 4.47 1.19160916 .62* .69* .74* .81 8. Integrating 5.29 1.11 .06 .10 .08 .10 .11 .06 .18 .47* .72 10. Avoiding 4.16 1.3713 .05080600100000100000		Mean	SD	<u></u>	2	m	4	7	9	7	∞	6	10	11	12
ode 0.53 0.60 .53*  2.34 .89 .43* .17  4.39 1.41 -0.2 .08 -0.15 .81  4.54 1.24 -0.6 .00 -0.7 .67* .70* .77  4.47 1.19 -0.16 .09 -0.16 .62* .69* .74* .81  5.52 .915 .16 .21* -0.5 .31* .41** .35* .40* .74  5.59 1.11 .06 .10 .08 .10 .11 .06 .18 .47*  4.54 1.37 -0.13 .05 -0.08 -0.06 .02 .01 .10 .06  5.52 1.04 -0.7 -0.1 -0.7 .06 .30* .20* .28* .35*	1. Project location	0.33	0.27												
2.34       .89       .43*       .17       .81         4.39       1.41      02       .08      15       .81         4.73       1.20      04       .00      05       .53*       .73         4.54       1.24      06       .00      17       .67*       .70*       .77         4.47       1.19      16      09      16       .62*       .69*       .74*       .81         5.52       .915       .16       .21*      05       .31*       .41**       .35*       .40*       .74         5.29       1.11       .06       .10       .01       .11       .06       .18       .47*         4.16       1.37      13       .05      08      06       .02       .01       .10       .06         5.22       1.04      07      01      07       .06       .30*       .20*       .28*       .35*	2. Contracting mode	0.53	09.0	.53*											
4.39       1.41      02       .08      15       .81       .73         4.73       1.20      04       .00      05       .53*       .73         4.54       1.24      06       .00      17       .67*       .74*       .81         4.47       1.19      16      09      16       .62*       .69*       .74*       .81         5.52       .915       .16       .21*      05       .31*       .41**       .35*       .40*       .74         5.29       1.11       .06       .10       .01       .11       .06       .18       .47*         4.16       1.37      13       .05      08      06       .02       .01       .10       .06         5.22       1.04      07      01      07       .06       .30*       .20*       .28*       .35*	3. Lasting time	2.34	68.	.43*	.17										
4.73       1.20      04       .00      05       .53*       .73         4.54       1.24      06       .00      17       .67*       .70*       .77         4.47       1.19      16      09      16       .62*       .69*       .74*       .81         5.52       .915       .16       .21*      05       .31*       .41**       .35*       .40*       .74         5.29       1.11       .06       .10       .01       .11       .06       .18       .47*         4.16       1.37      13       .05      08      06       .02       .01       .10       .06         4.53       1.09      02       .04       .16      13      09      10       .00       .15         5.22       1.04      07      01      07       .06       .30*       .20*       .38*       .35*	4. Instrumental SV	4.39	1.41	02	80.	15	.81								
4.54       1.24      06       .00      17       .67*       .70*       .77         4.47       1.19      16      09      16       .62*       .69*       .74*       .81         5.52       .915       .16       .21*      05       .31*       .41**       .35*       .40*       .74         5.29       1.11       .06       .10       .08       .10       .11       .06       .18       .47*         4.16       1.37      13       .05      06       .02       .01       .10       .06         4.53       1.09      02       .04       .16      13      09      10       .00       .15         5.22       1.04      07      01      07       .06       .30*       .20*       .28*       .35*	5. Self-SV	4.73	1.20	04	00.	05	.53*	.73							
4.47       1.19      16      09      16       .62*       .69*       .74*       .81         5.52       .915       .16       .21*      05       .31*       .41**       .35*       .40*       .74         5.29       1.11       .06       .10       .10       .06       .10       .11       .06       .18       .47*         4.16       1.37      13       .05      06       .02       .01       .10       .06         4.53       1.09      02       .04       .16      13      09      10       .00       .15         5.22       1.04      07      01      07       .06       .30*       .20*       .28*       .35*	6. Process SV	4.54	1.24	90.—	00.	17	*429	*07.	.77						
5.52       .915       .16       .21*      05       .31*       .41**       .35*       .40*       .74         5.29       1.11       .06       .10       .10       .11       .06       .18       .47*         4.16       1.37      13       .05      06       .02       .01       .10       .06         4.53       1.09      02       .04       .16      13      09      10       .00       .15         5.22       1.04      07      01      07       .06       .30*       .20*       .28*       .35*	7. Relationship SV	4.47	1.19	16	09	16	.62*	*69:	.74*	.81					
5.29 1.11 .06 .10 .08 .10 .11 .06 .18 .47* 4.16 1.3713 .050806 .02 .01 .10 .06 4.53 1.0902 .04 .16130910 .00 .15 5.22 1.04070107 .06 .30* .20* .28* .35*	8. Integrating	5.52	.915	.16	.21*	05	.31 *TE	.41**	.35*	*04	.74				
4.16     1.37    13     .05    08    06     .02     .01     .10     .06       4.53     1.09    02     .04     .16    13    09    10     .00     .15       5.22     1.04    07    01    07     .06     .30*     .20*     .38*     .35*	9. Compromising	5.29	1.11	90.	.10	80.	.10	1.	90.	.18	*47*	.72			
4.53 1.0902 .04 .16130910 .00 .15 5.22 1.04070107 .06 .30* .20* .28* .35*	10. Avoiding	4.16	1.37	13	.05	08	90	.02	.01	.10	90.	.30*	.71		
5.22 1.04070107 .06 .30* .20* .28* .35*	11. Obliging	4.53	1.09	02	.04	.16	13	09	10	00.	.15	*44.	*68.	.72	
	12. Dominating	5.22	1.04	07	01	70	90.	*08.	.20*	.28*	.35*	.27*	.16	.13	.71

Notes. \*p < .05. \*\*p < .01.

The bold italic is the square root value of AVE.

Project location: domestic (in China), labeled as 0 and abroad (in other countries), labeled as 1.

Contracting mode: EPC (Engineering & Procurement & Construction), labeled as 0, DB (Design & Build) labeled as 1, and others labeled as 2.

compromising style (M = 5.29, SD = 1.11) and dominating style (M = 5.22, SD = 1.04). The least chosen style is the avoiding style (M = 4.16, SD = 1.37). It is interesting to note that the avoiding style is the employees' least preferred style, and the dominating style is less preferred than integrating and compromising style. In addition, the control variables have a significant relationship with the negotiation styles, proving the necessity of the control variables. However, Table 4 shows that all variables tend to be correlated among themselves which may result in multicollinearity when do multiple regression. So we calculated the VIF for all variables in all models; the highest VIF was 3.03 (below the threshold value of 10), indicating that multicollinearity was not an issue (Neter, Kutner, Nachtsheim, & Wasserman, 1996).

Through multiple regression analyses, we tested our hypotheses concerning the relationships between negotiation outcomes and behavior styles.

First, we made a regression between four dimensions of SV—instrumental SV, self-SV, process SV, relationship SV, and two dimensions of behavior styles—cooperative styles and uncooperative styles (Models 1–2). For the two models, three control variables were firstly introduced into Model 1a–Model 2a, with the four dimensions of negotiation outcomes being added to the previous ones. All the results are shown in Table 5.

Instrumental SV in the previous round has a significant negative impact on next-round uncooperative styles ( $\beta = -.29$ , p = .01 < .01, SE = 0.07), while its effect on cooperative styles (p > .05) is not significant. Self-SV and process SV in the previous round show no influence on both cooperative styles and uncooperative styles (p > .05). Besides, relationship SV shows a positive impact on both cooperative styles ( $\beta = .38$ , p = .00 < 0.01, SE = 0.08) and uncooperative styles ( $\beta = .34$ , p = .01 < 0.01, SE = 0.10).

In addition, to test how SV influences every behavior style more specifically, we further developed five models (Models 3–7) to verify the relationship between the four dimensions of SV and the five styles—integrating, compromising, avoiding, obliging, and dominating, respectively. For the five models, three control variables were firstly introduced into Model 3a–Model 7a, with the four dimensions of negotiation outcomes being added to the previous ones. All the results are shown in Table 6.

Table 5
Multiple Regression Result of Study 1

	Cooperative styles		Uncooperative style	25
Dependent variable	Model 1a(β)	Model 1b(β)	Model 2a(β)	Model 2b(β)
Control variable				
Project location	-0.04	-0.00	-0.19	-0.15
Contracting mode	0.16*	0.17*	0.14	0.17
Lasting time	0.09	0.10	-0.05	-0.06
Independent variable				
Ins SV		-0.05		-0.29**
Sel SV		0.03		0.12
Pro SV		-0.14		-0.04
Rel SV		0.38**		0.34**
$R^2$	0.03		0.03	0.13
$\Delta R^2$		0.01		0.10
SE	0.78		0.92	0.88
F	1.60		1.94	0.00
$\Delta F$		3.70		4.49
Sig. F	0.19	0.01	0.13	0.00

Notes. \*p < .05. \*\*p < .01.

N = 169.

Project location: Domestic (in China) and abroad (in other countries).

Contracting mode: owner, contractor, designing company, subcontractor, and others.

Table 6 Multiple Regression Result of Study 1

	Integrating		Compromising		Avoiding		Obliging		Dominating	
Dependent variable	Model 3a(β)	Model 3b(β)	Model 4a(β)	Model 4b(β)	Model 5a(β)	Model 5b(β)	Model 6a(β)	Model 6b(β)	Model 7a(β)	Model 7b(β)
Control variable										
Project location	0.12	0.16	-0.03	-0.00	0.20*	-0.18	-0.16	-0.14	-0.07	-0.03
Contracting mode	0.17	0.17*	0.11	-0.12	0.16	0.19*	0.08	0.11	0.04	90.0
Lasting time	-0.13	-0.09	0.07	60.0	-0.02	-0.04	0.22*	0.20*	-0.05	-0.05
Independent variable										
Ins SV		0.01		0.03		-0.20*		-0.15		-0.22*
Sel SV		0.23*		0.01		-0.04		-0.13		0.25*
Pro SV		-0.04		-0.19		-0.04		-0.08		-0.02
Rel SV		0.30*		0.32*		0.26*		0.23*		0.27*
$R^2$	90.0	0.27	0.01	0.07	0.04	0.07	0.04	0.08	0.01	0.14
$\Delta R^2$		0.20		0.05		0.04		0.04		0.13
SE	0.89	06.0	1.17	1.09	1.36	1.35	1.07	1.07	1.05	66.0
F	3.54*	8.29*	0.87	1.70	2.04	1.78	2.35	1.93	0.44	3.71*
$\Delta \mathcal{F}$		11.19		2.30		1.57		1.58		6.12
Sig. F	0.02	0.000	0.46	0.11	0.11	60.0	0.07	0.07	0.72	0.00

Notes. \*p < .05. \*\*p < .01.

N = 169.

Project location: Domestic (in China) and abroad (in other countries).

Contracting mode: owner, contractor, designing company, subcontractor, and others.

Instrumental SV in the previous round has a significant negative impact on avoiding ( $\beta = -.20$ , p = .06 < .1, SE = 0.10) and dominating styles ( $\beta = -.22$ , p = .02 < .05, SE = 0.08), while its effect on integrating, compromising, and obliging (p > .05) styles is not significant. Self-SV in the previous round has a significant positive impact on the integrating negotiation style ( $\beta = .23$ , p = .03 < .05, SE = 0.08) and dominating style ( $\beta = .25$ , p = .024 < .05, SE = 0.10) in the next round, while the effect on compromising, avoiding, and obliging (p > .05) styles is not significant. Process SV shows no influence on all the five behavior styles: integrating, compromising, avoiding, obliging, and dominating (p > .05). Relationship SV, however, shows a positive impact on integrating ( $\beta = .30$ , p = .00 < .05, SE = 0.09), compromising ( $\beta = .32$ , p = .01 < .05, SE = 0.12), avoiding ( $\beta = .26$ , p = .05 < .05, SE = 0.15), obliging ( $\beta = .23$ , p = .26 < .05, SE = 0.12), and dominating styles ( $\beta = .27$ ,  $\rho = .03 < .05$ , SE = 0.11).

Some behavior styles are not only related to one SV. For example, integrating style is affected by both self-SV and relationship SV, but relationship SV is much more powerful in explaining the integrating style. To examine the difference further, we make a comparison in Table 7 to show the distinct and exclusive contribution of a significant variable above and beyond other effects on a certain style. Relationship SV contributes much more variance ( $R^2$  change of 3.1 percent) than self-SV ( $R^2$  change of 2.2 percent) in their regression with integrating style. Avoiding style depends much more on relationship SV ( $R^2$  change of 2.4 percent) and relatively less on instrumental SV ( $R^2$  change of 2 percent). Dominating style is significantly affected by instrumental SV ( $R^2$  change of 3 percent), followed by self-SV ( $R^2$  change of 2.8 percent) and relationship SV ( $R^2$  change of 2.6 percent).

# Study 2

In this study, we employed a simulated negotiation to see whether the result is consistent (Mestdagh & Buelens, 2003) in accordance with the majority of research in the negotiations field and also used the questionnaires we designed to collect the data.

# Method

#### **Participants**

During the six-month experiment, a simulated two-round negotiation, which is the simplest multiround negotiation, was carried out four times. 205 master's level business students in total completed all

Table 7
Comparison of Significant SV's Effect on Behavior Styles in Study 1

	Exclusive	e contributi	on						
	Integrati	ing	Compromising	Avoidir	ng	Obliging	Domina	ting	
Summary statistics	S SV	R SV	Compromising R SV	I SV	R SV	R SV	I SV	S SV	R SV
R <sup>2</sup> change (%)									
I SV	_	_	_	2.00	_	_	3	-	_
S SV	2.20	_	_	_	_	_	_	2.80	_
P SV	_	_	_	_	_	_	_	_	_
R SV	_	3.10	3.70	_	2.40	2.40	_	_	2.60
Control variable	7.10	5.40	1.50	3.20	3.90	3.70	0.30	0.40	0.70
Adjusted $R^2$ (%)	23.20	20.50	2.80	3.20	3.20	3.70	10	10.10	10
Sig. F	0.03	0.01	0.01	0.06	0.05	0.04	0.02	0.02	0.03

Notes. N = 169.

of the measures described here during a course on negotiation only one time, and there are about 50 people in simulated negotiation every time.

#### Procedure

In this simulation, participants took part in a standardized two-round exercise which a two-party negotiation between Estate One and Pearl Investments (Malhotra, 2005a,b). Pearl Investments is a holding company that specializes in real estate investment and who wanted to sell a Hamilton property. Estate One is one of the biggest names in residential real estate and is not competitor of Pearl Investments. The goal of Pearl Investments in this negotiation was to get the best price possible while Estate One's goal was different. Thus, the only issue for both parties to negotiate about was price. To balance the male–female ratio, participants were randomly divided into several groups. The odd groups were assigned to the role of the seller (Pearl Investments), and the even groups were assigned to the role of the buyer (Estate One) so that group 1 would negotiate with group 2 and so on. Each party had the same number of negotiators, ranging from three to six. Each side received instructions confidentially, which included both common and asymmetric information. Meanwhile, we told the participants that they should remain "in role" during the exercise, not disclose their confidential instructions to their counterparts, and not discuss the exercise until after completing both rounds.

After receiving instructions, simple exercise introductions, and notices, each party was assigned to different rooms to read and analyze the instructions, and to prepare for 40 min. Then, they had 30 min to conduct the Round 1 negotiation in their group's negotiating room, respectively. After Round 1, they paused for 10 min and then negotiated again for 20 min with the same negotiation case, namely the Round 2 negotiation.

After the two-round negotiation, the participants were asked to complete the questionnaires according to their own perception of the negotiation, regardless of whether they reached an agreement. In addition, we emphasized many times that the SV is their perception of Round 1 and their own behavior style is only the feedback from Round 2 when they completed the questionnaires to avoid them confusing the perceptions of Round 1 and Round 2.

## Reliability and Validity Analysis

Reliability. Similar to Study 1, we also examined Cronbach's alpha to assess the internal consistency and reliability of the scales. As Table 8 shows, the Cronbach's alpha value of all constructs was ranged

Table 8
The Cronbach's Alpha of the Scale in Study 2

Scale	Cronbach's alpha
All scales in questionnaire	.917
Negotiation SV	.892
Instrument SV	.786
Self-SV	.757
Process SV	.814
Relationship SV	.878
Behavior styles	.878
Integrating	.823
Compromising	.744
Avoiding	.781
Obliging	.81
Dominating	.792

from .74 to .92 and greater than the .7 benchmark, thus indicating that all the multiple-item scales used in this research have sufficient and satisfactory internal consistency and reliability (Robinson et al., 1991).

*Validity.* As a result of the EFA shown in Table 9, the KMO of all scales is above 0.85 and the Bartlett's test levels (all = 0.00) are significant, which indicates a satisfactory validity of the measure.

Additionally, we used the confirmatory factor analysis (CFA) to explore the validity of the constructs (Anderson & Gerbing, 1988). As for the subjective value of negotiation outcome, the CFA fit statistics were  $\chi^2/df = 2.26$  (<3) and the goodness-of-fit indices were as follows: GFI = 0.90 (>0.9); CFI = 0.94 (>0.9); IFI = 0.92 (>0.9); TLI = 0.92 (>0.9); RMSEA = 0.08 (<0.08). As for negotiation behavior, the CFA fit statistics were  $\chi^2/df = 1.78$  (<2), and the goodness-of-fit indices were as follows: GFI = 0.89 (close to 0.9); CFI = 0.93 (>0.9); IFI = 0.93 (>0.9); TLI = 0.92 (>0.9); RMSEA = 0.06 (<0.08). The indices indicate a satisfactory fit of the model to the data.

The construct's reliability and convergent validity were also tested based on the results of the CFA. We also used SFL, CR, and AVE to assess convergent validity. The results shows that all of the SFL values are above the 0.5 benchmark, and the AVE for every construct was above the 0.5 cutoff except for the compromising style and avoiding style (instrumental SV's AVE = 0.56; self-SV's AVE = 0.51; process SV's AVE = 0.80; relationship SV's AVE = 0.67; integrating's AVE = 0.66; compromising's AVE = 0.49; avoiding's AVE = 0.47; obliging's AVE = 0.53; dominating's AVE = 0.57), the AVE of which is close to 0.5 (Fornell & Larcker, 1981). The CR values for each construct range from 0.74 to 0.89 (instrumental SV's CR = 0.79; self-SV's CR = 0.76; process SV's CR = 0.82; relationship SV's CR = 0.89; integrating's CR = 0.83; compromising's CR = 0.74; avoiding's CR = 0.78; obliging's CR = 0.82; dominating's CR = 0.80) and are all above the 0.7 benchmark. All three indices indicate that the measurements demonstrated good convergent validity.

To test the discriminant validity, we compared the square root of AVE with the off-diagonal correlation coefficients. As shown in Table 10, the square root value of AVE of each construct is higher than the off-diagonal correlation coefficients, which indicates adequate discriminant validity of the measurements.

#### Common Method Variance

Similarly, we also used a Harman's single factor test and a rigorous test based on confirmatory factor analysis (CFA) to assess and control for CMV (Podsakoff et al., 2003). On one hand, we conducted an exploratory factor analysis on all independent and dependent variables. The results show that the top nine factors (we measured nine independent and dependent variables in total through the questionnaire) can explain 70.74 percent of total variance, which is more than 60 percent, and there is no one factor which can explain more than 30 percent of the total variance.

On other hand, we also added an unmeasured latent method factor to the CFA model, making each item an indicator of both its substantive trait and the latent method factor. Then, we compared the new model fit indices and factor loading of each indicator with the basic model to verify the extent of changes to the model fit. Our results show that the model fit indices become limited better with the latent method factor. As for subjective value of the negotiation outcome, GFI is increased from 0.90 to 0.92 (change of 2%), CFI is increased from 0.94 to 0.96 (change of 2.77%), and IFI is increased from 0.92 to 0.96 (change

Table 9
The Construct Validity of the Scale in Study 2

Statistics	Whole scale	Subject value scale	Behavior style scale
KMO	0.866	0.861	0.868
Sig. Bartlett's test	0.000	0.000	0.000

Table 10
Descriptive Statistics and Pearson Correlation Matrix

	Mean	SD	1	2	3	4	5	6	7	8	9
1. Instrumental SV	5.01	1.38	.75								
2. Self-SV	5.28	1.03	.27*	.72							
3. Process SV	4.87	1.29	.51*	.22*	.89						
4. Relationship SV	4.41	1.50	.59*	.21*	.71*	.82					
5. Integrating	5.09	1.14	.31*	.18	.45*	.47*	.81				
6. Compromising	4.73	1.25	.35*	.12	.38*	.48*	.64*	.70			
7. Avoiding	4.27	1.28	.19*	.090	.29*	.38*	.36*	.42*	.69		
8. Obliging	4.75	1.05	.24*	.12	.26*	.36*	.46*	.51*	.33*	.73	
9. Dominating	5.14	1.06	.20*	.25*	.17	.22*	.33*	.18	.16	.36*	.75

Notes. \*p < .05. \*\*p < .01.

N = 205.

The bold italic value is the square root value of AVE.

of 5.13%). As for negotiation behavior, GFI is increased from 0.89 to 0.92 (change of 3.25%), CFI is increased from 0.93 to 0.97 (change of 4.29%), and IFI is increased from 0.93 to 0.97 (change of 4.39%). All the model fit indices' changes are lower than the average level of 25 percent observed by Williams et al. (1989) and the 16 percent observed by Carlson and Perrewé (1999), which indicates that our research did not suffer from a serious disturbance of CMV.

#### Results

Similar to Study 1, we also calculated the VIF for all variables in all models; the highest VIF was 2.38 (below the threshold value of 10), indicating that multicollinearity was not an issue (Neter et al., 1996). First, we made a regression between four dimensions of SV—instrumental SV, self-SV, process SV, and relationship SV—and two dimensions of behavior styles—cooperative styles and uncooperative styles. The results at the individual level (Models 8–9) are shown in Table 11.

As Table 11 shows, instrumental SV and process SV in the previous round show no influence on both cooperative styles and uncooperative styles (p > .05). Self-SV in the previous round has a significant

Table 11
Multiple Regression Result at the Individual Level of Study 2

	Dependent variable	
Independent variable	Cooperative styles Model 8	Uncooperative styles Model 9
Instrumental SV	0.05	-0.02
Self-SV	0.05	0.13**
Process SV	0.11	0.03
Relationship SV	0.42**	0.37**
$R^2$	0.29	0.18
SE	0.81	0.82
F	20.85	10.97
Sig. F	0.00	0.00

Notes. \*p < .05. \*\*p < .01.

N = 205.

positive impact on next-round uncooperative styles ( $\beta$  = .13, p = .05 < .05, SE = 0.06), while its effect on cooperative styles (p > .05) is not significant. Instrumental SV and process SV in the previous round show no influence on both cooperative styles and uncooperative styles (p > .05). Relationship SV shows a positive impact on both cooperative styles ( $\beta$  = .42, p = .00 < .01, SE = 0.06) and uncooperative styles ( $\beta$  = .42, p = .00 < .01, SE = 0.06).

However, the relationship between four dimensions of SV—instrumental SV, self-SV, process SV, and relationship SV—and two dimensions of behavior styles—cooperative styles and uncooperative styles both are insignificant (p > .05) at the team level.

In addition, we further verified the relationship between the four dimensions of SV and the five styles—integrating, compromising, avoiding, obliging, and dominating, respectively at the individual level (Models 10–14) and team level (Models 15–19). The regression results at the individual level are shown in Table 12.

As shown in Table 12, instrumental SV in the previous round shows no influence on all five behavior styles: integrating, compromising, avoiding, obliging, and dominating (p > .05). Self-SV has a significant positive influence on the dominating negotiation style ( $\beta = .21$ , p = .00 < .05, SE = 0.07) in the next round, while it shows no influence on integrating, compromising, avoiding, and obliging (p > .05). Process SV in the previous round shows a significant positive influence on the next round's integrating negotiation style ( $\beta = .23$ , p = .01 < .05, SE = 0.08), while it shows no influence on compromising, avoiding, obliging, and dominating (p > .05). Relationship SV negotiators felt the previous round had a positive impact on integrating ( $\beta = .29$ , p = .00 < .05, SE = 0.07), compromising ( $\beta = .40$ , p = .00 < .05, SE = 0.08), avoiding ( $\beta = .38$ , p = .00 < .05, SE = 0.09), obliging ( $\beta = .35$ , p = .00 < .05, SE = 0.07), but that it was not related to a dominating style (p > .05) in the next round.

As integrating style is affected by both process SV and relationship SV, we make a comparison between the separate and exclusive contributions they make. As shown in Table 13, relationship SV contributes much more variance ( $R^2$  change of 3.6 percent) than process SV ( $R^2$  change of 2.5 percent) in their regression with integrating style, which indicates that relationship SV influences the next round's integrating style more than process SV does.

The regression results at the team level are shown in Table 14. It can be seen that instrumental SV in the previous round shows no influence on all five behavior styles (p > .05). Self-SV has a significant positive influence on the dominating negotiation style ( $\beta = .32$ , p = .04 < .05, SE = 0.14) in the next round, while it shows no influence on integrating, compromising, avoiding, and obliging (p > .05). Process SV

Table 12
Multiple Regression Result at the Individual Level of Study 2

	Dependent vari	able			
Independent variable	Integrating Model 10	Compromising Model 11	Avoiding Model 12	Obliging Model 13	Dominating Model 14
Instrumental SV	0.00	0.09	-0.07	0.03	0.06
Self-SV	0.07	0.00	0.02	0.05	0.21**
Process SV	0.23*	0.05	0.05	-0.02	-0.01
Relationship SV	0.29*	0.40**	0.38**	0.35**	0.15
$R^2$	0.25	0.24	0.15	0.14	0.09
SE	0.99	1.10	1.20	0.99	1.02
F	17.00**	15.90**	8.69**	7.81**	5.18**
Sig. F	0.00	0.00	0.00	0.00	0.00

Notes. \*p < .05. \*\*p < .01.

N = 205.

Table 13
Comparison of Significant SV's Effect on Behavior Styles in Study 2

Summary statistics	Exclusive contribution							
	Integrating		Camananisian	Accelling	Ohlininn	Dominating		
	P SV	R SV	Compromising R SV	Avoiding R SV	Obliging R SV	Dominating S SV		
R <sup>2</sup> change (%)								
ISV	_	_	_	_	_	_		
S SV	_	_	_	_	_	3.90		
P SV	2.50	_	_	_	_	_		
R SV	_	3.60	6.60	6.20	5.10	_		
Adjusted R <sup>2</sup>	23.90	23.90	22.60	13.10	11.80	7.60		
Sig. F	0.01	0.02	0.00	0.00	0.00	0.00		

Note. N = 205.

Table 14
Multiple Regression Result at the Team Level of Study 2

	Dependent variable						
Independent variable	Integrating Model 15	Compromising Model 16	Avoiding Model 17	Obliging Model 18	Dominating Model 19		
Instrumental SV	-0.16	0.13	-0.05	0.03	-0.00		
Self-SV	0.06	-0.06	0.04	0.08	0.32*		
Process SV	0.60*	0.38	0.61*	-0.35	-0.17		
Relationship SV	0.13	0.26	0.12	0.68**	0.30		
$R^2$	0.39	0.50	0.48	0.21	0.15		
SE	0.63	0.60	0.62	0.62	0.55		
F	6.48	10.04	9.48	2.64	1.74		
Sig. F	0.00	0.00	0.00	0.05	0.16		

Notes. \*p < .05. \*\*p < .01.

N = 44.

in the previous round shows a significant positive influence on integrating negotiation style ( $\beta$  = .60, p = .03 < .05, SE = 0.21) and avoiding style ( $\beta$  = .61, p = .01 < .05, SE = 0.21), while it shows no influence on others (p > .05). Relationship SV negotiators felt the previous round had a positive impact on obliging ( $\beta$  = .68, p = .04 < .05, SE = 0.18), but that it is not related to other styles (p > .05) in the next round.

# **General Discussion and Conclusion**

#### **General Discussion**

Study 1 and Study 2 are fundamentally different regarding the collection of the information from the questionnaire. Study 1 directly asks the respondents to complete the questionnaire on the basis of a recalled multi-round negotiation, while Study 2 asks participants to fill in the questionnaire after a simulated negotiation. Both studies certify the hypothesis from different perspectives that SV in the previous round has a significant positive or negative impact on behavior styles in the next round.

Tables 4 and 10 shows the Pearson correlation matrix among the variables in Study 1 and Study 2. In particular, we can see the four branches of SV are correlated among themselves strongly. It is interesting to note that the correlation among the branches of SV in Study 2 is much weaker than Study 1. For example in Study 1 and Study 2, the correlation coefficient between instrumental SV and self-SV is 0.53 versus 0.27, between instrumental SV and process SV is 0.70 versus 0.22, and so on. It indicates that negotiations in the real world are more multifaceted, and we should conduct more research outside of the laboratory.

The regression results of Model 1 and Model 2 in Study 1 showed the instrumental SV's negative relationship with uncooperative behavior styles supporting hypothesis 1b. To be specific, Model 5 and Model 7 showed that instrumental SV had a negative influence on avoiding and dominating styles, while it was insignificant in Study 2 both at the individual level and team level. Maybe negotiators in the simulated negotiation in Study 2 lack sensitivity to their objective value so that their perception of the economic outcome shows few relationship with next-round behavior styles. High instrumental SV means that negotiators are satisfied with the previous round's outcome and feel the distribution to be fair. This facilitates their concern for the interests of both parties rather than just their own interests, so that they do not want to dominate their counterpart or avoid their issues.

Although the positive relationship between self-SV and cooperative styles was insignificant in Model 1 of Study 1, Model 3 of Study 1 verified that self-SV related to integrating style positively supporting hypothesis 2a. High self-SV promotes negotiators' satisfaction with their own performance and form more positive mood. It will greatly facilitate information sharing and cooperative behaviors in the next round. However, Model 9 in Study 2 pointed out the positive relationship between previous round's self-SV and next round's uncooperative behavior styles. In particular, Model 7 in Study 1, Model 14 (at the individual level) and Model 19 (at the team level) in Study 2 all showed that self-SV mainly influenced next-round dominating style. It means that with the increase in the negotiators' self-SV, they might pay more attention to their own interests and tend much more to dominate the other side. As a consequence, self-SV has two influences on the next round's style, and whether a negotiator adopts the integrating or dominating style under the influence of a certain degree of self-SV may further depend on other SVs, such as instrumental SV and relationship SV.

Models 1–2 in Study 1 and Models 8–9 in Study 2 did not verify process SV's holistic influence on next-round cooperative and uncooperative styles. However, the result of Model 10 (at the individual level) and Model 15 (at the team level) in Study 2 showed that process SV in the previous round positively related to integrating style in the next round. High process SV implies that both parties not only view the negotiation as an efficient and fair procedure, but also recognize mutual effort, so that they continue to share information and focus on fairness, thus resulting in integrating styles. In addition, Model 17 in Study 2 pointed out that process SV in the previous round positively related to avoiding style in the next round at the team level which is an interesting phenomenon and need a further examination with much more data on team. However, Study 1 did not support this as the respondents in Study 1 filled out questionnaires based on a recent recalled negotiation case so the negotiators' sense of process might have decreased with the passing of time.

Both Models 1–2 in Study 1 and Models 8–9 (at the individual level) in Study 2 showed relationship SV influence cooperative styles. In particular, Model 4 and 6 in Study 1, Models 11 and 13 (at the individual level) and Model 18 (at the team level) in Study 2 pointed out that compromising and obliging styles were only positively related to relationship SV Actually, the high relationship SV means good impression, high trust of the other, and a good foundation for a future relationship, so negotiators may share information, focus on fairness so both sides benefit, and to put both parties' interests on an equal footing. Thus, they tend to adopt integrating and compromising styles. Meanwhile, with high relationship SV, negotiators may also wish to pay more attention to their counterpart in order to maintain a good relationship in future dealings and to oblige the other side by some concessions. Contradictorily, Model 7 in Study 1 also showed that avoiding style was positively related to relationship SV. It may

because that based on the good relationship with their opponent, negotiators will be more likely to refuse the other party's unreasonable suggestions and come up with much better proposals according to their own experience and expertise. Thus, negotiators with high relationship SV is also likely to do dominating style in the next round.

Except for compromising and obliging styles, the other three negotiation styles were related to more than one branch of SV. Integrating style was related to self-SV, process SV and relationship SV while relationship SV played the greatest role among them. Avoiding style was related to instrumental SV and relationship SV while relationship SV also played the greatest role among them. In particular, dominating style was related to instrumental SV, self-SV and relationship SV. Different to others, its relationship with instrumental SV was strongest.

## Conclusion

From the two studies, we can conclude that all the four SVs in the previous round had a significant relationship with the behavior styles in the next round. Specifically, relationship SV positively related to all five negotiation styles and its relationship with integrating, compromising, obliging, and avoiding styles is greater than other SVs. Process SV was only positively related to integrating. Instrumental SV showed a negative relationship with uncooperative styles—avoiding and dominating—and its relationship with dominating style was greater than other SVs. However, self-SV played an interesting role in that it related to both integrating and dominating styles which looked like they should be incompatible.

In other words, process SV and instrumental SV are purely regarded as a positive SV for their positive relationship with the cooperative styles or negative relationship with uncooperative styles. However, relationship SV and self-SV related to both cooperative styles and uncooperative styles. Actually, whether negotiators adopt a cooperative style—integrating, compromising, obliging—or uncooperative style—avoiding and dominating—depends on a combined action of all the SVs rather than on a particular one of them.

# **Limitations and Further Study**

This study has several limitations that provide opportunities for further research. First, our research focused on the relationship between subjective value (SV) in the previous round and negotiation behavior styles in the next round in a multi-round negotiation, but did not investigate potential moderators or some latent control variables, such as negotiators' business roles, gender, and age of negotiators and the Big Five personality traits. For example, negotiators usually classify information and behavior framed by the roles they assume when they make decisions, which is a contextual frame (Taylor, 1981; Tversky & Kahneman, 1981). The seller, such as a contractor, is positively framed by his role and is easily controlled by the cognitive mode, while the buyer, such as an owner, is negatively framed and prone to engage in a quick, automatic, and heuristic information processing (Dunegan, 1993). Under the effect of epistemic motivation, scholars have directly found the seller can achieve much better joint outcomes than the buyer (Schei, Rognes, & Mykland, 2006)). Thus, it can be speculated that negotiators' roles play a moderate role in the relationship between SV and negotiation behavior styles. In addition, some scholars have pointed out that male negotiators will be more dominating and females more obliging and somewhat more compromising (Nelson et al., 2015). While some other scholars have found that men and women may fall into stereotype reactance in negotiation (Kray, Thompson, & Galinsky, 2001). They will behave in contrast to gender stereotypes, that men responded to impression motivation by yielding whereas women responded by claiming value for themselves (Curhan & Overbeck, 2008). The contradictory discoveries remind us that it is necessary to control gender or view it as modulatory variable when testing the relationship between SV and behavior styles.

Secondly, in Study 2, we asked the participants to fill out the questionnaires after finishing the whole two-round negotiation. Although we emphasized many times that the SV is their perception of Round 1 and the answer related to their own behavior style is only feedback from Round 2, there is still the possibility that participants may have confounded the ratings which is a limitation of Study 2. Thus, it might have been better to ask the participants to report on the subjective values after the first round and then to report on the negotiation behavior styles after the second round. Although limited in the continuity of the whole two-round negotiation, this may possibly be a good method to try in a future study. Besides, the negotiations in Study 2 are dyadic (two parties) and we have asked the respondents to answer the questionnaire in the perspective of their team while they may have confounded the evaluation of their team with their own to some degree so that it would be better to make some improvements in future study. Furthermore, we used self-reported data in both studies which are not completely objective, so that it would be better to add more relatively objective report data from a negotiator's counterpart in a future study.

Finally, although the sample in Study 1 involved projects located in both China and abroad, the proportion was not balanced; that is, the ratio of the domestic project was higher than that of abroad. Besides, the project contained a foreign component, but the people who were participants were from China, so that the data in this study were mainly from China. Thus, the data and results may be a big supplement in negotiations research for most data in this field previously comes from North America and Europe. Furthermore, negotiators from collectivistic cultures (such as China) are more likely to estimate social—psychology outcomes, such as satisfaction, trust, and the commitment to continuing the relationship, while negotiators from individualistic cultures (such as North America and Europe) are likely to estimate economic outcomes (Neale & Bazerman, 1992). Thus, there will be a huge room to test the consistency of the result in various countries and culture; namely, culture may also be a potential modulatory variable in the relationship between SV and behavior styles.

# References

- Rahim, A. M., Magner, N. R., & Shapiro, D. L. (2000). Do justice perceptions influence styles of handling conflict with supervisors? What justice perceptions, precisely? *International Journal of Conflict Management*, 11(1), 9–31.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411. https://doi.org/10.1037/0033-2909.103.3.411
- Bazerman, M. H., Curhan, J. R., & Moore, D. A. (2001). The death and rebirth of the social psychology of negotiation. In G. J. O. Fletcher & M. S. Clark (Eds.), *Blackwell handbook of social psychology: Interpersonal processes* (pp. 196–228). Malden, MA: Blackwell Publishers Ltd.
- Bazerman, M. H., Curhan, J. R., Moore, D. A., & Valley, K. L. (2000). Negotiation. *Annual Review of Psychology*, 51(1), 280–314. https://doi.org/10.1146/annurev.psych.51.1.279
- Blake, R. R., & Mouton, J. S. (1970). The fifth achievement. *The Journal of Applied Behavioral Science*, 6, 413–426. https://doi.org/10.1177/002188637000600403
- Blake, R. R., Mouton, J. S., & Bidwell, A. C. (1962). Managerial grid. *Advanced Management-Office Executive*, 1 (9), 12–15.
- Bless, H. (2000). Moods and general knowledge structures: Happy moods and their impact on information processing. In J. P. Forgas (Ed.), *Feeling and thinking: The role of affect in social cognition* (pp. 131–142). Cambridge, UK: Cambridge University Press.
- Bower, G. H., & Forgas, J. P. (2001). Mood and social memory. In J. P. Forgas (Ed.), *The handbook of affect and social cognition* (pp. 95–120). Mahwah, NJ: Lawrence Erlbaum Associates.
- Brockner, J., & Wiesenfeld, B. M. (1996). An integrative framework for explaining reactions to decisions: Interactive effects of outcomes and procedure. *Psychological Bulletin*, 120(2), 189–208. https://doi.org/10.1037/0033-2909.120.2.189

- Carlson, D. S., & Perrewé, P. L. (1999). The role of social support in the stressor-strain relationship: An examination of work-family conflict. *Journal of Management*, 25, 513–540. https://doi.org/10.1177/014920639902500403
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86, 425–445. https://doi.org/10.1037/0021-9010.86.3.425
- Curhan, J. R., Elfenbein, H. A., & Eisenkraft, N. (2010). The objective value of subjective value: A multi-round negotiation study. *Journal of Applied Social Psychology*, 40, 690–709. https://doi.org/10.1111/j.1559-1816.2010.00593.x
- Curhan, J. R., Elfenbein, H. A., & Kilduff, G. J. (2009). Getting off on the right foot: Subjective value versus economic value in predicting longitudinal job outcomes from job offer negotiations. *Journal of Applied Psychology*, 94, 524–534. https://doi.org/10.1037/a0013746
- Curhan, J. R., Elfenbein, H. A., & Xu, H. (2006). What do people value when they negotiate? Mapping the domain of subjective value in negotiation. *Journal of Personality and Social Psychology*, 91, 493–512. https://doi.org/10. 1037/0022-3514.91.3.493
- Curhan, J. R., & Overbeck, J. R. (2008). Making a positive impression in a negotiation: Gender differences in response to impression motivation. *Negotiation and Conflict Management Research*, 1(2), 179–193. https://doi.org/10.1111/j.1750-4716.2008.00010.x
- Druckman, D., & Broome, B. J. (1991). Value differences and conflict resolution familiarity or liking? *Journal of Conflict Resolution*, 35, 571–593. https://doi.org/10.1177/0022002791035004001
- Druckman, D., & Wagner, L. (2016). Justice and fairness in negotiation. *Group Decision and Negotiation*, 26, 9–17. https://doi.org/10.1007/s10726-016-9496-4
- Dunegan, K. J. (1993). Framing, cognitive modes, and image theory: Toward an understanding of a glass half full. *Journal of Applied Psychology*, 78, 491–503. https://doi.org/10.1037/0021-9010.78.3.491
- Elfenbein, H. A., & Curhan, J. R. (2012). The effects of subjective value on future consequences: Implications for negotiation strategies. In D. Shapiro & B. Golman (Eds.), *The psychology of negotiations in the 21st century work-place: New challenges and new solutions* (pp. 115–140). New York, NY: Routledge.
- Elfenbein, H. A., Curhan, J. R., Eisenkraft, N., Shirako, A., & Baccaro, L. (2008). Are some negotiators better than others? Individual differences in bargaining outcomes. *Journal of Research in Personality*, 42, 1463–1475. https://doi.org/10.1016/j.jrp.2008.06.010
- Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, 32(1), 115–130. https://doi.org/10.2307/256422
- Forgas, J. P. (1998). On feeling good and getting your way: Mood effects on negotiator cognition and bargaining strategies. *Journal of Personality and Social Psychology*, 74, 565–577. https://doi.org/10.1037//0022-3514.74.3.565
- Forgas, J. P., & George, J. M. (2001). Affective influences on judgments and behavior in organizations: An information processing perspective. *Organizational Behavior and Human Decision Processes*, 86(1), 3–34. https://doi.org/10.1006/obhd.2001.2971
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18, 39–50. https://doi.org/10.2307/3151312
- Fortgang, R. S., Lax, D. A., & Sebenius, J. K. (2003). Negotiating the spirit of the deal. *Harvard Business Review*, 81 (2), 66–79.
- Halac, M. (2014). Relationship building: Conflict and project choice over time. *Journal of Law, Economics, and Organization*, 30, 683–708.
- Hollander-Blumoff, R., & Tyler, T. R. (2008). Procedural justice in negotiation: Procedural fairness, outcome acceptance, and integrative potential. *Law & Social Inquiry*, 33, 473–500. https://doi.org/10.1111/j.1747-4469. 2008.00110.x
- Kass, E. (2008). Interactional justice, negotiator outcome satisfaction, and desire for future negotiations: RESPECT at the negotiating table. *International Journal of Conflict Management*, 19, 319–338. https://doi.org/10.1108/10444060810909284
- Konovsky, M. A., Folger, R., & Cropanzano, R. (1987). Relative effects of procedural and distributive justice on employee attitudes. *Representative Research in Social Psychology*, 17(1), 15–24.

- Koza, K. L., & Dant, R. P. (2007). Effects of relationship climate, control mechanism, and communications on conflict resolution behavior and performance outcomes. *Journal of Retailing*, 83(3), 279–296. https://doi.org/10.1016/j.jretai.2007.03.002
- Kray, L. J., Thompson, L., & Galinsky, A. (2001). Battle of the sexes: Gender stereotype confirmation and reactance in negotiations. *Journal of Personality and Social Psychology*, 80, 942–950. https://doi.org/10.1037//0022-3514.80.6.942
- Larrick, R. P., & Wu, G. (2007). Claiming a large slice of a small pie: Asymmetric disconfirmation in negotiation. *Journal of Personality and Social Psychology*, 93(2), 212–233. https://doi.org/10.1037/0022-3514.93.2.212
- Lind, E. A. (2001). Fairness heuristic theory: Justice judgments as pivotal cognitions in organizational relations. *Advances in Organizational Justice*, 56(2), 57–88.
- Loewenstein, G. F., Thompson, L., & Bazerman, M. H. (1989). Social utility and decision making in interpersonal contexts. *Journal of Personality and Social Psychology*, *57*, 426–441. https://doi.org/10.1037/0022-3514.57.3.426
- Lu, W., Zhang, L., & Fu, Y. (2016). Improving subjective value in construction claim negotiations: Role of behavioral primers. *Journal of Management in Engineering*, 32, 05016005. https://doi.org/10.1061/(ASCE)ME.1943-5479.0000428
- Malhotra, D. (2005a). Hamilton Real Estate: Confidential Role Information for the CEO of Estate One (BUYER).Malhotra, D. (2005b). Hamilton Real Estate: Confidential Role Information for the Executive VP of Pearl Investments (SELLER).
- Mestdagh, S., & Buelens, M. (2003). Thinking back on where we're going: A methodological assessment of five decades of research in negotiation behavior. 16<sup>th</sup> Annual IACM Conference Melbourne, Australia. Retrieved from https://ssrn.com/abstract=400840
- Morris, M. W., Larrick, R. P., & Su, S. K. (1999). Misperceiving negotiation counterparts: When situationally determined bargaining behaviors are attributed to personality traits. *Journal of Personality and Social Psychology*, 77(1), 52–67.
- Naquin, C. E. (2003). The agony of opportunity in negotiation: Number of negotiable issues, counterfactual thinking, and feelings of satisfaction. *Organizational Behavior and Human Decision Processes*, 91(1), 97–107. https://doi.org/10.1016/s0749-5978(02)00532-0
- Naquin, C. E., & Paulson, G. D. (2003). Online bargaining and interpersonal trust. *Journal of Applied Psychology*, 88(1), 113–120. https://doi.org/10.1037/0021-9010.88.1.113
- Neale, M. A., & Bazerman, M. H. (1992). Negotiator cognition and rationality: A behavioral decision theory perspective. Organizational Behavior and Human Decision Processes, 51(2), 157–175. https://doi.org/10.1016/0749-5978(92)90009-v
- Nelson, N., Bronstein, I., Shacham, R., & Ben-Ari, R. (2015). The power to oblige: Power, gender, negotiation behaviors, and their consequences. *Negotiation and Conflict Management Research*, 8(1), 1–24. https://doi.org/10.1111/ncmr.12045
- Neter, J., Kutner, M. H., Nachtsheim, C. J., & Wasserman, W. (1996). *Applied linear statistical models* (Vol. 4, p. 318). Chicago, IL: Irwin.
- Novemsky, N., & Schweitzer, M. E. (2004). What makes negotiators happy? The differential effects of internal and external social comparisons on negotiator satisfaction. *Organizational Behavior and Human Decision Processes*, 95(2), 186–197. https://doi.org/10.1016/j.obhdp.2004.05.005
- O'Connor, K. M., Arnold, J. A., & Burris, E. R. (2005). Negotiators' bargaining history and their effects on future negotiation performance. *Journal of Applied Psychology*, 90, 350–362. https://doi.org/10.1037/0021-9010.90.2. 350
- Olekalns, M., & Druckman, D. (2014). With feeling: How emotions shape negotiation. *Negotiation Journal*, *30*, 455–478. https://doi.org/10.1111/nejo.12071
- Oliver, R. L., Balakrishnan, P. S., & Barry, B. (1994). Outcome satisfaction in negotiation: A test of expectancy disconfirmation. *Organizational Behavior and Human Decision Processes*, 60(2), 252–275. https://doi.org/10.1006/obhd.1994.1083
- Perdue, B. C., Day, R. L., & Michaels, R. E. (1986). Negotiation styles of industrial buyers. *Industrial Marketing Management*, 15(3), 171–176. https://doi.org/10.1016/0019-8501(86)90026-x

- Pinkley, R. L. (1990). Dimensions of conflict frame: Disputant interpretations of conflict. *Journal of Applied Psychology*, 75(2), 117–126. https://doi.org/10.1037/0021-9010.75.2.117
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903. https://doi.org/10.1037/0021-9010.88.5.879
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12, 531–544. https://doi.org/10.1177/014920638601200408
- Pruitt, D. G. (1983). Achieving integrative agreements. In M. H. Bazerman & R. J. Lewicki (Eds.), *Negotiating in organizations* (pp. 35–49). Beverly Hills, CA: Sage.
- Rahim, M. A. (2010). Managing conflict in organizations. London, UK: Transaction Publishers.
- Rahim, A., & Bonoma, T. V. (1979). Managing organizational conflict: A model for diagnosis and intervention. *Psychological Reports*, 44, 1323–1344. https://doi.org/10.2466/pr0.1979.44.3c.1323
- Robinson, J. P., Shaver, P. R., & Wrightsman, L. S. (1991). Measures of personality and social psychological attitudes. *Behavioral & Social Sciences Librarian*, 11(2), 107–128.
- Rose, G. M., & Shoham, A. (2004). Interorganizational task and emotional conflict with international channels of distribution. *Journal of Business Research*, *57*, 942–950. https://doi.org/10.1016/s0148-2963(02)00490-3
- Rubin, J. Z., Pruitt, D. G., & Kim, S. H. (1994). Social conflict: Escalation, stalemate, and settlement. New York, NY: Mcgraw-Hill Book Company.
- Ruble, T. L., & Thomas, K. W. (1976). Support for a two-dimensional model of conflict behavior. *Organizational Behavior and Human Performance*, 16(1), 143–155. https://doi.org/10.1016/0030-5073(76)90010-6
- Schei, V., Rognes, J. K., & Mykland, S. (2006). Thinking deeply may sometimes help: Cognitive motivation and role effects in negotiation. *Applied Psychology*, 55(1), 73–90. https://doi.org/10.1111/j.1464-0597.2006.00240.x
- Schweitzer, M. E., Hershey, J. C., & Bradlow, E. T. (2006). Promises and lies: Restoring violated trust. *Organizational Behavior and Human Decision Processes*, 101(1), 1–19. https://doi.org/10.1016/j.obhdp.2006.05.005
- Snyder, C. R., & Higgins, R. L. (1997). Reality negotiation: Governing one's self and being governed by others. *Review of General Psychology*, 1, 336–350. https://doi.org/10.1037/1089-2680.1.4.336
- Taylor, S. E. (1981). A categorization approach to stereotyping. In D. L. Hamilton (Ed.), *Cognitive processes in stereotyping and intergroup behavior* (pp. 83–114). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Thibaut, J. W., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Thomas, K. W. (1992). Conflict and conflict management: Reflections and update. *Journal of Organizational Behavior*, 13(3), 265–274. https://doi.org/10.1002/job.4030130307
- Thomas, K. W., & Pondy, L. R. (1977). Toward an "intent" model of conflict management among principal parties. *Human Relations*, 30, 1089–1102. https://doi.org/10.1177/001872677703001203
- Thompson, L. (1990). Negotiation behavior and outcomes: Empirical evidence and theoretical issues. *Psychological Bulletin*, 108, 515–532. https://doi.org/10.1037/0033-2909.108.3.515
- Tinsley, C. H., O'Connor, K. M., & Sullivan, B. A. (2002). Tough guys finish last: The perils of a distributive reputation. *Organizational Behavior and Human Decision Processes*, 88, 621–642. https://doi.org/10.1016/s0749-5978 (02)00005-5
- Tjosvold, D., Wan, P., & Tang, M. M. (2016). Trust and managing conflict: Partners in developing organizations. In P. Elgoibar, M. Euwema, & L. Munduate (Eds.), *Building trust and constructive conflict management in organizations* (pp. 53–74). Basel, Switzerland: Springer International Publishing.
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211, 453–458. https://doi.org/10.1126/science.7455683
- Valley, K. L., Neale, M. A., & Mannix, E. A. (1995). Friends, lovers, colleagues, strangers: The effects of relationships on the process and outcome of dyadic negotiations. Research on Negotiation in Organizations, 5, 65–94.
- Walton, R. E., & McKersie, R. B. (1965). A behavioral theory of labor negotiations: An analysis of a social interaction system. Ithaca, NY: Cornell University Press.
- Williams, L. J., Cote, J. A., & Buckley, M. R. (1989). Lack of method variance in self-reported affect and perceptions at work: Reality or artifact? *Journal of Applied Psychology*, 74, 462–468.

Zarankin, T. G. (2008). A new look at conflict styles: Goal orientation and outcome preferences. *International Journal of Conflict Management*, 19(2), 167–184. https://doi.org/10.1108/10444060810856094

Zhang, S. J., Chen, Y. Q., & Sun, H. (2015). Emotional intelligence, conflict management styles, and innovation performance: An empirical study of Chinese employees. *International Journal of Conflict Management*, 26, 450–478. https://doi.org/10.1108/ijcma-06-2014-0039

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