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## Relationship Building in E-negotiation: Dyadic Effects on Subjective Negotiation Outcomes

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**Relationship Building in E-negotiation: Dyadic Effects on Subjective Negotiation**

**Outcomes**

A Thesis

Presented in

Partial Fulfillment of the

Requirements for the Degree of

Master of Arts

By

Mounica Reddy

June, 2022

Department of Psychology

College of Science and Health

DePaul University

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**Thesis Committee**

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## **Biography**

Mounica Reddy was born in Los Angeles, California on December 27, 1990. She graduated from Westwood High School in Austin, Texas in 2008, and went on to receive her Bachelor of Science degree in Biology from Texas Tech University in 2012. She also received her Master of Arts degree in Industrial and Organizational Psychology and Master of Business Administration degree from Roosevelt University in 2018.

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## Abstract

E-negotiation is a critical activity that is becoming a new reality (Sokolova et al., 2006), however, the e-negotiation environment lends itself to fewer informative cues than the face-to-face environment. The ability to maintain relationships with parties and negotiate with them in the future increases the negotiator's bargaining power and could be important beyond economic outcomes (Curhan & Brown, 2011). This study investigates the link between relationship-building and subjective values in negotiation, and how the negotiation medium may change this relationship. Subjective values of rapport, trustworthiness, and interest in future interaction were predicted to both differ by e-negotiation and face-to-face negotiation condition and be influenced by the amount of relationship-building language in the negotiation. Sixty-six same-gender dyads negotiated either by e-negotiation or in person. The impact of dyadic relationship-building was tested using the Actor-Partner Interdependence Model (Kenny et al., 2002). Results found that the amount of relationship-building was not associated with dyadic perceptions of trustworthiness, rapport, or interest in future interaction. There were no significant partner effects for relationship-building and the three subjective value outcomes. Finally, condition did not moderate the link between relationship-building and subjective value outcomes. Possible explanations of the implications and the lack of findings are discussed.

*Keywords:* APIM, e-negotiation, rapport, relationship-building, subjective value, trustworthiness

## **Relationship-building in E-negotiation: Dyadic Effects on Subjective Negotiation Outcomes**

Virtual work has significantly increased as a global pandemic pushed organizations to adapt quickly and move away from the traditional office model of work. This, coupled with an increased reliance on technology to manage work, is changing many elements of traditional work, such as negotiation in the workplace (Naquin & Paulson, 2003). Negotiation is an essential element used to address workplace issues, and typically involves interplays between organization members to make work decisions and allocate resources (Stuhlmacher & Citera, 2005). Electronic negotiations (e-negotiations) are now “a new reality” as the virtual workplace environment continues to rapidly grow (Sokolova et al., 2006). E-negotiations and face-to-face (FTF) negotiations are associated with different types of behaviors, which are predicted to result in different economic and perceptual negotiation outcomes. There are components of FTF negotiation that do not exist when negotiating over chat or email, such as cues from body language. This research compares the two modes of interaction on similarities and differences in language, a shared component of both FTF and e-negotiation. Language use is expected to differ and influence both objective and subjective outcomes.

### **Objective and Subjective Outcomes in Negotiation**

Negotiation results in objective or economic outcomes as well as some very important social-psychological outcomes that are perception based. Objective outcomes are tangible such as money, point values, or resources whereas social-psychological outcomes revolve around the attitude and perceptions of negotiators (Curhan & Brown, 2011). In contrast to objective outcomes, Curhan and colleagues (2006) call these social-

psychological outcomes “subjective values.” Subjective values are the “social, perceptual, and emotional consequences of a negotiation” (Curhan et al., 2006, p. 494).

Subjective values are important outcomes in negotiation. Subjective feelings of success are at times the only benchmark of success that a negotiator has, as it is rare to know the exact objective value that the negotiator could have maximized (Curhan et al., 2006). Negotiators often “care more about feeling positive, being respected, or having a favorable relationship” than the terms of the deal (Curhan & Brown, 2011, p. 580). Negotiators who have favorable relationships with their counterparts may express the desire to maintain a working relationship. Studies have found that individuals who reported high subjective value after negotiations also reported greater willingness to stay in contact with and negotiate again with their counterpart (Curhan et al., 2006). The ability to maintain relationships with parties and negotiate with them in the future increases the negotiator’s bargaining power (Curhan & Brown, 2011). The ability to maintain relationships and increase subjective value have been found to “pay off” in terms of objective value over a second negotiation (Curhan et al., 2006). Subjective value is also linked with commitment to upholding a deal, where negotiators can reasonably expect their counterpart to follow through on the terms of the negotiation (Curhan & Brown, 2011). Thus, the quality of the relationship can be more important than objective terms of the deal (Gelfand et al., 2006).

Subjective outcomes received more attention starting in 2006 with a seminal paper by Curhan and colleagues. They created a measure of subjective perceptions by first categorizing aspects of subjective value into four groups: feelings about the instrumental outcome, feelings about the self, feelings about the negotiation process, and

feelings about the relationship with the counterpart (Curhan et al., 2006). The latter two categories (feelings about the negotiation process and feelings about the relationship) make up the concept of rapport. Rapport is critical to the negotiation task and involves listening and being listened to, mutual trust, and taking care not to damage the relationship (Curhan et al., 2006). These issues relate to the process of negotiation and indicate that people have other values than solely gaining an objective advantage. Negotiations typically do not occur in a silo; in most cases, people negotiate with others that they will see and work with again, with friends and family, and with those whose opinions matter to them. Because subjective values, such as rapport, are important negotiation outcomes, it is worthwhile to examine how they differ by negotiation mode.

### ***Face-to-Face versus E-negotiation Subjective Outcomes***

Comparing processes and subjective outcomes between face-to-face (FTF) and e-negotiations is complicated. Negotiations that occur in person allow for negotiators to obtain contextual information above and beyond the message content. Media richness is the degree of information that can be conveyed through a communication medium (Poole et al., 1992). According to media richness theory (Daft & Lengel, 1983), FTF negotiations are considered the “richest” media because there is immediate feedback and multiple cues through “body language, tone of voice, and message content” that are expressed in real time (Daft & Lengel, 1986, p. 560). Richness influences the amount and ambiguity of information; FTF communication provides more information and less ambiguity than e-negotiation (Daft & Lengel, 1986). Media richness influences both objective and subjective outcomes (Curhan & Brown, 2011). There is a general body of

support that FTF communications foster mutually beneficial objective and subjective outcomes in negotiation compared to less rich media.

Research often shows more mutually beneficial outcomes for FTF negotiation compared to the less-rich negotiation. When FTF negotiations were compared to less rich media, FTF negotiations concluded in less time (an objective outcome) (Drolet & Morris, 2000). Furthermore, parties had a greater desire to work with each other in the future (a subjective outcome) (Purdy et al., 2000). Bazerman and colleagues (2000) suggest that FTF negotiations result in negotiators developing a shared mental model whereas this does not seem to occur via telephone communication. Group interactions that occur via computer are also slower and rated lower in satisfaction with the process than FTF interactions (Baltes et al., 2002; Friedman & Belkin, 2013). Online negotiations compared to FTF negotiations result in lower interest in future relations and less satisfaction with the negotiation outcome (Naquin & Paulson, 2003), and online negotiators may be less accurate when judging counterparts' interests, leading to lower individual and joint objective value outcomes (Arunachalam & Dilla, 1995).

Advancements in technology have provided the ability to negotiate in many different ways. Video conferencing, audio-only communication, chatting through instant messaging systems, and e-mail are all ways that virtual negotiation can take place. The focus here will be on instant message text-based media, which are considered relatively low on the media richness scale. The only forms of media considered less rich than instant message text-based media are formal written documentation, such as bulletins, and solely numerical data (Daft & Lengel, 1986). Written text-only negotiation is one of the leanest types of communication due to restricted informational cues. Due to the

physical separation and the electronic medium, negotiators typically have less information about the other party, including fewer nonverbal cues and less understanding of their counterpart's initial perceptions than when in a FTF setting (Hine et al., 2009).

Other frameworks offer similar predictions to media richness theory. Social presence theory (Short et al., 1976) explains the "cues filtered out" phenomenon of electronic media, arguing that computer-based communication is a cold medium that removes non-verbal cues and inhibits people from developing personal bonds (Sproull & Kiesler, 1986). Likewise, the concept of psychological distance is similar to the idea of information richness. Wellens (1986) suggests that computer-based media leads to more depersonalization and social awareness than FTF interactions due to fewer informational cues. Thus, virtual communication encourages feelings of psychological distance, while FTF communication encourages feelings of psychological closeness (Wellens, 1986). Psychological distance also has implications for the subjective outcomes between negotiation counterparts. Lower levels of trust towards the other party are perceived before, throughout, and after online negotiations compared to FTF negotiations (Naquin & Paulson, 2003).

On the other hand, social information processing (SIP) theory (Walther, 1992) paints a less bleak picture of virtual negotiations and uses the "cues filtered out" approach to argue that meaningful relationships are possible over computer-based interactions with time. Siegel and colleagues (1986) found that "social equalization" was higher in computer-based interactions where group members participated more equally in discussion than in FTF interactions. Another advantage is that some negotiators may benefit from increased aggressive behavior in e-negotiation to increase objective

outcomes (Friedman & Belkin, 2013; Rosette et al., 2012). In summary, there is ample support suggesting that varying modes of interaction are associated with different negotiation outcomes.

### **Face-to-Face versus E-Negotiation Processes and Behaviors**

In addition to negotiation outcomes, negotiation processes are expected to differ across modes of interaction. Stuhlmacher and Citera's meta-analytic study (2005) found that less hostile behavior occurred in FTF negotiations than in virtual negotiations. When looking at FTF negotiations through a social awareness lens, heightened awareness and sensitivity to the other party has been shown to facilitate mutual disclosure, trust, and reciprocity (McGinn & Croson, 2004). Drolet and Morris (2000) found that participants developed greater rapport and cooperated more in FTF communication compared to audio-only communication. Morris and colleagues (2002) found that e-mail negotiators had a harder time building rapport and had less preference for a working relationship than FTF negotiators because less personal information was conveyed, and fewer questions were asked through email. Additionally, Stuhlmacher and Citera (2005) found that anonymity moderated hostile behavior in negotiations and that more hostile behavior occurred in negotiations when parties were anonymous compared to identified. They also found that text and email-based negotiations showed more hostility in general than FTF negotiations (Stuhlmacher & Citera, 2005). Other studies have also found that online communication results in more rudeness or impulsivity (Dubrovsky et al., 1991), aggressive behavior (Keisler et al., 1984), negative attacks, and conflicts (Goleman, 2007).

### ***Relationship-building Behavior***

Nadler and Shestowsky (2006) argue that when negotiations occur online, it is important to reduce the effects of de-individuation by “making sure that negotiators see their partners as identifiable human beings.” Focusing solely on gaining the highest objective outcome in negotiation can hinder the cooperation needed for future exchanges (Curhan et al., 2006). Relationship-building behavior can enhance cooperation and is an important facilitator of subjective value in negotiation. Morris and colleagues (2002) found that e-mail negotiators had a harder time building rapport than FTF negotiators because less personal information was conveyed, and fewer questions were asked through email. Relationship-building in negotiations could potentially be a way avoid the negative repercussions of de-individuation.

Relationship-building behavior can manifest in many ways in negotiation including humor, asking questions, agreeable language, and small talk or “schmoozing”. Humor in the negotiation can develop rapport and increase both objective and subjective outcomes (Curhan & Brown, 2011). Humor in requesting the final offer resulted in negotiator counterparts making larger concessions, evaluating the negotiation more positively, and reporting marginally less tension (O’Quin & Aronoff, 1981). Asking questions in a negotiation has been associated with negotiators perceiving more positivity towards each other before (Fairfield & Allred, 2007) and after the negotiation, and is a way to signal interest in the other party’s perspective (Chen et al., 2010). This enhances the negotiator relationship and counterpart subjective value (Chen et al., 2010). Another study found that agreeable language (e.g., “alright,” “fine,” “indeed”, etc.) was one of the strongest predictors of reaching an e-negotiation settlement compared to an impasse

(Hine et al., 2009). Small talk in negotiation can lead negotiators to express more willingness to work again with their counterparts (Morris et al., 2002). Making promises and creating clear consequences for compliance and noncompliance with negotiation terms were found to enhance the quality of implementing the negotiation contract (Mislin et al., 2011), and trust has been found to increase as positive interactions between parties increase (Malholtra & Murnigan, 2002). Thus, of interest in this study, is how subjective outcomes can increase when relationship-building behavior is used in negotiations.

**Relationship-building Behavior and Negotiation Outcomes.** A good relationship can be effective to maintain the good will and cooperation necessary for greater returns in the long run. (Curhan et al., 2006). Relationship-building behavior can also lead to higher joint outcomes in negotiation due to information exchange and trust. Valley and colleagues (1998) found that face-to-face negotiators achieved higher joint benefit, facilitated by more truth-telling, than negotiators conversing via telephone or in writing. Asking questions is facilitated by positive regard for the other party and provides information that yields better understanding of the other party's values and higher joint objective value (Fairfield & Allred, 2007). Another study found that sharing personal information and in-group affiliation in computer-mediated negotiation reduced the rate of impasse (Moore et al., 1999). Relationship-building behavior can also be thought of as a facilitator of future objective value. The rapport developed in one negotiation could foster concern for the other party, facilitate information sharing, and elicit other behaviors that are imperative for the success of the next negotiation (Curhan et al., 2006). Hine and colleagues (2009) found that agreeable language was a strong predictor of success in e-negotiations where a tone of "assent" appeared to aid a cooperative approach to solving

problems for shared benefit, whereas a tone of “negate” in the second half of e-negotiations indicated a reluctance to make concessions and a potential for impasse.

**Trust.** Trust and trustworthiness are part of subjective values in negotiation. Trust refers to a state in which there is an “intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (Rousseau et al., 1998, p. 395). Trust consists of an individual’s own intentions towards another party, whereas trustworthiness is a “characteristic or quality of the other party” and involves the trustor relating characteristics of the other party and making a judgement about them (Lewicki & Polin, 2013). Trust and perceived risk are interrelated (Mayer et al., 1995) and people are more likely to share information when they trust their counterpart (Naquin & Paulson, 2003). Thus, in situations such as negotiation where perceived risk is inherently high, trust is critical. Trust and cooperation have a cyclical relationship and move the progression of a negotiation. However, negotiators that are too trusting may disclose information that makes them vulnerable and may not maximize their economic negotiation outcomes (Lewicki & Polin, 2013). High candor and trust in negotiations has been associated with more concessions toward the other (DeRue et al., 2009). On the other hand, low trust may restrict the flow of information and can make a negotiation very difficult (Lewicki & Polin, 2013). High trust can offset other concerns about the integrity and competence of the other party (Olekalns & Smith, 2009).

Trustworthiness is central to the social exchange process (Olekalns & Smith, 2009) and involves a more dyadic look at how negotiators perceive each other. Butler (1995, 1999) found that initial impressions of trustworthiness determine how willing negotiators are to share information. Additionally, when negotiators report low trust in

their counterparts, deception has been found to increase (Olekalns & Smith, 2007, 2009). Trust and trustworthiness in the other party are clearly important to negotiation.

***Trustworthiness.*** Trustworthiness has been studied as being composed of three separate dimensions relating to the counterpart: ability, benevolence, and integrity (Mayer et al., 1995). Ability is defined as “groups of skills, competencies, and characteristics that enable a party to have influence within some specific domain” (Mayer et al., 1995, p. 717) and refers to the competence or perceived expertise of the opposing party. For example, trustworthiness is increased if the other party is seen to have the ability or expertise to live up to their side of the deal. Benevolence is “the extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit motive,” (Mayer et al., 1995, p. 718) which coincides with perceptions that the trustee will not try to harm the trustor (Lewicki & Polin, 2013). Benevolence in negotiations is displayed through courtesy, showing respect, and engaging in an integrative negotiation process (Lewicki & Polin, 2013). Integrity is how ethical the trustor perceives the other party to be, including how credible they are and how likely they are to follow through on their end of the deal (Lewicki & Polin, 2013). Negotiators use informational cues to make judgements about the other party’s trustworthiness based on ability, benevolence, and integrity (Lewicki & Polin, 2013).

***Rapport.*** Rapport is a state of mutual positivity that is developed by attention and involvement, positivity, and coordination (Nadler, 2004b). Rapport develops by smooth turn-taking in conversation, where the listener acknowledges understanding, agreement, or attention (Nadler, 2004b). Components of rapport are also linked to nonverbal expression, which are only accessed when negotiators can see each other (Drolet &

Morris, 2000). Visual access has been shown to enhance both cooperation and rapport among players in social dilemma games, such as the Prisoner's Dilemma, and leads to better collective outcomes (Nadler, 2004b; Sally, 2000). Without visual access or some sort of foundation for a positive relationship (e.g., negotiators are friends), negotiators are less likely to develop rapport that is related to beneficial outcomes in mixed-motive negotiations (Nadler, 2004b). Still, in an e-negotiation setting, negotiators can practice strategies to develop rapport with their counterparts. For example, engaging in small talk has been shown to facilitate cooperation and resulted in favorable impressions of the counterpart after the negotiation (Nadler, 2004a). Overall, rapport develops relatively easily in a FTF context, but when required to negotiate via less-rich media, negotiators can attempt to build a foundation for a positive relationship with their counterpart to develop rapport and arrive at positive joint outcomes.

***Interest in Future Interaction.*** A final subjective value of interest in this paper is the negotiator's interest in negotiating with their counterpart again in the future. An individual's desire to negotiate again is related to trust in a negotiation (Naquin & Paulson, 2003), and can indicate satisfaction with both the counterpart, the process of negotiation, and resulting outcomes. Purdy and colleagues (2000) found that willingness to negotiate again was positively related to media richness; specifically, negotiators were more willing to negotiate again when comparing FTF, videoconference, and telephone conditions to computer chat conditions. Online negotiations have been found to relate to less desire for future interaction than those in a FTF negotiation and resulted in less satisfaction with the negotiation outcome (Naquin & Paulson, 2003). On the other hand, negotiators who experience greater social, perceptual, and emotional negotiation

outcomes (components of subjective values) are likely to have more desire to negotiate again with their counterpart (Curhan et al., 2006). Thus, the e-negotiation environment is expected to decrease a negotiator's interest in future interaction with their counterpart compared to the FTF environment.

### **Rationale**

The current study aims to provide insight into relationship-building behaviors and subjective values in e-negotiation by contrasting it with FTF negotiation. Success in negotiation can be viewed through the lens of subjective value outcomes such as rapport, trustworthiness, and interest in future negotiation interaction. The e-negotiation environment lends itself to fewer informative cues, and thus less opportunity for positive negotiation outcomes. According to media richness theory (Daft & Lengel, 1983), the e-negotiation environment is less rich than the FTF environment, and FTF communication provides more information and less ambiguity than e-negotiation (Daft & Lengel, 1986). Media richness can influence both objective and subjective outcomes (Curhan & Brown, 2011). Because the virtual space is associated with less rich media, e-negotiation is associated with less post-negotiation trust (Lewicki & Polin, 2013), lower development of rapport (Nadler, 2004b), and less desire to negotiate with the counterpart again (Naquin & Paulson, 2003).

This thesis examines if negotiators who utilize relationship-building enhance their and their counterparts' subjective perceptions of success in negotiation. The ability to maintain relationships with parties and negotiate with them in the future increases the negotiator's bargaining power and could be important beyond solely economic outcomes (Curhan & Brown, 2011). Thus, I hope to examine how interacting through different

forms of communication media, negotiators might use strategies that increase beneficial subjective value outcomes.

## **Hypotheses**

Because relationship-building is hypothesized to relate to joint outcomes in negotiation (Fairfield & Allred, 2007; Valley et al., 1998) as well as individual outcomes (Curhan et al., 2006; Hine et al., 2009), hypotheses are discussed at both the dyad level and the individual level. Hypotheses at the individual level should be treated differently than those at the dyad level to account for both the negotiator and their counterpart's effects of relationship-building and their individual subjective value perceptions (Kashy & Kenny, 2000).

### ***Dyad–Level Hypothesis***

**Hypothesis 1.** Subjective negotiation outcomes of post-negotiation trustworthiness (H1a), rapport (H1b), and interest in future interaction (H1c) are expected to relate to the number of relationship-building behaviors within a dyad. Specifically, more joint relationship-building behaviors displayed in the negotiation will relate to more positive, dyadic subjective outcomes.

### ***Individual–Level Hypotheses***

**Hypothesis 2.** Negotiators will report higher levels of subjective outcomes of post-negotiation trustworthiness (H2a), rapport (H2b), and interest in future interaction (H2c) the more their counterparts engage in relationship-building behaviors.

**Hypothesis 3.** Compared to FTF negotiation, e-negotiation will have lower subjective value outcomes for post-negotiation trustworthiness (H3a), rapport (H3b), and interest in future interaction (H3c).

**Hypothesis 4.** Negotiators' relationship-building behaviors interact with the mode of negotiation such that increased individual relationship-building leads to more positive counterpart subjective values in FTF compared to e-negotiation. Specifically, a focal negotiator's relationship-building behaviors in FTF negotiations increase their counterpart's perceptions of the focal negotiator's post-negotiation trustworthiness (H4a), rapport (H4b), and interest in future interaction (H4c) more than in e-negotiations.

## **Method**

### **Participants**

A total of 276 undergraduate students were recruited from two universities to participate in a simulated negotiation over two years. Originally this thesis had planned to use data from universities in two different locations, the United States and Germany. The initial participant pool included 68 dyads from the United States and 72 dyads from Germany. However, upon further examination, a large portion of data from the German participants was not available, and only the US sample was used for this study.

The participants received either \$8 or psychology research study participation credit. Two dyads were removed due to a partner in each dyad missing all post-negotiation data. A final sample of 66 dyads (132 individuals) was used for analysis in this study. The study utilized same-gendered dyads to control for potential confounds of

mixed sex dyads. The final sample had 74 women (37 female dyads) and 58 men (29 male dyads).

### **Procedure**

The experimental study randomly assigned participants to negotiation condition: e-negotiation or FTF negotiation. The e-negotiation condition had a further manipulation that either revealed or did not reveal if the negotiator counterpart was a man or woman. For the purpose of the current analyses, these two e-negotiations conditions (known gender and unknown gender) were combined such that there were 25 FTF dyads and 41 e-negotiation dyads.

Each member of the dyad was scheduled to arrive at different rooms for the experiment and did not meet or see each other before negotiating. Upon arrival, participants were randomly assigned to e-negotiation or face-to-face negotiation condition. Participants first completed the consent form (See Appendix E). After this, they were given ten minutes to read the simulated negotiation instructions regarding their role in the negotiations (see Appendix F).

The simulated negotiation was adapted from the Pelican Landing task by Brodt (2009), a negotiation between a city planner and real estate developer about real estate development issues. The number of tasks were reduced to four issues: financing, open space, retail space, and height of buildings. Negotiators had competing interests for three issues, where one party preferred the highest value, and the other party preferred the lowest value. Negotiators had similar interests for one issue where both parties preferred the highest value. Participants received information regarding the four issues with associated values between 350 and 900 points as their respective payoffs. Participants

were told that if no agreement was reached, a minimum agreement of 350 points would be assumed.

After negotiators read through the negotiation simulation instructions and planned for a total of 10 minutes, participants completed a pre-negotiation survey (Appendix G) containing questions about their plans for the negotiation and expectations for their counterpart. Then, participants were told about the negotiation format they would be using (FTF or e-negotiation). Participants negotiating by computer stayed in their individual rooms and used an instant messaging program to negotiate. The software facilitated real-time communication between participants. Those in the FTF condition were brought into the same room, meeting for the first time, and began negotiating.

Participants were given up to 35 minutes to complete the negotiation and were given a time warning when they had 5 minutes left. If participants did not reach any agreements after 35 minutes, the negotiation was declared an impasse. After negotiating, participants completed the post-negotiation survey, read the study debrief, and received payments or class credit for their participation.

## **Measures**

### ***Relationship Building***

Relationship building involves positive perceptions of the relationship between members of a dyad and is important to subjective value in negotiation (Curhan et al., 2006; Curhan & Brown, 2011). In this study it was measured by the frequency of one of eight types of relationship-building language. These statements were greetings, questions (Fairfield & Allred, 2007), acknowledgements, statements of agreement (Hine et al., 2009), concessions, small talk (Morris et al., 2002), colloquial speech, polite speech, and

statements that indicated care or concern for the counterpart (see Appendix A for codebook).

Greetings were defined by participants greeting each other at the beginning or end of negotiations (e.g., “good afternoon.”). Questions were operationalized as participants asking questions to the other participant (e.g., “is this amount fair?”). Acknowledgements were defined as participants reflecting or admitting to something their counterpart said (e.g., “I understand that the city does not have that budget right now”). Statements of agreement were operationalized as a participant agreeing with or having a positive tone towards a statement their counterpart made (e.g., a participant states “I completely agree” to their counterpart stating, “I would like to have tall buildings”). Concessions were defined as statements in which a participant accepts some sort of compromise or loss to their goals. An example of a concessionary statement would be if, after both parties discuss what their goals are for an issue, a participant asks, “Can we meet in the middle?” Small talk was operationalized as participants discussing information other than negotiation material. An example of this is a participant saying, “I hope you’re doing well today.” Colloquial speech was defined as informal language; for example, a participant replies “sure thing” to a counterpart’s statement. Polite speech was defined as a statement that was phrased in a way that indicated positive tone and politeness towards the counterpart. For example, a participant states “nice work” to their counterpart after they resolve an issue. Lastly, statements that indicate care or concern for the counterpart were defined as language that indicated the participant showed concern about the counterpart or their goals (e.g., “I do not want one of us to leave this negotiation dissatisfied”).

As a note, though humor is an ideal indicator of relationship building, humor was not coded due to the challenges of recognizing humor in a written context using solely language. For example, an emoticon of a smiling face could indicate a humorous statement in the e-negotiation condition, but there is no similar comparison for that type of statement in the FTF transcript.

A relationship-building statement could conceivably fit more than one category but it was coded as one statement. For example, the statement “Hello, how are you on this rainy day?” could be considered a greeting, a question, or small talk. In this coding, the eight types of relationship-building statements were examples and not required to be placed into one of the eight distinct categories. Relationship building statements were coded by role (developer and planner) and summed to arrive at a total relationship-building score for each negotiation. More coding details are provided in the results section.

### ***Subjective Values***

**Trustworthiness.** Trustworthiness was measured in both the pre-negotiation questionnaire and post-negotiation questionnaire through an adapted version of the trustworthiness scale (Mayer et al., 1995) (see Appendix C). A total of nineteen items were scored across three dimensions of trustworthiness on a scale of 1 to 7 (1 = Disagree Strongly, 7 = Agree Strongly). An example item is, “My counterpart will go out of his/her way to help me.”

**Rapport.** Two dimensions (process and relationship dimensions) of the Subjective Value Inventory (SVI) that make up rapport were used to assess subjective value outcomes after the negotiation (Curhan et al., 2006) (see Appendix D). A total of eight items were scored

on a scale of 1 to 7 (1 = Not at all, 7 = Perfectly). An example item is, “How satisfied are you with your relationship with your counterpart as a result of this negotiation?”

**Interest in Future Interaction.** Willingness to negotiate and interact in the future was measured via three items from an adapted work-based backlash scale (Amanatullah & Tinsley, 2013) and through one item about willingness to negotiate again adapted from Naquin & Paulson (2003) (See Appendix E). The first three items were scored on a scale from 1 to 7 (1 = Not at all, 7 = Extremely). An example item is, “How interested would you be in working with your counterpart in the future?” The item regarding willingness to negotiate was scored between 1 to 100 (1 = Not at all, 100 = Without hesitation). This item is, “Based upon your experience in this negotiation, to what degree are you willing to have future dealings (i.e., negotiations) with your counterpart? Please give your response on a scale of 1 to 100, with 1 being not at all and 100 being without hesitation.”

### ***Other Variables***

Additional measures in the original study are not a part of the current examination. Intended first offers, limits, goals, (Naquin & Kurtzberg, 2010; Mayer et al., 1995), and distributive negotiation self-efficacy were measured in the pre-negotiation questionnaire (Sullivan et al., 2006). The post-negotiation questionnaire included negotiators’ understanding of integrative potential (Thompson & Hastie, 1990).

Additional measures included major, English fluency, demographics, and questions used to assess participants’ comfort with technology.

## Results

### Scoring

#### *Individual subjective value outcomes*

Each subjective value measure (rapport, trustworthiness, and interest in future interaction) was averaged by the number of items in the measure to arrive at a single composite score for each construct. Interest in future interaction initially consisted of three items on one scale and one additional item. Due to the redundancy of items and for greater internal consistency, the item utilizing a separate scale was not used in the analyses, and the remaining three items were averaged to create an aggregate subjective value measure for interest in future interaction.

For all scales, mean imputation was used to calculate average subjective value scores where data was missing. Mean imputation was only used for participants missing three or fewer scores on the trustworthiness items ( $n = 4$ ) and one or fewer scores on the rapport and interest in future interaction items ( $n = 3$ ).

#### *Dyadic subjective value outcomes*

Dyadic subjective value outcomes were calculated by taking the average of the actor and partner's individual subjective value scores for each dyad. For example, the actor's trustworthiness score and the partner's trustworthiness score in a dyad were averaged to arrive at their dyadic trustworthiness score.

### Coding Negotiation Transcripts

#### *Relationship building*

Statements were coded as relationship building by reviewing each negotiation transcript. The total number of relationship-building statements made by each negotiator

and the overall number of relationship-building statements in a negotiation were recorded. Three undergraduate and two graduate students were trained to identify relationship-building statements in the context of this study. Each coder was given a set of negotiation transcripts to code individually. The number of relationship-building statements in each transcript was reviewed and agreed upon by the author and an additional coder, and discrepancies were resolved for greater reliability. Each relationship-building statement was counted as a single instance even if a statement could be classified into more than one type of relationship-building category.

Though the frequency of relationship-building statements in each relationship-building category was not measured, there were some general trends. *Asking questions* was the most frequently coded relationship-building statement, while *colloquial speech* and *indications of care or concern for the counterpart* were some of the least frequently coded types of relationship-building statements. Though *greetings* did not make up the bulk of relationship-building statements, the presence of this type of statement was coded in almost every single transcript.

Descriptive statistics and correlations are reported in Table 1, and descriptive statistics by condition are reported in Table 2.

**Table 1***Means, Standard Deviations and Zero-Order Correlations*

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	
1. Ind Relationship Bldg	135	13.60	6.41	–					
2. Total Relationship Bldg	135	27.20	11.20	<b>0.87</b>	–				
3. Trustworthiness	131	4.74	0.96	-0.14	-0.08	<i>0.93</i>			
4. Rapport	131	5.31	1.09	-0.06	-0.01	<b>0.74</b>	<i>0.92</i>		
5. Future Interaction	130	5.27	1.41	-0.04	-0.06	<b>0.67</b>	<b>0.72</b>	<i>0.91</i>	
6. Overall Subjective Value	131	5.40	0.87	-0.11	-0.07	<b>0.65</b>	<b>0.91</b>	<b>0.65</b>	<i>0.91</i>

*Note.* Cronbach's alpha values are provided in italics. Correlations are statistically significant at the  $p < .05$  level (items in bold). Ind Relationship Bldg = individual relationship building; Total Relationship Bldg = total relationship building; Overall Subjective Value = composite subjective value from Subjective Value Inventory. Trustworthiness, Rapport, and Future Interaction were on a 7-point scale. Individual relationship building and total relationship building were measures of frequency.

**Table 2***Means and Standard Deviations of Primary Study Variables by Condition*

Variable	<u>E-Negotiation</u>			<u>Face-to-Face Negotiation</u>		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
1. Ind Relationship Bldg	83	12.0	4.69	50	16.3	7.90
2. Total Relationship Bldg	83	24.0	8.14	50	32.6	13.6
3. Trustworthiness	80	4.87	0.98	49	4.53	0.92
4. Rapport	80	5.35	1.16	49	5.25	0.96
5. Future Interaction	80	5.42	1.41	48	5.05	1.34

*Note.* *N*, *M* and *SD* are used to represent sample size, mean and standard deviation, respectively. Ind Relationship Bldg = individual relationship building; Total Relationship Bldg = total relationship building; Individual relationship building and total relationship building were measures of frequency.

### Dyadic Dependence

I first investigated the degree of dependence due to the dyads by computing the intraclass correlation (ICC) for the main study variables. ICC values are reported in Table 3. Positive ICC values indicate similarity between dyads and negative ICC values indicate dissimilarity between dyads. The absolute value of ICC estimates are also interpreted as the proportion of variance due to dyad effects (Kashy & Kenny, 2000).

All ICCs were significantly different from zero, and 35% of the variance in the main study variables was due to dyads (range 21% to 54%), suggesting the importance of considering the dyad effect in analyses.

**Table 3**

*Intraclass Correlations of Main Study Variables*

Variable	ICC
1. Ind Relationship Bldg	0.54***
2. Trustworthiness	0.30***
3. Rapport	0.35***
4. Future Interaction	0.21**

*Note.* K = 66 dyads. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ . Ind Relationship Bldg = individual relationship building; Trustworthiness, Rapport, and Future Interaction were on a 7-point scale. Individual relationship building and total relationship building were measures of frequency.

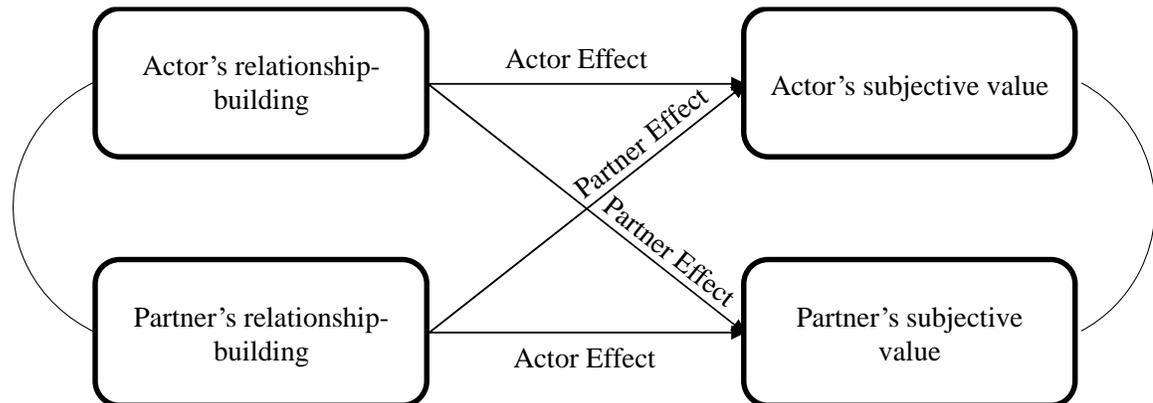
**Hypothesis Testing**

The dyad-level hypothesis was tested by correlating variables. An alpha criterion of 0.05 was utilized to determine statistical significance. The remaining individual-level hypotheses were tested using the Actor-Partner Interdependence Model (APIM), a model of dyadic relationships that predicts actor and partner effects separately while accounting for interdependence in each dyad (Kashy & Kenny, 2000; Kenny et al., 2002). APIM is a dyadic multi-level analysis, where individuals are nested within dyads and multilevel modeling or structural equation modeling can be used to estimate actor and partner effects (Kenny et al., 2002). In these analyses, multilevel modeling was used via maximum likelihood (ML) estimation to estimate actor and partner effects and to examine moderation of actor and partner effects. In each hypothesis, three separate outcomes were considered: trustworthiness, rapport, and interest in future interaction.

Therefore, for each individual-level hypothesis, three separate models were run. Figure 1 depicts the APIM model of relationship-building on subjective value outcomes.

**Figure 1**

*Actor-Partner Interdependence Model of Relationship-building Language on Subjective Value Outcomes*



APIM analysis depends on distinguishability of dyads, or whether members in a dyad can be distinguished on some meaningful variable (Kenny et al., 2002). Even if members can theoretically be distinguished in some way (e.g., by developer or planner role), it is still advisable to empirically test if the distinguishing feature differentially relates to outcomes. To test for distinguishability, two separate multilevel models using ML estimation were run using the “nlme” package in R statistical software (Pineiro et al., 2022). The indistinguishable dyad model consisted of equal actor and partner effects, while the distinguishable model consisted of different actor and partner effects, the main effect of the distinguishing factor, and accounted for the within-group heteroscedasticity structure. Because the indistinguishable model is nested within the distinguishable model, the two multilevel models were compared using a  $X^2$  test to determine distinguishability. This model comparison was run three times to test each outcome variable separately. Each model comparison showed that dyads were empirically indistinguishable, or stated differently, that the role of the negotiator (planner or developer) did not differentially

relate to the study variables.

After determining that the dyads in this study were empirically indistinguishable, APIM models were tested by estimating actor, partner, and moderation effects using the “nlme” package (Pinheiro et al., 2022) in R statistical software. Models were fitted using the generalized least squares method which allows for nonindependence by correlating the errors of both members in each dyad. Moderation was tested by grand mean centering the predictor variable, and including main effects of the actor, partner, and moderator, as well as two interaction terms: the interaction of the moderator and actor variables and the interaction of the moderator and partner variables.

### ***Hypothesis 1***

Hypothesis 1 involved the association of study variables at the dyad level. The sum of individual relationship building scores and dyad-level subjective outcomes were used. A one-tailed test was specified due to the directionality of the hypothesis. Dyadic relationship-building was not significantly correlated with any of the subjective value outcomes: trustworthiness ( $r = -0.11, p = .902$ ), rapport ( $r = -0.03, p = 0.616$ ), and interest in future interaction ( $r = -0.10, p = 0.873$ ).

### ***Hypothesis 2***

Hypothesis 2 involved understanding the role of individual relationship-building on the counterpart’s subjective outcomes. In APIM, the actor effect is the effect of a person’s X variable on their own outcome variable, while the partner effect is the effect of a person’s partner’s X variable on the person’s outcome variable, or interchangeably, the effect of a person’s X variable on their partner’s outcome variable. Using the APIM

model, relationship-building was regressed onto each subjective value outcome separately. Results are shown in Table 4.

**Table 4**

*Multilevel Regression Analyses Predicting Subjective Values from Actor and Partner Relationship Building*

Variable	<u>Trustworthiness</u>			<u>Rapport</u>			<u>Future Interaction</u>		
	<i>B</i>	<i>SE</i>	df	<i>B</i>	<i>SE</i>	Df	<i>B</i>	<i>SE</i>	df
Relationship-building-A	-0.033*	0.014	119.53	-0.028	0.016	122.40	-0.015	0.021	110.86
Relationship-building-P	0.017	0.014	119.52	0.024	0.016	122.39	-0.001	0.022	110.92

*Note.* Relationship-building-A = Actor Relationship Building; Relationship-building-P = Partner Relationship-building. \* $p < .05$

**Hypothesis 2a.** APIM results revealed that the partner's relationship-building did not significantly predict the actor's perception of trustworthiness ( $\beta = 0.017$ ,  $SE = 0.014$ ,  $p = .219$ ), failing to support Hypothesis 2a. Notably, actor relationship-building significantly predicted actor perceptions of trustworthiness ( $\beta = -0.033$ ,  $SE = 0.014$ ,  $p = 0.02$ ) in a different direction than expected. Taken together, these results indicate that in the negotiation, the effect of an actor's relationship-building did not significantly affect how trustworthy the partner thought the actor was. However, actors perceived their counterpart to be less trustworthy when actors themselves engaged in more relationship-building.

**Hypothesis 2b.** To test Hypothesis 2b, individual relationship-building was regressed onto rapport using the APIM. Partner relationship-building did not significantly predict actor perceptions of rapport ( $\beta = 0.024$ ,  $SE = 0.016$ ,  $p = 0.131$ ). Hypothesis 2b was not supported.

**Hypothesis 2c.** To test Hypothesis 2c, individual relationship-building was regressed onto interest in future interaction using the APIM. Partner relationship-building did not significantly predict interest in future interaction ( $\beta = -0.001$ ,  $SE = 0.021$ ,  $p = 0.958$ ). Hypothesis 2c was not supported. Overall, results from Hypothesis 2 indicate that an individual's relationship-building did not have a significant effect on their partner's subjective values after the negotiation.

### ***Hypothesis 3***

Hypothesis 3 examined e-negotiation or FTF condition as a moderator along with centered individual relationship building of the actor and partner, and regressed onto subjective value outcomes in a series of multilevel models. The results of these models are presented in Table 5.

**Table 5**

*Multilevel Regression Analyses Predicting Subjective Values from Actor and Partner Relationship Building and the Moderating Effect of Condition*

Variable	<u>Trustworthiness</u>			<u>Rapport</u>			<u>Future Interaction</u>		
	<i>B</i>	<i>SE</i>	<i>df</i>	<i>B</i>	<i>SE</i>	<i>Df</i>	<i>B</i>	<i>SE</i>	<i>df</i>
Condition	0.323	0.215	65.69	0.090	0.253	66.05	0.340	0.304	65.54
Relationship-building-A	-0.021	0.018	120.88	-0.027	0.020	124.47	-0.005	0.028	113.25
Relationship-building-P	0.025	0.018	120.88	0.021	0.020	124.47	-0.002	0.028	113.26
Condition x Relationship-building-A	-0.016	0.030	121.46	0.002	0.034	124.90	-0.015	0.046	113.96
Condition x Relationship-building-P	-0.007	0.030	121.46	0.013	0.034	124.89	0.019	0.046	113.98

*Note.* Relationship-building is centered. FTF condition = 0, E-Negotiation = 1; Relationship-building-A = Actor Relationship Building; Relationship-building-P = Partner Relationship-building.

**Hypothesis 3a.** Individual relationship-building was regressed onto trustworthiness with condition as a between-dyads moderator. Condition did not have a significant main effect on individual perceptions of trustworthiness ( $\beta = 0.32$ ,  $SE = 0.21$ ,  $p = 0.132$ ). These results fail to support Hypothesis 3a.

**Hypothesis 3b.** Individual relationship-building was regressed onto rapport with condition as a moderator. Condition did not have a significant main effect on individual perceptions of rapport ( $\beta = 0.09$ ,  $SE = 0.25$ ,  $p = 0.721$ ). These results fail to support Hypothesis 3b.

**Hypothesis 3c.** Individual relationship-building was regressed onto interest in future interaction with negotiation condition as a moderator. Condition did not have a

significant main effect on interest in future interaction ( $\beta = 0.34$ ,  $SE = 0.30$ ,  $p = 0.266$ ). These results fail to support Hypothesis 3c. Taken together, these results indicate negotiation condition did not significantly change relationships between actor relationship-building and partner subjective value perceptions.

#### ***Hypothesis 4***

The same series of multilevel models used to test Hypothesis 3 were used to understand interaction effects of condition in Hypothesis 4. The results of these models are presented in Table 5.

**Hypothesis 4a.** The interaction of negotiation condition and actor relationship-building on partner perceptions of trustworthiness was not significant ( $\beta = -0.007$ ,  $SE = 0.030$ ,  $p = 0.830$ ). In other words, negotiation condition and the actor's relationship-building did not significantly influence how trustworthy the partner perceived the actor to be. The results fail to support Hypothesis 4a.

**Hypothesis 4b.** The interaction of negotiation condition and actor relationship-building on partner perceptions of rapport was not significant ( $\beta = 0.013$ ,  $SE = 0.034$ ,  $p = 0.712$ ). These results fail to support Hypothesis 4b.

**Hypothesis 4c.** The interaction of negotiation condition and actor relationship-building on partner's interest in future interaction was not significant ( $\beta = 0.019$ ,  $SE = 0.046$ ,  $p = 0.688$ ). These results fail to support Hypothesis 4c. Taken together, these results indicate negotiation condition and an individual's relationship-building did not significantly influence partner's subjective value perceptions.

## Discussion

The hypotheses in this study were unsupported by this data. First, total relationship-building did not significantly relate to dyadic perceptions of trustworthiness, rapport, or interest in future interaction. For Hypothesis 2, actor relationship-building did not significantly predict partner subjective values, but based on the direction of the estimate, actor relationship-building significantly and negatively related to the actor's perception of their counterpart's trustworthiness. In other words, results lean toward the possibility that as the actor engaged in more relationship-building, they perceived their partner to be less trustworthy. This relationship was in an unexpected direction and would suggest that the frequency of relationship-building language may not have been key to perceptions of subjective value. Additionally, the e-negotiation or FTF condition did not significantly impact the three subjective values, and the interaction of condition with relationship building did not significantly predict the three subjective values for the actor nor the partner.

There are many explanations for the lack of support for the hypotheses in this study. Past studies suggest that there should be positive and moderate bivariate relationships between relationship building and subjective values (Curhan & Brown, 2011; de Dreu et al., 2000; Purdy et al., 2000). In this study, individual and total relationship building had nonsignificant relationships with the three subjective value outcomes. Because of the historical evidence that relationship building relates positively to subjective value, it is unlikely that relationship building in this study was unrelated to the three outcomes. However, some explanations for the lack of findings could be in how relationship building was operationalized, a potential reciprocal expectation of

relationship building by negotiators, and the use of deception or negative behaviors that may have overshadowed the positive effects of relationship-building.

Non-verbal and paraverbal indicators of relationship building were not measured in this study due to the absence of these cues in e-negotiation. It is possible that in the FTF condition, non-verbal and paraverbal cues may have contributed more to relationship building than solely language. Relationship building could have also been measured in additional ways. For example, additional indicators of relationship building, such as humor, could have been an additional type of relationship-building statement. Humor was not coded in this study due to the challenges of recognizing humor in written transcripts across negotiation mediums. Relationship building was measured by capturing the frequency of relationship-building statements across negotiation partners. Another way to operationalize relationship building would have been to create a proportion of relationship-building statements across total words in negotiation transcripts to account for both the total time it took to negotiate and the proportion of relationship-building words to all words in each negotiation. This would follow a similar procedure to Hine and colleagues' (2009) treatment of agreeable language in which they categorized the proportion of positive to negative language in negotiations. Lastly, it is possible that different types of relationship-building language have different impact. Perhaps more weight could have been given to certain relationship-building statements that may be more important to subjective value than other statements. For example, indicating care for the counterpart is likely to contribute more to subjective value than asking questions. In this research, questions were one of the most frequently coded relationship-building statements. All questions were given the same weight though they may not have

contributed equally to relationship building; some types of questions are important for discovering counterpart preferences, while different types of questions may build trust and rapport. Nuanced measurement of relationship-building may yield more insight into negotiators' perceptions of subjective value.

The unexpected and significant negative relationship between actor relationship building and actor perceptions of their counterpart's trustworthiness may also provide insight into negotiators' intent and expectations when engaging in relationship building. As negotiators engaged in more relationship building, they perceived their counterpart to be less trustworthy. This may suggest that negotiators use relationship building as a strategic tactic to enhance cooperation, and thus their own satisfaction with the negotiation outcome, but if these behaviors are not reciprocated by the counterpart, the negotiator may be less satisfied and have lower subjective value perceptions after the negotiation. Considering negotiator intent and expectations could provide a promising avenue for better understanding subjective value in negotiations.

A final explanation for relationship building failing to predict subjective values could be in either party's use of deception or negative behavior that may have attenuated the relationship. When a party finds that their counterpart has been deceptive, the deceived party is more likely to punish their counterpart compared to when deception was not perceived; in this case, both negotiators were more likely to use deception in the future and had lower joint outcomes (Boles et al., 2000; Shapiro & Bies, 1994). Additionally, when negotiators use deception, their counterparts rate them as less trustworthy and less trustful, and the counterparts are less willing to work with the other

party in the future (Boles et al., 2000; Tinsley et al., 2002). Therefore, when deception or negative behavior is perceived by the counterpart, subjective values are impacted.

The absence of differences between the FTF or e-negotiation conditions was also unexpected. Mean subjective value outcomes were all higher in the e-negotiation condition than the FTF condition. One explanation for this could be that this study relied on an undergraduate student sample; studies have shown that young adults prefer online communication with unknown individuals compared to middle and late adult age groups (Thayer & Ray, 2006). Because participants were “technology natives” (those raised with online technology and social media), they may have had a preference to negotiate in the virtual condition compared to FTF. SIP theory (Walther, 1992) would support this claim, in which individuals can create meaningful relationships over computer-based interactions. Still, much is unknown on how individual differences like this impact technology use and influence negotiation outcomes across different negotiation mediums.

Although the hypotheses in this study were unsupported, this research still contributes to the negotiation literature. The unexpected direction of relationship-building language and subjective values suggests that solely written or spoken language may not contribute to the bulk of subjective value. Future research should consider how nonverbal and paraverbal relationship-building cues may differ in eliciting higher subjective values compared to solely written or spoken language. Second, participants in this study indicated higher mean subjective value outcomes in the e-negotiation condition compared

to the FTF condition. Future research may consider how age relates to preferences for specific negotiation mediums and how this contributes to subjective value perceptions.

The findings are important to consider in light of limitations to this study. Because of the cross-sectional design of the study, causal relationships cannot be assumed between relationship building and subjective value perceptions. A longitudinal, multi-negotiation study may provide a better basis for understanding the direction of influence between negotiation condition, relationship-building and subjective value outcomes. Another limitation of this study is the sample size. The study was adequately powered to detect actor effects but required 159 dyads to adequately detect partner effects. Many relationships were close to reaching marginal significance; thus, a larger sample size would likely result in better detection of actor-partner effects.

Lastly, the sample consisted of undergraduate students receiving class credit or a paid incentive to participate in the study. This sample was specifically chosen because they were not experienced negotiators and would be more comparable to each other on this factor. Having negotiation experience has been found to lead to different negotiation outcomes (Mazei et al. 2015). Questions still remain on how negotiation experience and technology experience might play a role.

As the e-negotiation medium becomes more prevalent, this research can offer value regarding the interplay between negotiation condition, relationship-building, and subjective values in negotiation. Future research can explore the intent behind relationship-building in negotiations and how this relates to the negotiator's own subjective value perceptions. Because this study took place before the COVID-19 pandemic, the effect of negotiation medium may be different than if the study was done

at the present time. FTF negotiation may look different in the context of infection concerns and e-negotiation may also look different now that virtual work is much more prevalent, and future research would benefit from exploring relationships across these “new” conditions.

Research has shown mixed outcomes for computer-mediated negotiation (Thompson et al., 2010). Still, with the advent of the new remote workplace, workers will not be able to avoid e-negotiation. There are several variables that may affect the relationship between the negotiation medium and success in a negotiation, and it is critical to understand how patterns of behavior relate to negotiation outcomes when communicating through technology. As communication becomes increasingly reliant on the virtual medium, organizational research can benefit by exploring how individuals can strategize and build relationships in the e-negotiation format to drive different objectives, allocate important resources, and facilitate workplace outcomes.

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### Appendix A: Relationship Building Codebook

Relationship-building behavior	General Examples
Greetings	“Hello” “Nice to meet you” “Good afternoon”
Questions	“How are you today?” “Do you agree with me?” “What do you think?”
Acknowledgement	“I hope you’re well.” “Have a good day.” “It’s almost the weekend.”
Assent/Agreement	“Yup” “I totally agree.” “Sure” *Don’t include solely “yes” unless it is used in a way that is not just confirming an answer but is used to agree with the statement
Concessions	“That is a good point.” “Could we meet in the middle?”
Small Talk	“I hope you’re well.” “Have a good day.” “It’s almost the weekend.”
Colloquial Speech	“Yup” “Sure thing!”
Polite Speech	“Nice work” “If possible, I would like to...” “Perfect”
Indicating care or concern for counterpart	“I do not want one of us to leave this negotiation dissatisfied” “This is in your best interest”

### **Appendix B: Post-Negotiation Trustworthiness Measure**

Trustworthiness was measured using 19 items. A Likert Scale (1 – 7) was used to measure agreement with anchors Disagree Strongly (1) to Agree Strongly (7).

- My counterpart was very capable in negotiating
- My counterpart was knowledgeable about negotiating
- I felt very confident about my counterpart's negotiation skills
- My counterpart was well qualified with respect to negotiating
- My counterpart was very concerned about my welfare
- My needs and desires were very important to my counterpart
- My counterpart did NOT knowingly do anything to hurt me
- My counterpart really looked out for what is important to me
- My counterpart went out of his/her way to help me
- My counterpart had a strong sense of justice
- I never had to wonder whether my counterpart would stick to his/her word
- My counterpart tried hard to be fair in dealings with me
- My counterpart 's actions and behaviors were NOT very consistent
- I liked my counterpart's values
- Sound principles seem to have guided my counterpart's behavior
- My counterpart was open about his/her motivess and interests during the negotiation
- My counterpart shared her/his feelings during the negotiation
- My counterpart shared relevant information during the negotiation
- I always knew what my counterpart felt and thought during the negotiation

### Appendix C: Rapport Measure

Rapport was measured using 8 items. A Likert Scale (1 – 7) was used to measure agreement.

Do you feel your counterpart(s) listened to your concerns?

1	2	3	4	5	6	7
Not at all			Moderately			Perfectly

Would you characterize the negotiation process as fair?

1	2	3	4	5	6	7
Not at all			Moderately			Perfectly

How satisfied are you with the ease (or difficulty) of reaching an agreement?

1	2	3	4	5	6	7
Not at all satisfied			Moderately satisfied			Perfectly satisfied

Did your counterpart(s) consider your wishes, opinions, or needs?

1	2	3	4	5	6	7
Not at all			Moderately			Perfectly

What kind of “overall” impression did your counterpart(s) make on you?

1	2	3	4	5	6	7
Extremely negative			Neither negative nor positive			Extremely positive

How satisfied are you with your relationship with your counterpart(s) as a result of this negotiation?

1	2	3	4	5	6	7
Not at all			Moderately			Perfectly

Did the negotiation make you trust your counterpart(s)?

1	2	3	4	5	6	7
Not at all			Moderately			Perfectly

Did the negotiation build a good foundation for a future relationship with your counterpart(s)?

1	2	3	4	5	6	7
Not at all			Moderately			Perfectly

### **Appendix D: Interest in Future Interaction Measure**

Interest in future interaction was measured using 4 items. A Likert Scale (1 – 7) was used to measure agreement with anchors Not at all (1) to Extremely (7). The last item used a 1-100 scale to measure agreement.

1. How interested would you be in working with your counterpart in the future?
2. If you were the project manager on a future work assignment, how likely would you be to ask your counterpart to be part of the project team?
3. Is your counterpart the type of person you like to work with?
4. Based upon your experience in this negotiation, to what degree are you willing to have future dealings (i.e., negotiations) with your counterpart? Please give your response on a scale of 1 to 100, with 1 being not at all and 100 being without hesitation.

## Appendix E: Consent Form

### ADULT CONSENT TO PARTICIPATE IN RESEARCH

#### STUDY ON PEOPLE'S PERCEPTIONS AND BEHAVIORS IN TWO-PERSON INTERACTIONS

**Principal Investigator:** Alice F. Stuhlmacher, Ph.D.

**Institution:** DePaul University, Chicago, Illinois, USA

**Department (School, College):** Psychology Department, College of Science and Health

**Collaborators:** Jens Mazei, University of Muenster, Germany

#### What is the purpose of this research?

We are asking you to be in a research study because we are trying to learn more about people's perceptions and behaviors in two-person interactions, particularly those that might occur in negotiation. This study is being conducted by Dr. Alice Stuhlmacher at DePaul. There may be other people on the research team assisting with the study and data collection.

We hope to include about 260 people in the research.

#### Why are you being asked to be in the research?

You are invited to participate in this study because you engage in interactions with other people regularly, are likely to negotiate at various times in the future, and are a fluent English speaker and reader. You must be age 18 or older to be in this study. This study is not approved for the enrollment of people under the age of 18.

#### What is involved in being in the research study?

If you agree to be in this study, being in the research involves engaging in a negotiation as a specific type of interaction. We are interested in people's behavior and how they perceive such situations.

This is the procedure for the study.

- First, you will read detailed instructions and information concerning the negotiation and your priorities.
- After this, you will receive a questionnaire on your plans and expectations for the negotiation.
- Then you will negotiate with your counterpart. Given that the aim of this research is to examine how people behave in such interactions, your negotiation will be recorded in order to get an accurate record of what was said.

- Finally, you will receive another questionnaire on your experiences from the negotiation.

Importantly, all data in this study are confidential. While we will need your signature at the end of the experiment when you received payment for your participation, your name will not be stored in a way that can be linked to the data. Furthermore, all data will only be used for research purposes.

**How much time will this take?**

This study will take approximately 60 minutes to complete.

**Are there any risks involved in participating in this study?**

Being in this study does not involve any risks other than what you would encounter in daily life. As in your daily interactions, you may feel unsure about the best course of action in negotiating or uncomfortable about answering certain questions. You do not have to answer any question you do not want to.

**Are there any benefits to participating in this study?**

You will not personally benefit from being in this study.

We hope that what we learn will help other researchers, negotiators, employees and policy makers in improving the quality of interactions.

**Is there any kind of payment, reimbursement or credit for being in this study?**

You will receive \$8 cash for your participation. If you do not complete the study, we are unable to provide payment. Upon completing the study, you will need to sign your name to show that you received the money and your name will **not** be linked to the data.

**Can you decide not to participate?**

Your participation is voluntary, which means you can choose not to participate. There will be no negative consequences, penalties, or loss of benefits if you decide not to participate or change your mind later and withdraw from the research after you begin participating. Your decision whether or not to be in the research will not affect your standing with DePaul University.

**Who will see my study information and how will the confidentiality of the information collected for the research be protected?**

The research records will be kept and stored securely. Your information will be combined with information from other people taking part in the study. When we write about the study or publish a paper to share the research with other researchers, we will write about the combined information we have gathered. We will not include your name or any information that will directly identify you. We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. However, some people might review or copy our records that may identify you in order to make sure we are following the required rules, laws, and regulations. For example, the DePaul University Institutional Review Board, *or* the funding agency for the research, the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG) may want to audit the files. No names will be stored with the conversations. The records of the interaction will be stored in a locked office on a password protected computer belonging to Dr. Alice Stuhlmacher for no more than 1 year, and that following the removal of all identifying information the data will be archived indefinitely.

**Who should be contacted for more information about the research?**

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions, suggestions, concerns, or complaints about the study or you want to get additional information or provide input about this research, you can contact the researcher, Dr. Stuhlmacher, [astuhlma@depaul.edu](mailto:astuhlma@depaul.edu), 773-325-2050 in the Psychology department of DePaul University.

This research has been reviewed and approved by the DePaul Institutional Review Board (IRB). If you have questions about your rights as a research subject you may contact Susan Loess-Perez, DePaul University's Director of Research Compliance, in the Office of Research Services at 312-362-7593 or by email at [sloesspe@depaul.edu](mailto:sloesspe@depaul.edu).

You may also contact DePaul's Office of Research Services if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.

*You will be given a copy of this information to keep for your records.*

**Statement of Consent from the Subject:**

I have read the above information. I have had all my questions and concerns answered. By signing below, I indicate my consent to be in the research.

Signature: \_\_\_\_\_

Printed name: \_\_\_\_\_

Date: \_\_\_\_\_

## **Appendix F: Simulated Negotiation Instructions**

### **RiverBend Development Negotiation**

#### **Real Estate Developer**

You are a chief real estate developer preparing for an upcoming negotiation with a chief city planner. You hope to resolve the three remaining issues that had stalled the approval of “RiverBend”, a residential community proposed for the city’s “Old Town”, so that construction could soon begin.

#### **RiverBend**

You are working as a chief real estate developer for a real estate development and property management company, which owned a lot of the property in Old Town. You are interested in turning Old Town into a residential community containing a combination of condominiums and rental units. “RiverBend”, as the project was called, was designed to include a small marina also. The local media had tentatively endorsed the proposed development.

You have recently completed a similar development, called Miraloma Pointe, in a nearby town. After a shaky beginning, Miraloma Pointe now seems to be doing well. You think that RiverBend is just the type of development that could generate much needed new business.

The past decade had not been kind to the real estate business. In the past, interest in real estate developing was high, as were the profits. A lot of growth was taking place in the cities nearby, and you could boast of a dozen medium or large-scale projects in various stages of planning or construction such as the Divisadero Center, or the award winning Latimer Towers. Not only were the buildings full (thus generating large rents or management fees), but the demand for more construction was high. It seemed that everyone wanted to live in one of your buildings.

Unfortunately, and suddenly (as it appeared to you in retrospect), everything came to a standstill. Not only did new urban construction slow down, but also people and companies started leaving the cities for other states or the less expensive suburbs. The opening of the interstate highway west of the city, instead of bringing people to the city, seemed to have the opposite effect. Bedroom communities sprang up overnight along the interstate corridor.

Not only do you find suburban tract houses and shopping malls aesthetically displeasing, you knew they represented a loss to your business. As demand for urban living had dropped, so had rents, sales, and new construction.

After surviving some lean years, you are now poised to take advantage of many young professionals’ renewed interest in living and working in the city. That is why you are excited about RiverBend.

But you know that city planners, although welcoming new projects in the area, are also eager to seek concessions from a real estate developer before agreeing to pursue a project.

### **The "Old Town"-Discussions**

As you review the discussions with the city planners, it appears that four issues still need to be resolved with the chief planner for the city:

**(1) City Financing:** Government financing was almost always less expensive for a project such as RiverBend than financing by banks or other commercial lenders. Also, because of your current financial condition, you do not expect to still qualify for the "preferred customer" rate that you had obtained from most banks in the past.

**(2) Retail Space:** The square-footage rental value of the rental space that had been included at previous projects was greater than the residential square-footage value. You are thus willing to increase retail space at River Bend.

**(3) Open Space:** Urban residential developments are more and more frequently committing a percentage of their real estate to an open area, accessible to the public as well as the residents. Generally the open space would be nicely landscaped and lighted, and it would often include park benches and paths. You, however, view open space as wasted space; i.e., space that you would be unable to build on.

**(4) Height:** People are almost always willing to pay an increased sales price or rent to be higher up. You know that this would be especially true at River Bend with a westward view over the river of the city and beyond.

You considered alternative resolutions for each of the issues and thought about their importance. In order to understand these feelings better, you assigned relative points to each alternative (Exhibit 1, see next page) and noted the highest and lowest attainable values were 900 and 0, respectively. Also, you determined that 350 was the value of a no deal in this negotiation; that is, you would rather walk away from the negotiation than settle for a deal worth less than 350 points.

### Exhibit 1: Your Payoff Schedule

*Confidential – not to be disclosed to your counterpart*

City financing	Points	Open space	Points
\$500,000	0	30%	0
\$625,000	60	25%	15
\$750,000	120	20%	30
\$875,000	180	15%	45
\$1,000,000	240	10%	60
Retail space	Points	Height	Points
0 sq. ft.	0	2 stories	0
1500 sq. ft.	100	3 stories	50
3000 sq. ft.	200	4 stories	100
4500 sq. ft.	300	5 stories	150
6000 sq. ft.	400	6 stories	200

#### **Important information:**

Please note that it is not possible to agree on alternatives other than those described in the payoff schedule. To give an example, it is not possible to agree on an amount of \$550,000 city financing.

Furthermore, please do not discuss or disclose any information related to your personal background (e.g., your age or your major) during the interaction. This ensures that interactions can be compared.

*Please inform your experimenter once you have read and understood your instructions.*

## **RiverBend Development Negotiation**

### **Chief City Planner**

You are a chief city planner preparing for an upcoming negotiation with a chief real estate developer. You hope to resolve the three remaining issues that had stalled the approval of “RiverBend”, a residential community proposed for the city’s “Old Town”, so that construction could soon begin.

### **River Bend**

You are working as a chief city planner for a larger city in the Midwest. Old Town was the historic district along the east bank of the Green River, which had formed the core of the original city’s settlement. A local real estate development and property management company owned a lot of the property in Old Town and is interested in turning Old Town into a residential community containing a combination of condominiums and rental units. “RiverBend”, as the project was called, was designed to include a small marina also. The local media had tentatively endorsed the proposed development.

A similar development called Miraloma Pointe, had been recently completed in a nearby town. After a shaky beginning, Miraloma Pointe now seems to be doing well. You think that RiverBend is just the type of development that could generate much needed new business.

The past decade had not been kind to the city. In the past, interest in the city was high, as were city revenues. A lot of growth was taking place in your city and the cities nearby, and the city could boast of a dozen medium or large-scale projects in various stages of planning or construction such as the Divisadero Center, or the award winning Latimer Towers. Not only were the buildings full (thus generating large property or sales tax revenues), but the demand for more construction was high. It seemed that everyone wanted to live in the city.

Unfortunately, and suddenly (as it appeared to you in retrospect), everything came to a standstill. Not only did new urban construction slow down, but also people and companies started leaving the cities for other states or the less expensive suburbs. The opening of the interstate highway west of the city, instead of bringing people to the city, seemed to have the opposite effect. Bedroom communities sprang up overnight along the interstate corridor.

Not only did you find suburban tract houses and shopping malls aesthetically displeasing, you knew they represented a loss of city revenue. As demand for urban living had dropped, so had rents, sales, and new construction.

After surviving some lean years, you are now poised to take advantage of many young professionals’ renewed interest in living and working in the city. That is why you are excited about RiverBend.

But you know that real estate developers, although interested in launching projects in the area, are also eager to seek concessions from a city planner before agreeing to pursue a project.

Page Break

### **The "Old Town"-Discussions**

As you reviewed the discussions with the real estate developers, it appears that four issues still need to be resolved with the chief real estate developer.

**(1) City Financing:** Government financing was almost always less expensive for a project such as RiverBend than financing by banks or other commercial lenders. Also, because of the city's current financial condition, you do not expect that you could lend as much financial support as you might have in the past.

**(2) Retail Space:** Some people were interested in the possibility of establishing a retail "center" at RiverBend. However, such a center would increase the traffic in the area so that people might be less willing to move to Old Town. You are thus willing to decrease retail space at River Bend.

**(3) Open Space:** Urban residential developments are more and more frequently committing a percentage of their real estate to an open area, accessible to the public as well as the residents. Generally the open space would be nicely landscaped and lighted, and it would often include park benches and paths. This action would be beneficial to a city, because city resources would not be used to develop or maintain the open space.

**(4) Height:** People are almost always willing to move to a city where they can live higher up. You know that this would be especially true at River Bend with a westward view over the river of the city and beyond.

You considered alternative resolutions for each of the issues and thought about their importance. In order to understand these feelings better, you assigned relative points to each alternative (Exhibit 1, see next page) and noted the highest and lowest attainable values were 900 and 0, respectively. Also, you determined that 350 was the value of a no deal in this negotiation; that is, you would rather walk away from the negotiation than settle for a deal worth less than 350 points.

Page Break

### Exhibit 1: Your Payoff Schedule

*Confidential – not to be disclosed to your counterpart*

City financing	Points	Open space	Points
\$500,000	240	30%	400
\$625,000	180	25%	300
\$750,000	120	20%	200
\$875,000	60	15%	100
\$1,000,000	0	10%	0
Retail space	Points	Height	Points
0 sq. ft.	60	2 stories	0
1500 sq. ft.	45	3 stories	50
3000 sq. ft.	30	4 stories	100
4500 sq. ft.	15	5 stories	150
6000 sq. ft.	0	6 stories	200

#### **Important information:**

Please note that it is not possible to agree on alternatives other than those described in the payoff schedule. To give an example, it is not possible to agree on an amount of \$550,000 city financing.

Furthermore, please do not discuss or disclose any information related to your personal background (e.g., your age or your major) during the interaction. This ensures that interactions can be compared.

*Please inform your experimenter once you have read and understood your instructions.*

## Appendix G: Pre-Negotiation Survey

Dear Participant,

In a few minutes you will negotiate with your counterpart **via a chat program on the computer**

Below are several questions concerning the upcoming negotiation. Please indicate the answer that most accurately reflects your opinion. Some of the questions are similar to one another; this is primarily to ensure the validity and reliability of the questionnaire. Simply answer each question independently, without reference to any of the other questions.

1. Regarding your plans for the upcoming negotiation: Please indicate ...  
 ... the ideal number of points you want to achieve in the negotiation (that is your goal)  
 ... the least number of points you are willing to accept before walking away from the negotiation at an impasse (that is your limit)

Please indicate on a 100-point scale (0 = no confidence, 100 = full confidence) your confidence that you can use the following tactics successfully in the following negotiation:

2. Persuade the other negotiator to make most of the concessions. \_\_\_\_\_ (0 to 100)
3. Convince the other negotiator to agree with me. \_\_\_\_\_ (0 to 100)
4. Gain the upper hand against the other negotiator \_\_\_\_\_ (0 to 100)
5. Prevent the other negotiator from exploiting your weaknesses. \_\_\_\_\_ (0 to 100)

Your opinion:

6. I am afraid that my counterpart will perceive me to be a pushy person.

7. I worry that my counterpart will punish me for being too demanding.

8. I always place the needs of others above my own.

**Disagree strongly**

**Agree strongly**

1	2	3	4	5	6	7
1	2	3	4	5	6	7
1	2	3	4	5	6	7

9. For me to be happy, I need others to be happy.	1	2	3	4	5	6	7
10. I have difficulty satisfying my own needs when they interfere with the needs of others.	1	2	3	4	5	6	7

.....TURN PAGE OVER →

These last questions concern your expectations about your counterpart in the upcoming negotiation.

	Disagree strongly				Agree strongly		
11. My counterpart will be very capable in negotiating.	1	2	3	4	5	6	7
12. My counterpart will be knowledgeable about negotiating.	1	2	3	4	5	6	7
13. I feel very confident about my counterpart's negotiation skills.	1	2	3	4	5	6	7
14. My counterpart is well qualified with respect to negotiating.	1	2	3	4	5	6	7
15. My counterpart will be very concerned about my welfare.	1	2	3	4	5	6	7
16. My needs and desires will be very important to my counterpart.	1	2	3	4	5	6	7
17. My counterpart <i>would not</i> knowingly do anything to hurt me.	1	2	3	4	5	6	7
18. My counterpart will really look out for what is important to me.	1	2	3	4	5	6	7
19. My counterpart will go out of his/her way to help me.	1	2	3	4	5	6	7
20. My counterpart will have a strong sense of justice.	1	2	3	4	5	6	7
21. I <i>will not</i> wonder whether my counterpart will stick to his/her word.	1	2	3	4	5	6	7
22. My counterpart will try hard to be fair in dealings with me.	1	2	3	4	5	6	7
23. My counterpart's actions and behaviors <i>will not</i> be very consistent.	1	2	3	4	5	6	7
24. I will like my counterpart's values.	1	2	3	4	5	6	7

25. Sound principles will guide my counterpart's behavior.	1	2	3	4	5	6	7
26. My counterpart will be open about her/his motives and interests during the negotiation.	1	2	3	4	5	6	7
27. My counterpart will share relevant information during the negotiation.	1	2	3	4	5	6	7
28. I will always know what my counterpart thinks and feels during negotiation.	1	2	3	4	5	6	7

**29. I will negotiate with my counterpart (mark one):**  Via computer  Face-to-face