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## Gender Role Congruity in Negotiation: The Impact of Task Framing and Communication Mode

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Gender Role Congruity in Negotiation: The Impact of Task Framing and  
Communication Mode

A Master's Thesis

Presented to

The Department of Psychology

DePaul University

By

Kaitlyn Rose Gallagher

May 9, 2018

**Thesis Committee**

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## Biography

The author was born in Mystic, Connecticut, November 19, 1992. She graduated from Robert E. Fitch Sr. High School in Groton, Connecticut in 2011. She received her Bachelor of Arts degrees in Psychology and Sociology with a concentration in Family Studies/Social Work from Wagner College in Staten Island, New York in 2015.

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## Abstract

Previous research has demonstrated that gender influences negotiation behavior and outcomes. Using role congruity theory, this study examined if the context of the negotiation, specifically the type of negotiation (integrative vs. distributive), minimized gender effects in choice of negotiation medium. The relationship between fear of backlash, anxiety, and self-efficacy on preference for negotiation medium (virtual vs. face-to-face) was also examined. This study used a 2 Gender: (Male, Female) x 2 Negotiation Type: (Distributive, Integrative) between-participants design with 206 undergraduate students from a voluntary research pool. Multiple logistic regression revealed a main effect of gender on negotiation medium, but no significant interaction of the negotiation approach on the choice of interaction mode and gender. Moderated regression revealed no significant main effects for fear of backlash or self-efficacy on the preference for virtual negotiations, but there was a significant main effect of anxiety on the preference for virtual negotiations. There was also a significant interaction with gender moderating the relationship between fear of backlash and preference for virtual negotiation, but not for the other variables of anxiety or self-efficacy. The implications of these findings are discussed.

## Introduction

Negotiations are an important means of resolving conflict and making decisions. In the workplace, negotiations are used for finalizing contracts, allocating resources, making decisions, and resolving differences of opinions. Walton and McKersie (1965) defined negotiation as the “deliberate interactions of two or more complex social units which are attempting to define or redefine the terms of their interdependence (p. 3).” Negotiations can occur both formally and informally under different contexts, such as the structure of the negotiation or the medium the negotiation occurs through. It appears that the negotiation processes and outcomes can differ based on individual differences, and specifically by gender (e.g., Amantullah & Morris, 2010; Bear & Babcock, 2012; Bowles, Babcock, & McGinn, 2005; Elfenbien, 2015; Mazei et al., 2015; Stuhlmacher & Linnabery, 2013). It is worthwhile to better understand these gender differences for their own sake, as well as their impact in workplace discrimination and the gender pay gap.

The gender pay gap refers to the difference in average earning between men and women employees. The gender pay gap is a continuing international problem which seems unlikely to vanish at its current rate of convergence (Blau & Kahn, 2007; Khoreva, 2011). The gender pay gap has been explained as falling into two categories: macro and micro (Auster, 1989). The macro level proposes that women are seen as a homogeneous group, while the micro level focuses on the contextual factors that lead to biases (Auster, 1989; Khoreva, 2011). The slowdown of the gender pay gap convergence (Blau & Kahn, 2006; Blau & Kahn,

2007) has been explained by numerous factors including changes in gender differences in unmeasured characteristics and in labor market discrimination (Blau & Kahn, 2006). Individual factors such as pay expectations, gender role orientation, and perceived pay fairness continue to facilitate the perception of the gender pay gap (Khoreva, 2011). These micro level contextual factors are therefore important to research to accelerate the gender pay gap convergence. Investigating the negotiation context, which has the potential to create a situation which can either eliminate or encourage inequalities between individuals, is a desirable contribution to the understanding of why the gender pay gap still occurs. If a situation exists which minimizes gender effects in negotiations, this would guide an understanding of remedies and interventions organizations could implement to create equal opportunities for employees. This paper aims to evaluate the creation of such a situation through the context of the negotiation, using the understanding of role congruity theory (Eagly & Karau, 2002) as its foundation.

This research aimed to examine the relationship between negotiation context and individual differences. Specifically, I first review the different types of negotiations. Then, the impact of individual differences, specifically gender, on negotiations are discussed. Finally, the relationship between negotiation context and gender are discussed. These findings are then be discussed in the context of the gender pay gap convergence.

## Approaches to Negotiations

Two common approaches to workplace negotiations are labeled distributive (also known as win – lose) and integrative (or win – win) negotiations. In a distributive negotiation, the interests of the negotiators are negatively correlated, such that a positive outcome for one party is associated with a decrease for the other party involved (Walter & McKersie, 1965). Behaviors from a distributive frame point can be classified as *claiming value* from a fixed pie perspective (Brett, 2007). Examples of claiming value behaviors include making single issue offers, referring to the “bottom line”, referring to a negotiator’s power, and using threats (Weingart, Olekalns, & Smith, 2006). Integrative negotiations hold the possibility of joint gain from the negotiation, where both parties can find a positive solution. Integrative framing contains behaviors that *create value* by expanding the pie of resources (Brett, 2007). Behaviors that exemplify creating value include making multi-issue offers, making positive comments, and suggesting compromise (Weingart et al., 2006). It is common for individuals to enter a negotiation with cognitive biases, such as incompatibility error and fixed sum error, in which both parties believe that their interests, and importance of interests are incompatible (Thompson & Hastie, 1990; Thompson, Neal, & Sinaceur, 2004).

Negotiations can occur in many different ways and no longer constrained to face-to-face interactions, with the opportunity to use technology available daily (Nadler & Shestowsky, 2006). Negotiations take place virtually (through email, text, telephone, or video), as well as face-to-face. The communication medium

affects the negotiation process and outcomes through the properties of synchronicity, communication channels, and efficacy (McGinn & Croson, 2004). Social awareness in negotiation is enhanced by high efficacy, synchronous communication with multiple communication channels, such as through face-to-face and videoconferencing mediums, which leads to a shared understanding of the negotiation process (McGinn & Croson, 2004). Media-rich communication are those that have display cues, tones, facial expressions, and body language, such as face-to-face and videoconferencing. Media-poor communication (e.g. telephone and email) obstructs the transfer of cues and expressions. Media-rich communication, as opposed to media-poor communication, are believed to encourage collaborative behaviors during negotiations than poorer media, such as over the telephone or computer-mediated written communications (Purdy & Nye, 2000). Purdy and Nye (2000) suggest that high media richness reduces the required bargaining time and increases outcome satisfaction and the desire for future negotiation interactions. When media-poor communication is used in negotiations, individuals can experience the other party to be more distant and unknown, compared to face-to-face negotiations (Nadler & Shestowsky, 2006).

When the negotiating parties have no prior relationship, contact, or shared identity, the communication medium used for negotiating can exert a strong influence on the perception of one's negotiating counterpart and the subsequent outcome of the negotiation. This is prevalent in virtual communication, given the reduction and/or absence of visual information and non-verbal cues (Nadler & Shestowsky, 2006). It is also possible that in some situations virtual

communication neutralizes cues of status and composure, creating a degree of equality in negotiations (Wachter, 1999). This research hopes to examine this potential effect.

### **Individual Differences in Negotiations**

**Gender.** Overall, women have been found to negotiate slightly worse economic outcomes than men (Mazei et al., 2015; Stuhlmacher & Walters, 1999). Because negotiations provide resources, these negotiations may impact gender equality in the workplace. Role congruity theory (Eagly & Karau, 2002) has been used to explain why these gender differences occur in a negotiation (for a review see Stuhlmacher & Linnabery, 2013). Agentic qualities like assertiveness, confidence, and dominance are typically expected of an individual in a negotiating role, but are incongruent with the traditional female gender role. Because of this role incongruity, prejudice against women in negotiator roles leads to women being perceived as less favorable in the role, or even achieving less economic success than men. As stated by Stuhlmacher and Linnabery (2013), this role incongruity does not mean that women are incapable of being good negotiators, or that communal attributes are not important in negotiations. This role incongruity instead implies that there are particular challenges in negotiations for women to overcome.

Female negotiators risk an unfavorable evaluation for being inconsistent with what is anticipated. This backlash is reduced when women negotiate on behalf of someone else, as opposed to negotiating for themselves, because it is more consistent with the traditional female gender role (Amanatullah & Morris,

2010; Bowles, Babcock, & Lai, 2007). When negotiating for oneself, the negotiation outcomes favored men, but the difference was no longer present when negotiators were acting on the behalf of, or advocating for, a single individual. Indeed, meta-analytic research finds that women are more successful than men when negotiating on behalf of another (Mazei et al., 2015).

The framing of a negotiation also affects gendered outcomes. Women were more likely to initiate a negotiation when they were cued to “ask” instead of to “negotiate” (Small, Gelfand, Babcock, & Gettman, 2007). Small and colleagues (2007) argue that this is because the language of asking is more consistent with a lower social role, and a gesture of politeness. Additionally, when the task was framed as more congruent with their social role based on the topic of the negotiation, women were more successful negotiators (Bear, 2011; Bear & Babcock, 2012). In a lab-based experiment, Bear (2011) found an interaction between gender and negotiation topic. Participants were assigned to read a scenario, the topic being either masculine (compensation) or feminine (workplace lactation room), in which someone expressed a desire to negotiate. The participants could choose to either negotiate with the individual themselves or avoid it by passing it off to someone else. Men were significantly more likely to avoid a negotiation when the topic concerned a lactation room than when it concerned compensation. Additionally, women were significantly more likely to avoid compensation negotiation compared to the lactation room condition. Similarly, men outperformed women in a negotiation task when the topic was masculine of nature (e.g., motorcycle headlights), but the gender difference was

eliminated when the topic was feminine (e.g., jewelry beads) (Bear & Babcock, 2012). When the topic was compensation, men were found to indicate a higher likelihood of active negotiation than women (Kaman & Hartel, 1994).

In a negotiation, individuals are expected to be aggressive, egotistic, and focused the outcomes; this fits into the agentic masculine gender role. It has been suggested that in a negotiation, women will apply more cooperative strategies, while men will apply more competitive strategies (Miles & LaSalle, 2009; Rubin & Brown, 1975). A meta-analysis (Walters, Stuhlmacher, & Meyer, 1998) found that women were slightly more cooperative than men in negotiations, but the effect reversed in certain situations. One of these situations was during non-face-to-face negotiations. In these situations, women displayed more competitive behaviors than men. This occurred when the interaction only transpired through a declaration of one's choices and communication was limited, reducing the need to fit perceptions of cooperativeness. This hidden identity in virtual negotiations is one of the example factors outlined by Stuhlmacher and Linnabery (2013) that could potentially increase negotiator role and gender role congruity for women.

**Gender and approach to negotiations.** The question remains as to how gender impacts integrative negotiations. In an integrative distribution, higher joint outcomes are achieved through communications and prosocial motives which fit into the communal roles. Thompson and DeHarpport (1998) found that when friends perceived a negotiation task as a problem-solving situation and were similar in communal orientation, they were more likely to make the most of joint interests. Participants were assigned to either a problem-solving condition or a

bargaining condition. Participants who viewed the task as a joint problem-solving situation, as opposed to those who viewed the task as a bargaining situation, expected the interaction to be more cooperative, less competitive, and more fair.

**Gender and virtual negotiations.** In a virtual environment, social roles are less prescribed, providing a weak situation with high ambiguity for behavioral expectations (Stuhlmacher, Citera, & Willis, 2007). In a written virtual negotiation, there are fewer cues (voice hesitation, tone, eye contact, body language, facial expression, etc.), which allows for female roles to be less salient and the negotiator role to be more salient, which permits women to be more aggressive than in face-to-face negotiations (Stuhlmacher et al., 2007; Stuhlmacher & Linnabery, 2013). Virtual negotiations also equalize pre-negotiation power differences (Turnbull, Strickland, & Shaver, 1976).

Stuhlmacher and Reich (2017) found a gender difference in the behavioral outcome of choosing a negotiation medium, of face-to-face or a chat program on a computer. Participants were told that they were going to negotiate a job offer with an individual in a different room. Participants were given instructions in preparing for a traditional distributive salary negotiation. After reading over the task, they were asked if they would like the negotiation to be face-to-face or over a chat program on a computer. Women were 5.28 times more likely than men to choose the chat program than face-to-face for their negotiation. This finding found a gender difference in the behavior of individuals as they approach a negotiation.

This paper build offs of the findings of Stuhlmacher and Reich to test how the negotiation situation will change the individuals' choice of negotiation

medium. It was expected that women are more likely than men to choose to negotiate virtually in a distributive negotiation than an integrative negotiation. Virtual negotiations make the female gender role less salient (Stuhlmacher & Linnabery, 2013), and could be seen as an advantage to women as they enter a traditional distributive negotiation. However, integrative negotiations are aligned more with the female gender role. Therefore, framing a negotiation as integrative would be congruent for women, and provide a situation where women are more likely to choose face-to-face instead of virtual negotiation.

### **Explanatory Variables**

**Fear of Backlash.** One factor that impacts gender differences in negotiation outcomes is fear of backlash. The effects of backlash are defined as “social and economic reprisals for behaving counter stereotypically” (Rudman, 1998). For women, backlash can occur when they present themselves with agency and authority, violating their communal gender role. This puts women in a dilemma where they must choose to avoid backlash by staying in line with their gender roles and be liked but not respected, or display agentic qualities that match job-specific demands and be respected but potentially not liked (Rudman & Phelan, 2008). In a lab-based experiment testing the status incongruity hypothesis, women who were high on agency in leadership positions suffered the most sabotage compared to all other targets (Rudman, Moss-Racusin, Phelan, & Nauts, 2012). Initiating a negotiation also has a greater social cost for women (as compared to men), where there is less interest for working with a woman whom

initiated a negotiation than for a woman whom did not initiate a negotiation (Bowles et al., 2007).

Therefore, in a traditional distributive negotiation, women may expect more backlash for violating their gender stereotype and negotiating solely for themselves. In a negotiation that is framed as integrative, women may expect less backlash because they are attempting to reach a deal which is mutually beneficial and shows concern for others, which is in line with their gender role. The fear of backlash may therefore change the behavior of a woman choosing her negotiation medium. If backlash is expected because of the distributive negotiation, women may be more likely to choose to negotiate virtually where their social role is less prescribed. If backlash is not expected because of an integrative negotiation, gender will moderate the impact of fear of backlash and women may be more likely to choose face-to-face negotiation because the female gender role can be beneficial in this situation.

**Anxiety.** A second individual difference that influences negotiations are feelings of anxiety. Anxiety is a state of psychological arousal, which one experiences in response to a situation where the individual is uncertain about a novel situation, the potential for undesirable outcomes, and the inability to alter the course of events (Brooks & Schweitzer, 2011; Gray, 1991; Raghunathan & Pham, 1999). Anxious individuals have been found to be biased in favor of low-risk/low-reward options when it comes to decision making (Raghunathan & Pham, 1999). For example, when compared to a neutral emotional state, anxious negotiators had lower expectations, made lower first offers, responded to

counteroffers more quickly, and exited negotiations earlier (Brooks & Schweitzer, 2011). Additionally, consistent with the belief that women are more anxious in traditional negotiations, women (compared to men) are found to experience greater relief when their first offer is accepted, specifically in weak situations (Kray & Gelfand, 2009).

Anxious individuals may be more likely to choose to negotiate virtually to reduce some of the pressure from face-to-face negotiations. In a distributive negotiation, individuals may experience more anxiety, as it is consistent with the traditional bargaining view. Therefore, when individuals, specifically women, are presented with a distributive negotiation situation, it could result in higher anxiety because it is gender incongruent. In an integrative negotiation, individuals are instructed to work together to receive an ideal solution for both parties involved. This minimizes the potential for undesirable outcomes, and may therefore lead to lower anxiety. With this lower anxiety, individuals may be more likely to negotiate face-to-face, as the risk and pressure of the negotiation is now lower because of the situation.

**Negotiator Self-efficacy.** A third individual difference variable that influences negotiation is self-efficacy. Self-efficacy is the belief that one can succeed and reach his or her goal. Individuals with high negotiation self-efficacy were less affected by anxiety, moderating the effects on earlier exits from a negotiation, which results in lower economic outcomes (Brooks & Schweitzer, 2011). While a direct effect for self-efficacy on outcomes was not found, Sullivan, O'Connor, and Burris (2006) found a direct effect on negotiators'

behaviors, and an indirect effect on negotiation outcomes. Individuals with high distributive negotiator self-efficacy were more likely to use choose distributive tactics, such as claiming value by dividing fixed resources, aiming to make the other party make concessions, and collecting most of the resources, which lead to positive outcomes on distributive issues. Individuals with high integrative negotiator self-efficacy choose more integrative tactics, such as creating value by exchanging information about interests, packaging interests in a creative way, and rapport building, which lead to positive outcomes for integrative issues. Furthermore, negotiator self-efficacy had a strong influence on a negotiators' choice of tactics during the initial phase of a negotiation, which is a time when the negotiator is most anxious.

Self-efficacy is also impacted by the contextual ambiguity of the situation, when cues are either strong or weak and protocols are either known or unknown. Miles and LaSalle (2008) found that counterpart self-efficacy was strongly related to performance in negotiation situation with higher contextual ambiguity than in situations of lower contextual ambiguity. Therefore, when the context of the situation was weak and unclear, the perceived self-efficacy of the negotiating counterpart was more important in the negotiation. When the structure and/or context of a negotiation is unclear, individual differences begin to play a role in the performance of the negotiator and the overall outcome of the negotiation.

### **Rationale**

Previous research has shown that gender influences negotiation behavior and outcomes (e.g., Amantullah & Morris, 2010; Bear & Babcock, 2012; Bowles,

Babcock, & McGinn, 2005; Elfenbien, 2015; Mazei et al., 2015). Distributive negotiations tend to focus on claiming resources, while integrative negotiations focus on creating resources to achieve higher joint outcomes (Beersma & De Dreu, 2002; De Dreu et al., 2000; Giebels et al., 2000). If virtual negotiations reduce gender role pressures and expectations (Stuhlmacher et al., 2007; Stuhlmacher & Linnabery, 2013), it was expected that in a distributive negotiation, men will be more likely to choose face-to-face negotiation, while women would be more likely to choose virtual negotiations.

Previous research found that women who display agentic qualities as part of their job requirements experience backlash for doing so (Rudman & Phelan, 2008; Rudman et al., 2012). Distributive negotiations seem to require negotiators to be more aggressive and agentic, which causes women to fear potential backlash when entering a distributive negotiation. Therefore, it was expected that those who fear backlash would be more likely to choose virtual negotiations than face-to-face negotiation where their gender roles are more prescribed.

Anxiety has been found to influence the outcomes of negotiations and decision making (Brooks & Schweitzer, 2011; Raghunathan & Pham, 1999). Women have been found to be more anxious negotiators (Kray & Gelfand, 2009). Therefore, it was proposed that women with high anxiety would be more likely to choose virtual negotiations, which have been found to equalize pre-negotiation power differences (Turnbull, Strickland, & Shaver, 1976).

High negotiator self-efficacy has been found to moderate the effects of anxiety and have an effect on the outcome of a negotiation (Brooks & Schweitzer,

2011; Sullivan et al., 2006). Specifically, high distributive self-efficacy has led to positive outcomes on distributive issues and high integrative self-efficacy has led to positive outcomes on integrative issues (Sullivan et al., 2006). Given that distributive negotiations are more in line with agentic qualities, and integrative negotiations are more in line with communal qualities, it was proposed that self-efficacy would mediate an individual's choice of interaction mode.

### **Hypotheses**

**Hypothesis I.** There will be a main effect of gender on choice of negotiation interaction mode. Men will be more likely to pick face-to-face negotiations than women.

**Hypothesis II.** There will be an interaction of the negotiation approach on choice of interaction mode and gender with fewer women choosing face-to-face over virtual negotiation in distributively framed tasks than in integratively framed tasks.

**Hypothesis III.** More fear of backlash will be associated with stronger preference for virtual negotiations than face-to-face.

**Hypothesis IV.** More anxiety will be associated with more preference for virtual negotiations.

**Hypothesis V.** Negotiators with lower self-efficacy will be more likely to prefer virtual negotiations.

**Hypothesis VI.** Gender will moderate the relationship between fear of backlash and stronger preferences for virtual negotiations than face-to-face. The

relationship between fear of backlash and preferences for virtual negotiations is stronger for women than for men.

**Hypothesis VII.** Gender will moderate the relationship between anxiety and more preference for virtual negotiations. The relationship between anxiety and preference for virtual negotiations is stronger for women than for men.

**Hypothesis VIII.** Gender will moderate the relationship between self-efficacy and more preference for virtual negotiations. The relationship between self-efficacy and preference for virtual negotiations is stronger for women than for men.

## **Method**

### **Participants**

Participants were 206 undergraduate students from a voluntary research pool. This sample size was based on a medium effect size at power = .80 for a two-way ANOVA at  $\alpha = .05$  (Cohen, 1992). Participants were at least 18 years of age, with 102 female and 104 male participants.

### **Design**

This study used a 2 Gender: (Male, Female) x 2 Negotiation Type: (Distributive, Integrative) between-participants design. In the Distributive Condition, there were 51 male and 52 female participants. In the Integrative Condition, there were 53 male and 50 female participants.

### **Procedure**

Upon arrival to the experimental room, participants were greeted by the experimenter and were instructed that they were going to work with an individual

who is in a different room. All experimenters for this study were female. Participants were randomly assigned to a negotiation task (Integrative or Distributive) when they arrived according to a random number table (Appendix A). After completing informed consent procedures (Appendix B), participants read an instruction sheet for the experiment and were told by the experimenter that they were going to be participating in job offer negotiation. This study used the negotiation task from Stuhlmacher and Reich (2017). Past participants from Stuhlmacher and Reich were blocked from participating.

Half the participants received distributively framed instructions, while other participants received integratively framed instructions (see Appendix C). These instructions were taken as a variation from the problem-solving condition (integrative) and the bargaining condition (distributive) from Thompson and DeHarpport (1998).

Both task conditions began with the same prompt: “You have been hired for a new job, but you still need to work out the fine details of terms of employment with your hiring manager.” For the distributive condition, the second half of the instructions were the following: “Think of this task as a negotiation situation in which **you are trying to get what you want and must bargain for it.**” For the integrative condition, the following instructions were used for the second half: “Think of this task as a situation in which **you face a common problem and must work with the hiring manager to create a solution that works for both you and the company.**” The experimenter explained the preference payoff table to the participant and asked if they had any clarification

questions. To reinforce the manipulation, participants were asked to list three tactics they would use to meet this goal. The researcher also verbally repeated the goal of the negotiation to the participant to make sure they understand.

Next, participants filled out their goals for the negotiation (Appendix D), negotiator self-efficacy (Appendix E), and negotiator anxiety (Appendix F). Participants then were asked to choose between face-to-face or a text-based chat program for the experiment, and rated their preference for both negotiation mediums (Appendix G). Participants were then told that there are more topics to negotiate if there is enough time. Related to this potential second negotiation, participants were then given the second set of tasks (Appendix C), asked to list their tactics, goals (Appendix D), and preference for both negotiation mediums (Appendix G) again. This was aimed at providing a measure of reliability.

While the experimenter was seeming to set up for the negotiation by stepping out of the room to inform the hiring manager of the chosen negotiation medium, the participant filled out the control measures and demographic survey (Appendix H). Once the participant finished the measures, they were informed that no negotiation or interaction will occur. They then took a measure of relief/regret (Appendix I).

Participants were debriefed (Appendix J) and reasons for the deception were explained. Participants received 1.5 credit for research participation for a psychology course. The procedure took around 30-45 minutes for each participant to complete. Figure 1 provides a flow diagram of the experimental procedure.

## Measures

**Goals.** Participants stated their ideal number of points they wished to achieve (range 150 to 750) in the negotiation, the least number of points they were willing to accept in the negotiations (range 150 to 750), and a first offer for each category (see Appendix D).

**Fear of Backlash.** Fear of backlash was measured with two open-ended questions (Amanatullah & Morris, 2010), asking how much negotiators can reasonably ask for (see Appendix D). Items included: “How much (in total points value) do you think you can reasonably ask for without your counterpart perceiving you to be a pushy person?” and “How much (in total points value) do you think you can reasonably ask for without causing your counterpart to punish you for being too demanding?” The two items were averaged into a single measure for fear of backlash. To make this number more intuitive during analyses, the pole was reversed by subtracting each individual score from 900, which was the sum of the possible minimum and maximum answers for the fear of backlash items. Higher numbers therefore reflect more fear of backlash.

**Negotiator Self-efficacy.** The eight-item negotiator self-efficacy scale (Sullivan, O'Connor, & Burris, 2006) was used (see Appendix E). This measure has four items on integrative self-efficacy and four items on distributive self-efficacy. Each item is rated on a 100-point scale, where 0 = no confidence and 100 = full confidence, describing how confident the participant feels they are in using each tactic successfully in a given negotiation. Example items included: “Prevent the other negotiator from exploiting your weaknesses (distributive)”

“Find tradeoffs that benefit both parties (integrative)”. Self-efficacy was averaged into scores for integrative self-efficacy, distributive self-efficacy, and total self-efficacy.

**Negotiator Anxiety.** Negotiator anxiety was measured by four anxiety-related emotions and four neutral-related emotions (Brooks & Schweitzer, 2011). Participants rated (1= not strongly at all, 7 = very strongly) four anxiety emotions: anxious, apprehensive, worried, and nervous and four neutral emotions: neutral, indifferent, unemotional, and calm (see Appendix F). Anxiety was averaged into scores for anxious and neutral emotions.

**Negotiation Medium.** Preference for medium was measured in two ways: behavioral and self-report. Participants were asked to choose to negotiate either face-to-face or over a text-based chat program on a computer. Negotiation medium was coded as 0 for Face-to-Face, 1 for Virtual. A second measure of self-report on how strongly they prefer a text-based chat program or face-to-face as their medium of negotiation on a single item 7-point spectrum (1 = Face-to-Face, 7 = Virtual). This item was asked twice for reliability and the average of the two scores was used to increase variance. Participants were asked an open-ended question on why they chose either face-to-face or chat (see Appendix G).

**Demographics.** Formal negotiation experience was measured to control for negotiation experience on a 7-point scale (1 = no experience, 7 = I’m an expert) (Eflenbein, Curhan, Eisenkraft, Shirako, & Baccaro, 2008). Participants responded to one question on sex and race/ethnicity. Technology use was measured on a 7-point scale for text-messaging, emails, phone calls, video calls,

with 1 = rarely ever communicate this way and 7 = always communicate this way (see Appendix H). Gender was coded as 0 for Male, 1 for Female. Race/ethnicity was coded as 0 for White, 1 for Black/African American, 2 for American Indian/Alaskan Native, 3 for Asian/Pacific Islander, 4 for Latino/Hispanic/Spanish Origin, 5 for Biracial, and 6 for Other.

**Negotiator Relief/Regret.** Relief and regret (Kray & Gelfand, 2009) was measured upon finding out that there was not a real negotiation (Appendix I). The two items were on a 7-point scale (1 = no relief/regret, 7 = very relieved/regretful).

## Results

### Descriptive Analyses

Descriptive analyses were run for demographic variables (see Table 1). Table 2 provides a breakdown of the means and standard deviations of the variables of the main variables based on gender and condition. Pearson correlation coefficients between the variables of gender, method chosen, preference for negotiation medium, backlash, anxiety, and self-efficacy are provided in Table 3. Significant correlations were found between all of the variables. Aimed at providing a measure of reliability, preference for virtual negotiation was asked at two different time points. These two items were found to have a significant correlation ( $r(204) = 0.83, p < 0.01$ ), and to be internally consistent ( $\alpha = 0.91$ ), allowing us to confidently conclude an individual's preference for virtual negotiations. Additionally, method of negotiation was also found to have a significant correlation with both relief ( $r(204) = 0.40, p < 0.01$ ) and regret ( $r(204)$

= -0.23,  $p < 0.01$ ). Participants who chose virtual negotiation, compared to participants who chose face-to-face negotiations, were more relieved and less regretful upon finding out that there would not be a real negotiation.

### **Hypothesis Testing**

**Hypotheses I & II.** Multiple logistic regression was run in R to analyze hypotheses 1-2. Model 0 was the main effects model which examined the effect of the variables gender, fear of backlash, anxiety, and negotiator self-efficacy on the dichotomous dependent variable for choice of negotiation medium (Table 4).

Model 1 was the interaction effects model, which examined the interaction of gender on the variables of fear of backlash, anxiety, and negotiator self-efficacy on the dichotomous dependent variable for choice of negotiation medium (Table 5). An ANOVA was computed to compare Model 1 to Model 0 (Table 6) finding that Model 1 explained more variance above and beyond that of Model 0 ( $F(4,196) = 6.011, p = 0.198$ ). Therefore, the coefficients from Model 1 were used to analyze Hypotheses I-II.

Analyses revealed a main effect of gender on choice of interaction mode ( $\beta = 0.67, z(204) = 1.49, p = 0.137$ ), with men, compared to women, being more likely to pick face-to-face negotiations over virtual negotiations, supporting Hypothesis I. However, there was not a strong effect for the interaction of the negotiation approach on the choice of negotiation medium and gender ( $\beta = -0.14, z(204) = -0.22, p = 0.829$ ), leaving Hypothesis II unsupported.

As shown in Table 8 (see Table 7 for the probability estimates for the Main Effects Model 0), in the distributively framed negotiations, the probability

to choose to negotiate face-to-face was higher for males (65.12%), than compared to females (48.88%). In the integratively framed negotiations, the probability to choose to negotiate face-to-face was still higher for males (75.77%), than compared to females (61.57%). Given the effect for both the main effect of anxiety ( $\beta = 0.85$ ,  $z(204) = 2.67$ ,  $p = 0.008$ ), as well as the interaction of gender and anxiety ( $\beta = -0.78$ ,  $z(204) = -1.97$ ,  $p = 0.048$ ), Table 9 breaks down the probability estimates based on high/low anxiety. The probability of choosing to negotiate face-to-face was highest for males when they had low anxiety in both the distributively (73.92%) and integratively (82.61%) framed negotiations, as compared to high anxiety in the distributively (55.14%) and integratively (67.32%) framed negotiations. The probability of choosing to negotiate face-to-face was also highest for females when they had low anxiety in both the distributively (59.22%) and integratively (70.88%) framed negotiations, as compared to high anxiety in the distributively (38.64%) and integratively (51.34%) framed negotiations.

**Hypotheses III-VIII.** Moderated regression was run in R to analyze hypotheses 3-8, with the continuous variables of fear of backlash, anxiety, and negotiator self-efficacy centered. Model 0 was the main effects model which examined the effect of the variables gender, fear of backlash, anxiety, and negotiator self-efficacy on the dependent variable of preference for virtual negotiations (Table 10). Model 1 was the interaction effects model, which examined the interaction of gender on the variables of fear of backlash, anxiety, and negotiator self-efficacy on the dependent variable of preference for virtual

negotiations (Table 11). An ANOVA was computed to compare Model 1 to Model 0 (Table 12) finding that Model 1 significantly explained more variance above and beyond that of Model 0 ( $F(4,196) = 2.25, p = 0.065$ ). Therefore, the coefficients from Model 1 were used to analyze Hypotheses III-VIII.

Hypothesis III predicted that more fear of backlash leads to a stronger preference for virtual negotiations than face-to-face, was unsupported ( $\beta = 0.03, t(204) = 0.34, p = 0.732$ ). Hypothesis IV predicted that more anxiety leads to increased preference for virtual negotiation was found to be supported ( $\beta = 0.23, t(204) = 1.98, p = 0.049$ ). Hypothesis V predicted that negotiators with lower self-efficacy will prefer virtual negotiations, was unsupported ( $\beta = -0.16, t(204) = -1.34, p = 0.183$ ). Figure 2 depicts the overall model for Hypotheses III-VIII based on Model 1. As predicted, greater fear of backlash and greater anxiety had a positive relationship with preference for virtual negotiations while greater negotiator self-efficacy had a negative relationship with virtual negotiations.

Hypotheses VII-VIII include gender as a moderator for the variables fear of backlash, anxiety, and self-efficacy on the preference for virtual negotiations. Gender itself had a significant main effect on the preference for virtual negotiations ( $\beta = 0.52, t(204) = 2.76, p = 0.006$ ). Hypothesis VI predicted that gender would moderate the relationship between fear of backlash and stronger preferences for virtual negotiations than face-to-face. Specifically, it was predicted that the relationship between fear of backlash and preferences for virtual negotiations is stronger for women than for men. This relationship (see Figure 3) was supported such that women had a greater fear of backlash with a stronger

preference for virtual negotiations ( $\beta = 0.33$ ,  $t(204) = 2.46$ ,  $p = 0.015$ ). Hypothesis VII (see Figure 4) predicted that gender would moderate the relationship between anxiety and more preference for virtual negotiations was unsupported ( $\beta = -0.19$ ,  $t(204) = -1.27$ ,  $p = 0.204$ ). Hypothesis VIII (see Figure 5) predicted that gender would moderate the relationship between self-efficacy and more preference for virtual negotiations was also unsupported ( $\beta = 0.09$ ,  $t(204) = 0.64$ ,  $p = 0.525$ ).

### **Discussion**

This study investigated if the framing of a negotiation impacts an individual's choice of negotiation medium. Specifically, I examined if the gender difference in behaviors of individuals as they approach a negotiation found by Stuhlmacher and Reich (2017) could be mitigated based on the negotiation situation. Drawing on role congruity theory (Eagly & Karau, 2002), I theorized that framing a negotiation as integrative would be more congruent for women and provide a negotiation situation which aligns the negotiator role with the female gender role (Stuhlmacher & Linnabery, 2013).

This study found that there is a significant main effect for gender on both choice and preference for mode of negotiations. Consistent with the findings of Stuhlmacher and Reich (2017), women, compared to men, were more likely to choose to negotiate virtually over a text-based chat program rather than face-to-face. The framing of the negotiation as distributive or integrative did not impact this behavioral decision.

One prediction that did find support was the moderation of gender between fear of backlash and preference for negotiation. The negotiator role in

typically viewed as being incongruent with the female gender role (Stuhlmacher & Linnabery, 2013). Therefore, when entering a negotiation, women potentially put themselves at risk by violating their communal gender role to match the agentic qualities of the negotiator role (Rudman & Phelan, 2008). Therefore, this finding suggests that women who feel they can only reasonably ask for less without being perceived as pushy or too demanding have higher preferences for virtual, rather than face-to-face, negotiations.

Surprisingly, the prediction that gender would moderate the relationships between anxiety with preference for virtual negotiations was unsupported. Given that past research has shown anxious individuals to be biased in favor of low-risk/low-reward options (Raghunathan & Pham, 1999), it was expected that the relationship between anxiety and preference for virtual negotiations would be stronger for women than for men. This prediction was based on the assumption that virtual negotiations provided a low-risk outlet that allows female roles to be less salient compared to face-to-face negotiations (Stuhlmacher et al., 2007; Stuhlmacher & Linnabery, 2013). However, anxiety was shown to have a large effect on the behavioral decision of choosing face-to-face or a text-based virtual chat program for the negotiation. Both men and women with higher anxiety about the upcoming negotiation were more likely to choose to negotiate virtually. The main effect for anxiety itself on preference for virtual negotiations was significant, suggesting that virtual negotiations provides a low-risk outlet for both men and women anxious about an upcoming negotiation.

Additionally, the prediction that gender would moderate the relationship between self-efficacy with preference for virtual negotiations was also unsupported. The prediction of self-efficacy was based off of the finding that self-efficacy has a direct effect on negotiator's behaviors, such as choosing more integrative or distributive tactics (Sullivan et al., 2006). Therefore, while it is surprising to find that gender did not moderate the relationship between self-efficacy and preference for virtual negotiation, future analyses could examine if the negotiation condition (distributive vs. integrative) moderates this relationship.

### **Limitations**

One possible limitation is the use of the word "negotiation" throughout. Previous research has found that women were more likely to initiate a negotiation when they were cued to "ask" instead of to "negotiate" (Small et al., 2007). The language of asking is more consistent with a lower social role, while negotiations have been typically viewed as an agentic pursuit. The choice to keep the word negotiate in the study was to be able to provide direct comparisons between this study and the one conducted by Stuhlmacher and Reich (2017). Therefore, future research could consider removing the word "negotiate" throughout the study to avoid the agentic priming of the negotiation situation.

While the framing of the negotiation did not have an effect on the gender difference in behaviors of individuals as they approach a negotiation, a second limitation of this study was the failure to include the framing condition in the analyses for Hypotheses III-VIII. In this present study, Hypotheses III-VIII examined if gender moderated the relationship between fear of backlash, anxiety,

and negotiator self-efficacy on preference for virtual negotiation. This did not take into account if the negotiation was distributively or integratively framed. Given the current lack of supported predictions, it would be worthwhile for future analyses to include the framing condition while examining Hypotheses VI-VIII. It is possible that while it did not have a direct effect on a behavioral outcome (Hypothesis II), the framing could have affected the control variables fear of backlash, anxiety, and self-efficacy, having an indirect effect on preference for virtual negotiation.

### **Future Directions**

One area for future research is to consider the time-point participants are asked to choose a negotiation medium. In the current procedure participants complete the measure for fear of backlash, anxiety, and self-efficacy before being told that they have the option to choose between face-to-face or a text-based chat program on the computer. It was noted in the experimental lab log that this choice was a surprise for some participants, being unaware that there were potential options for the negotiation medium. Therefore, the general assumption of participants was that they would be participating in a face-to-face negotiation when filling out these measures. Method of negotiation was found to have significant correlations with all of the variables of interest (Table 2). While not included in the proposed hypotheses, a measure of relief and regret was given to the participants at the end of the procedure, once they knew that no real negotiation would be occurring. Method of negotiation had a significant correlation with both relief and regret, such that participants who chose virtual

negotiation, compared to participants who chose face-to-face negotiations, were more relieved and less regretful upon finding out that there would not be a real negotiation. Additionally, fear of backlash after negotiation medium might determine if there has been a change in the amount participants feel they can reasonably ask for without being perceived as push or demand, especially for those who chose to negotiate virtually.

### **Implications**

The findings of this study demonstrated that women, compared to men, prefer to negotiate virtually over a text-based chat program rather than face-to-face, with the fear of backlash being a moderator in this relationship. In the workplace context, this is an important consideration for the gender pay gap. This study demonstrates that negotiation medium remains a micro level contextual factor that can encourage inequalities between individuals for both distributively framed and integratively framed negotiations. Given the role of fear of backlash in this relationship, it is therefore advised to encourage organizations that participate in salary negotiations to consider both virtual and face-to-face options. This will allow individuals, particularly women, who feel that they can only reasonably ask for less without being perceived as pushy or too demanding, a virtual environment with more depersonalization and less social impact than face-to-face interactions (Stuhlmacher & Citera, 2005; Stuhlmacher et al., 2007). It's important to note, however, that virtual negotiations, compared to face-to-face negotiations, have been found to result in lower profit (Stuhlmacher & Citera,

2005), therefore this option still does not provide a solution to accelerate the gender pay gap convergence.

When providing this recommendation, it is important to remember the Equal Pay Act of 1963 (United States, 1963), in the hopes that these findings will not be used to knowingly place individuals, specifically women, at a disadvantage. Given that negotiation medium is only one factor that can contribute to inequalities in salary negotiations, it is advisable to consider salary negotiation practices as a whole, limiting ambiguity and discrimination throughout the practice. Therefore, this also calls for further research into practices and interventions which create equal opportunities for all employees.

Overall, the findings of this study demonstrate that both men and women with higher anxiety about the upcoming negotiation have a higher preference for virtual negotiations. This finding can lead to future research on what specific properties of virtual negotiations seem to be more in line with anxious negotiators. This could guide interventions and training seminars to equalize perceived differences between the two mediums.

## **Conclusion**

This study created a situation which minimized gender effects in negotiation by manipulating the framing of the negotiation as distributive or integrative. While this manipulation was unsuccessful in reducing the behavioral effects found by Stuhlmacher and Reich (2017), it contributes to the negotiation literature by demonstrating the strength of this gender difference even with the inclusion of an integrative framing, which is theoretically more congruent with

the female gender role (Stuhlmacher & Linnabery, 2013). Future research could consider the complete removal of the word “negotiate” from the study or the time point at which participants are asked to choose a negotiation medium.

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Table 1

*Descriptive Statistics*

Demographic Variable	n	Percentage	Mean	SD
Gender				
Male	104	50.49%		
Female	102	49.51%		
Race/Ethnicity				
White	117	56.80%		
Black/African American	16	7.76%		
Asian/Pacific Islander	21	10.19%		
Latino/Hispanic/Spanish Origin	26	12.62%		
Biracial	5	2.43%		
Other	10	4.85%		
Negotiation Experience <sup>a</sup>				
Face-to-Face			2.99	1.56
Virtual			2.20	1.48
Technology Familiarity <sup>b</sup>				
Text Messages Per Day			77.06	99.34
Emails Per Day			4.29	8.52
Phone Calls Per Day			3.78	5.72
Video Calls Per Day			1.09	1.82

*Note.* <sup>a</sup> Negotiation Experience was measured with a 7-point scale. <sup>b</sup> Technology Familiarity was measured with open ended questions (responses ranged 0 to 1000).

Table 2

*Means and Standard Deviations of the Main Variables by Gender and Condition*

Variables	<u>Males</u>				<u>Females</u>			
	<u>Distributive</u>		<u>Integrative</u>		<u>Distributive</u>		<u>Integrative</u>	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Preferences <sup>a</sup>	3.15	1.82	3.23	1.73	4.52	2.02	4.07	1.81
Fear of Backlash <sup>b</sup>	398.78	127.16	396.46	130.77	426.44	131.77	442.25	124.49
Anxiety <sup>a</sup>	3.21	1.15	3.40	1.10	4.11	1.31	4.32	1.10
Self-efficacy <sup>c</sup>	71.06	15.54	70.33	13.24	62.46	18.86	63.33	17.12

*Note.* <sup>a</sup> Preferences and Anxiety were measured on a 7-point scale. <sup>b</sup> Backlash was an open ended question (points ranged from 150 to 750). <sup>c</sup> Self-efficacy was measured on a 100-point scale.

Table 3

*Means, Standard Deviations, and Correlations of the Main Variables*

Variables	Mean	SD	1	2	3	4	5
1. Gender <sup>a</sup>	---	---	---				
2. Method <sup>b</sup>	---	---	0.24**	---			
3. Preferences	3.63	2.04	0.28**	0.76**	---		
4. Fear of Backlash	415.72	129.13	0.14*	0.16*	0.22**	---	
5. Anxiety	3.76	1.25	0.36**	0.28**	0.28**	-0.18**	---
6. Self-efficacy	66.82	16.65	-0.23**	-0.28**	-0.26**	0.26**	-0.41**

*Note.* \*  $p < .05$ ; \*\*  $p < .01$ . <sup>a</sup> Gender (Male = 0, Female = 1). <sup>b</sup> Method (Face-to-face = 0, Virtual = 1).

Table 4

*Coefficients for Logistic Regression Main Effects Model 0 for Choice of Negotiation Medium*

	$\beta$	<i>SE</i>	<i>z</i>	<i>p</i>
Intercept	-0.50	0.28	-1.81	0.070
Gender	0.58	0.33	1.79	0.074
Condition	-0.56	0.31	-1.79	0.073
Fear of Backlash	-0.16	0.16	-1.00	0.317
Anxiety	0.36	0.18	2.01	0.045*
Self-efficacy	-0.41	0.19	-2.21	0.024*

*Note.* \*  $p < .05$ .  $N = 206$ .

Table 5

*Coefficients for Logistic Regression Interaction Model 1 for Choice of  
Negotiation Medium*

	$\beta$	<i>SE</i>	<i>z</i>	<i>p</i>
Intercept	-0.49	0.33	-1.46	0.145
Gender	0.67	0.45	1.49	0.137
Condition	-0.52	0.47	-1.09	0.275
Backlash	0.03	0.23	0.13	0.894
Anxiety	0.85	0.32	2.67	0.008**
Self-efficacy	-0.13	0.32	-0.43	0.670
Gender*Fear of Backlash	-0.42	0.33	-1.27	0.203
Gender*Anxiety	-0.78	0.39	-1.97	0.048*
Gender*Self-efficacy	-0.36	0.40	-0.91	0.363
Gender*Condition	-0.14	0.64	-0.22	0.829

*Note.* \*  $p < .05$ ; \*\*  $p < .01$ .  $N = 206$ .

Table 6

*Chi Squared Test Comparing Model 1 to Model 0*

	Res. Df	Res. Dev	Df	Deviance	<i>p</i>
Model 0	200	244.48			
Model 1	196	238.47	4	6.011	0.198

*Note.* \*  $p < .05$ .

Table 7

*Probability Estimates for Choice of Negotiation Medium for Logistic Regression**Main Effects Model 0*

Gender	Condition	Logit	Odds Ratio	Probability of Choosing Text-based Chat Program	Probability of Choosing Face-to-Face
Male	Distributive	-0.50	0.61	0.3773	0.6227
Male	Integrative	-1.06	0.35	0.2573	0.7427
Female	Distributive	0.08	1.08	0.5202	0.4798
Female	Integrative	-0.48	0.62	0.3826	0.6174

*Note.* N = 206.

Table 8

*Probability Estimates for Choice of Negotiation Medium for Logistic Regression**Main Effects Model 1*

Gender	Condition	Logit	Odds Ratio	Probability of Choosing Text-based Chat Program	Probability of Choosing Face-to-Face
Male	Distributive	-0.63	0.54	0.3488	0.6512
Male	Integrative	-1.14	0.32	0.2423	0.7577
Female	Distributive	0.04	1.05	0.5112	0.4888
Female	Integrative	-0.47	0.62	0.3843	0.6157

*Note.* N = 206.

Table 9

*Probability Estimates for Choice of Negotiation Medium for Logistic Regression**Main Effects Model 1 based on Anxiety as a Moderator*

Gender	Condition	Anxiety	Logit	Odds Ratio	Probability of Choosing Text-based Chat Program	Probability of Choosing Face-to-Face
Male	Distributive	Low	-1.04	0.35	0.2608	0.7392
Male	Distributive	High	-0.21	0.81	0.4486	0.5514
Male	Integrative	Low	-1.56	0.21	0.1739	0.8261
Male	Integrative	High	-0.72	0.49	0.3268	0.6732
Female	Distributive	Low	-0.37	0.69	0.4078	0.5922
Female	Distributive	High	0.46	1.59	0.6136	0.3864
Female	Integrative	Low	-0.89	0.41	0.2912	0.7088
Female	Integrative	High	-0.05	0.95	0.4866	0.5134

*Note.* N = 206.

Table 10

*Coefficients for Main Effects Model 0, examining the effects of gender, fear of backlash, anxiety, and negotiator self-efficacy on preference for virtual negotiations*

	$\beta$	<i>SE</i>	<i>t</i>	<i>p</i>
Intercept	-0.13	0.12	-1.10	0.271
Gender	0.38	0.14	2.73	0.007**
Condition	-0.12	0.13	-0.93	0.352
Fear of Backlash	0.12	0.07	1.75	0.083
Anxiety	0.13	0.08	1.82	0.070
Self-efficacy	-0.12	0.07	-1.67	0.096

*Note.* \*  $p < .05$ .

Table 11

*Coefficients for Interaction Model 1, examining the interaction of gender on fear of backlash, anxiety, negotiator self-efficacy, and condition for preference of virtual negotiations*

	$\beta$	<i>SE</i>	<i>t</i>	<i>p</i>
Intercept	-0.17	0.14	-1.25	0.215
Gender	0.52	0.20	2.76	0.006**
Condition	0.00	0.18	0.00	0.999
Backlash	-0.03	0.09	-0.34	0.732
Anxiety	0.23	0.12	1.98	0.049*
Self-efficacy	-0.16	0.12	-1.34	0.183
Gender*Fear of Backlash	0.33	0.13	2.46	0.015*
Gender*Anxiety	-0.19	0.15	-1.27	0.204
Gender*Self-efficacy	0.09	0.15	0.64	0.525
Gender*Condition	-0.27	0.26	-1.06	0.293

*Note.* \*  $p < .05$ ; \*\*  $p < .01$ .

Table 12

*ANOVA Comparing Model 1 to Model 0*

	Res. Df	RSS	Df	Sum of Squares	<i>F</i>	<i>p</i>
Model 0	200	173.85				
Model 1	196	166.20	4	7.647	2.254	0.065

*Note.* \*  $p < .05$ .

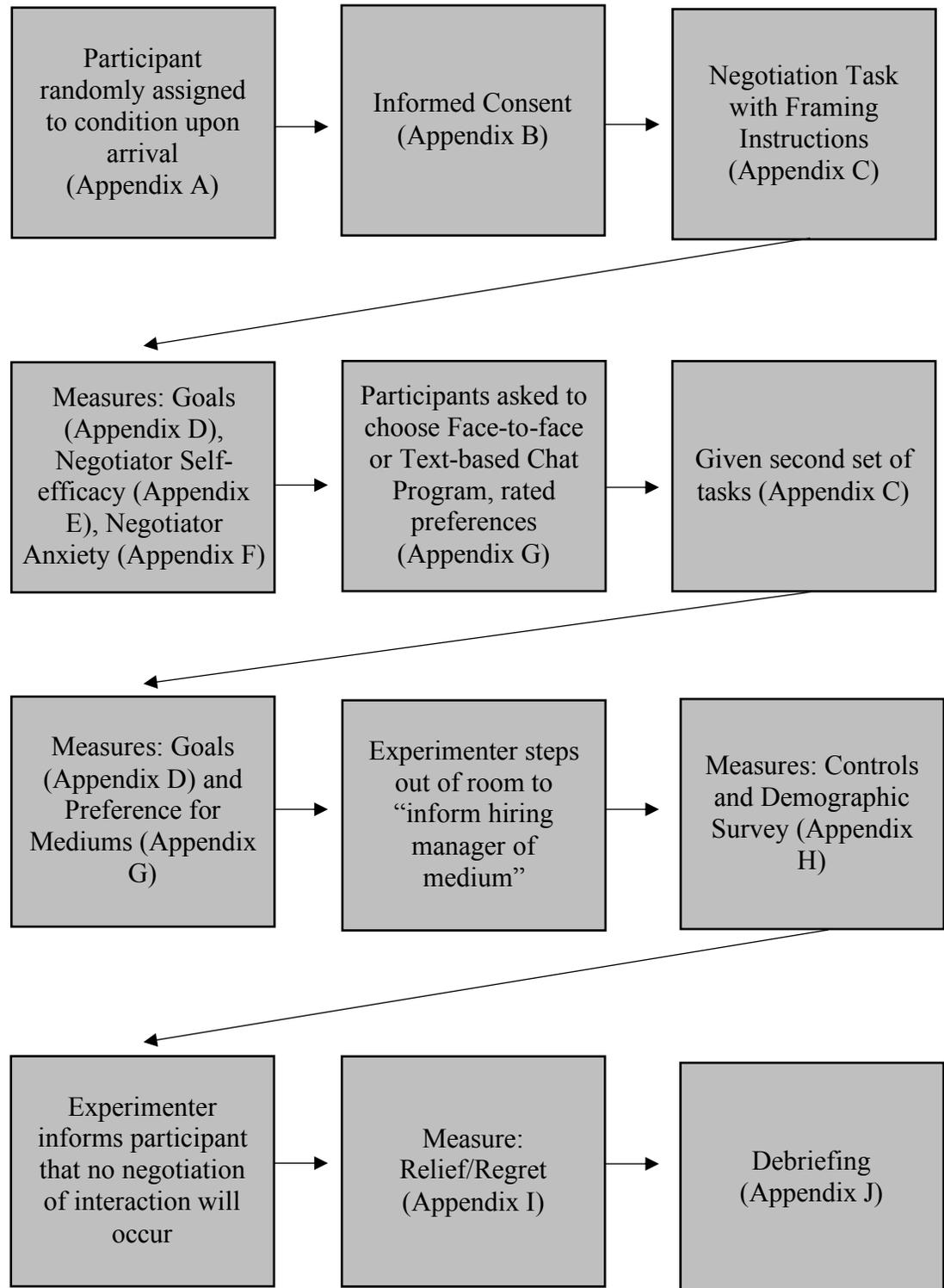
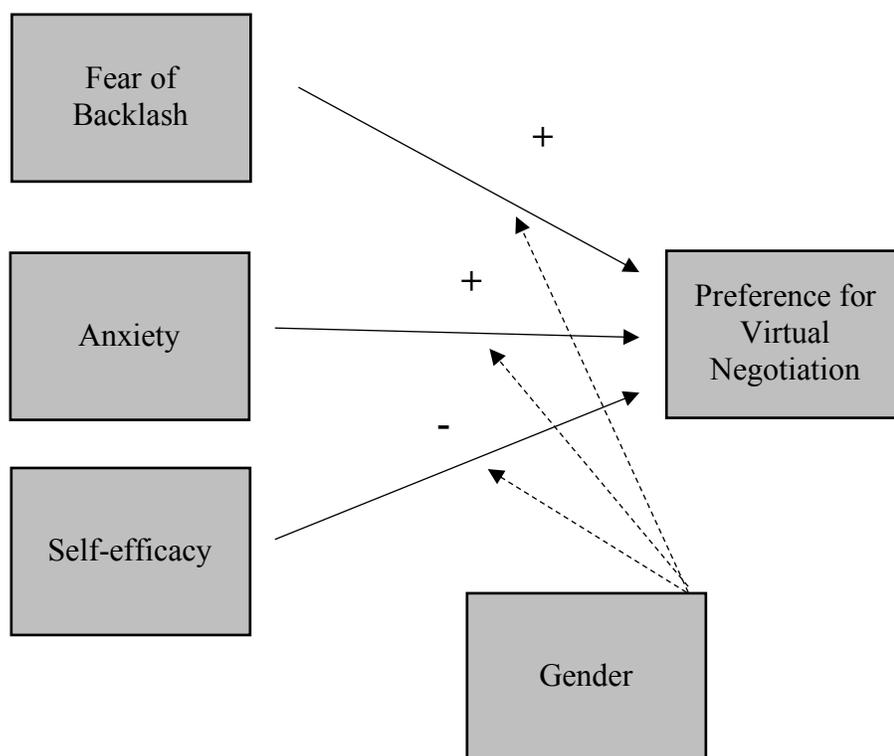
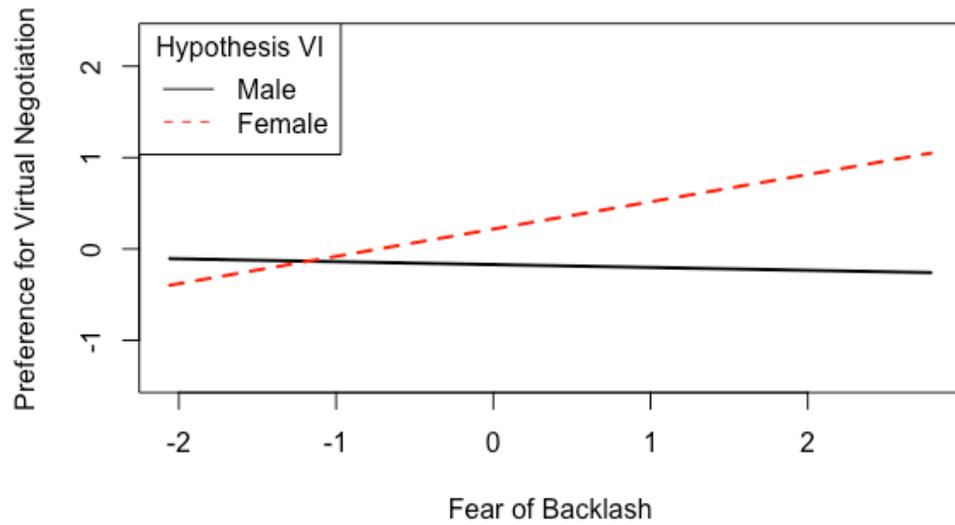


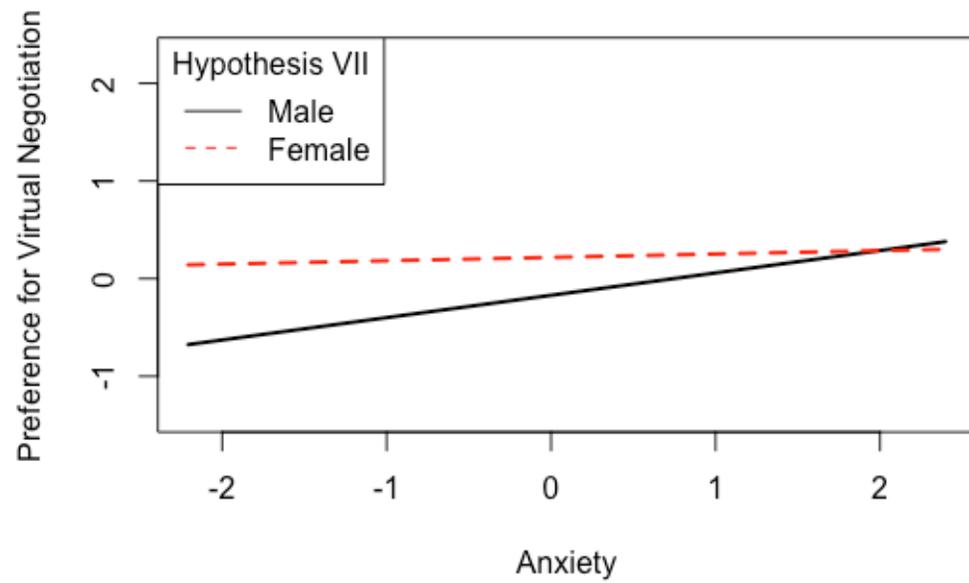
Figure 1. Flow diagram of the experimental procedure.



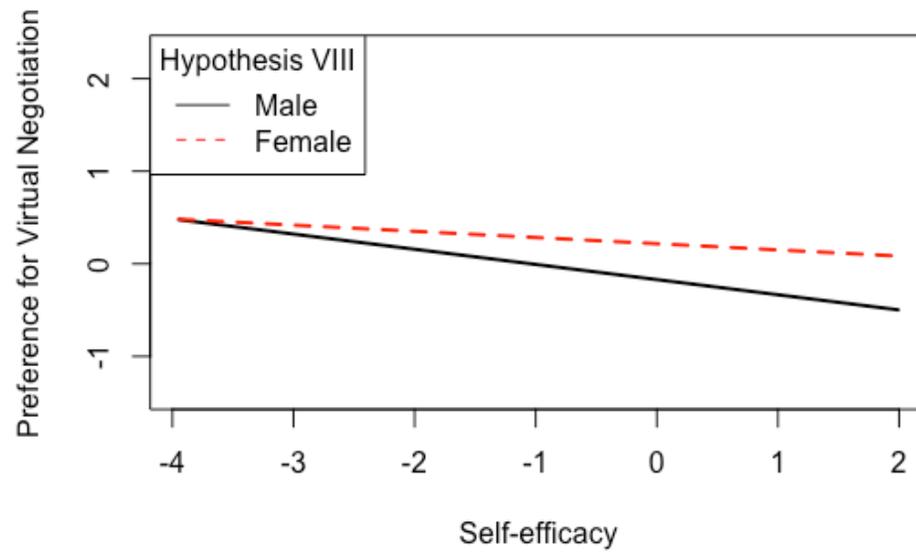
*Figure 2.* Model for Hypotheses III-VIII. This figure illustrates the relationships of the variables Fear of Backlash, Anxiety, and Self-efficacy on preference for virtual negotiations, with Gender as a moderator.



*Figure 3.* Interaction for Hypothesis VI illustrating the relationship between fear of backlash and preference for virtual negotiations by gender.



*Figure 4.* Interaction for Hypothesis VII illustrating the relationship between anxiety and preference for virtual negotiations by gender.



*Figure 5.* Interaction for Hypothesis VIII illustrating the relationship between self-efficacy and preference for virtual negotiations by gender.

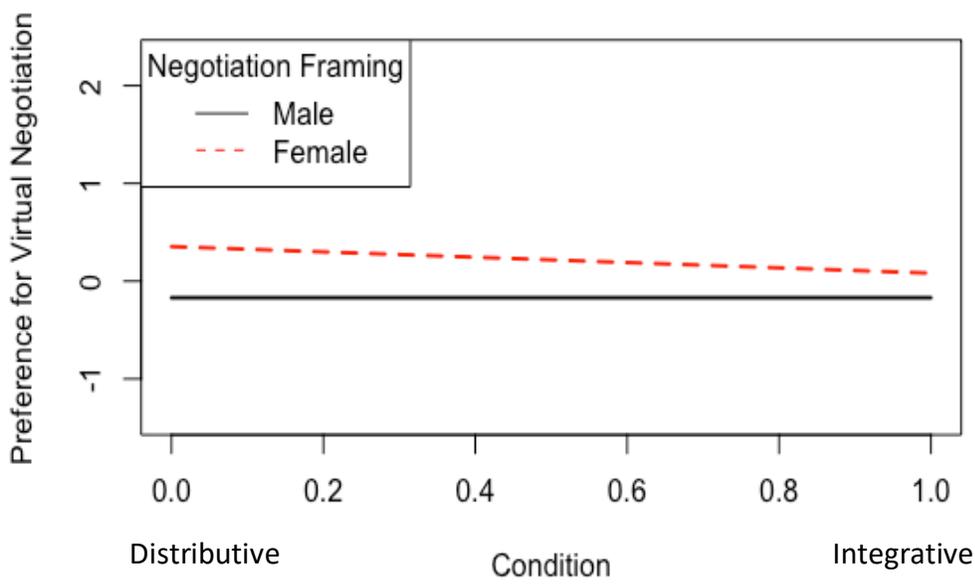


Figure 6. Interaction for Negotiation Framing Condition (Distributive vs. Integrative) illustrating the relationship between self-efficacy and preference for virtual negotiations by gender.

Appendix A

Random Numbers Tables

**Males**

<b>Participant</b>	<b>Condition</b>	<b>Participant</b>	<b>Condition</b>	<b>Participant</b>	<b>Condition</b>
1	Distributive	41	Integrative	81	Distributive
2	Distributive	42	Distributive	82	Distributive
3	Integrative	43	Distributive	83	Distributive
4	Distributive	44	Distributive	84	Integrative
5	Distributive	45	Distributive	85	Distributive
6	Integrative	46	Distributive	86	Distributive
7	Distributive	47	Distributive	87	Integrative
8	Integrative	48	Integrative	88	Distributive
9	Integrative	49	Distributive	89	Integrative
10	Integrative	50	Distributive	90	Integrative
11	Integrative	51	Integrative	91	Distributive
12	Distributive	52	Integrative	92	Integrative
13	Distributive	53	Integrative	93	Integrative
14	Integrative	54	Integrative	94	Distributive
15	Distributive	55	Integrative	95	Distributive
16	Distributive	56	Integrative	96	Integrative
17	Integrative	57	Integrative	97	Integrative
18	Integrative	58	Distributive	98	Integrative
19	Integrative	59	Distributive	99	Integrative
20	Distributive	60	Distributive	100	Distributive
21	Integrative	61	Distributive	101	Integrative
22	Distributive	62	Distributive	102	Distributive
23	Distributive	63	Integrative	103	Distributive
24	Integrative	64	Distributive	104	Distributive
25	Integrative	65	Integrative	105	Distributive
26	Integrative	66	Integrative	106	Integrative
27	Distributive	67	Distributive	107	Distributive
28	Integrative	68	Integrative	108	Integrative
29	Integrative	69	Integrative	109	Integrative
30	Distributive	70	Integrative	110	Integrative
31	Integrative	71	Distributive	111	Integrative
32	Integrative	72	Distributive	112	Distributive
33	Distributive	73	Integrative	113	Distributive
34	Integrative	74	Distributive	114	Integrative
35	Integrative	75	Distributive	115	Distributive
36	Integrative	76	Integrative	116	Distributive
37	Distributive	77	Integrative	117	Distributive
38	Distributive	78	Distributive	118	Integrative
39	Integrative	79	Distributive	119	Integrative
40	Integrative	80	Distributive	120	Distributive

### Females

Participant	Condition	Participant	Condition	Participant	Condition
121	Distributive	161	Distributive	201	Integrative
122	Integrative	162	Integrative	202	Integrative
123	Integrative	163	Integrative	203	Integrative
124	Distributive	164	Integrative	204	Integrative
125	Distributive	165	Distributive	205	Integrative
126	Integrative	166	Integrative	206	Integrative
127	Distributive	167	Integrative	207	Integrative
128	Distributive	168	Integrative	208	Integrative
129	Integrative	169	Integrative	209	Integrative
130	Distributive	170	Distributive	210	Distributive
131	Distributive	171	Distributive	211	Integrative
132	Integrative	172	Integrative	212	Distributive
133	Integrative	173	Integrative	213	Distributive
134	Integrative	174	Distributive	214	Distributive
135	Distributive	175	Distributive	215	Distributive
136	Distributive	176	Integrative	216	Integrative
137	Distributive	177	Distributive	217	Distributive
138	Integrative	178	Distributive	218	Integrative
139	Distributive	179	Integrative	219	Distributive
140	Integrative	180	Distributive	220	Distributive
141	Distributive	181	Distributive	221	Integrative
142	Distributive	182	Distributive	222	Integrative
143	Integrative	183	Integrative	223	Integrative
144	Distributive	184	Distributive	224	Distributive
145	Distributive	185	Distributive	225	Integrative
146	Integrative	186	Distributive	226	Integrative
147	Integrative	187	Distributive	227	Distributive
148	Distributive	188	Integrative	228	Distributive
149	Distributive	189	Integrative	229	Distributive
150	Integrative	190	Integrative	230	Distributive
151	Distributive	191	Integrative	231	Distributive
152	Distributive	192	Distributive	232	Distributive
153	Distributive	193	Integrative	233	Distributive
154	Distributive	194	Integrative	234	Integrative
155	Integrative	195	Distributive	235	Distributive
156	Distributive	196	Integrative	236	Distributive
157	Distributive	197	Distributive	237	Integrative
158	Distributive	198	Distributive	238	Distributive
159	Distributive	199	Distributive	239	Integrative
160	Distributive	200	Integrative	240	Distributive

Appendix B

Consent form

**ADULT CONSENT TO PARTICIPATE IN RESEARCH**  
**LANDING A NEW JOB**

**Principal Investigator:** Kaitlyn Gallagher

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

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

**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 job offer negotiation. This study is being conducted by Kaitlyn Gallagher, a graduate Industrial/Organizational psychology student for her Master's thesis. We hope to include 200 participants in this research.

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

You are invited to participate in this study because you are a student in the participant pool at DePaul University and speak English. 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 completing a few questionnaires, then participating in a negotiation with a counterpart.

- You will be told about participating in a simulated job offer negotiation. You will receive some instruction about your negotiation counterpart and how the negotiation will be scored.
- You will be asked about your preferences for the negotiation, your feelings about the negotiation, and some demographic information about yourself (past negotiation experience, work experience, gender, race/ethnicity)

**How much time will this take?**

This study will take about 45 minutes of your time.

**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. You may feel uncomfortable or embarrassed about answering certain questions or the idea of negotiation. You do not have to answer any questions 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 contribute to the knowledge in the field for negotiation.

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

You will be given 1.5 psychology subject pool credits for participation in the research. At the end of the research activity you will be asked to provide your SONA subject pool number on a separate sheet of paper so that we may give you credit. If you do not complete the study but stay for more than a half hour you will receive 1 credit. If you do not complete the study and stay for less than a half hour you will receive 0.5 credits. You must provide your subject pool number in order to be given credit.

**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 participate in this research will not affect your grades at 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. The data will be recorded in a de-identified manner. We will keep your responses confidential. 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 may review your information. If they look at our records, they will keep your information confidential.

**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, Kaitlyn Gallagher ([kgalla26@depaul.edu](mailto:kgalla26@depaul.edu)) or her advisor, Dr. Alice Stuhlmacher (773-325-2050).

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 C

### Tasks

Distributive:

You have been hired for a new job, but you still need to work out the finer details of terms of employment with your hiring manager. **Think of this task as a negotiation in which you are trying to get what you want and must bargain for it.**

Integrative:

You have been hired for a new job, but you still need to work out the finer details of terms of employment with your hiring manager. **Think of this task as a negotiation in which you face a common problem and must work with the hiring manager to create a deal that works for both you and the company.**

This table shows the options that you will discuss:

Option Points	Option Points	Option Points
<u>Salary</u>	<u>Vacation Days</u>	<u>Starting Date</u>
\$50,000	0	5 days
\$52,000	100	8 days
\$54,000	200	12 days
\$56,000	300	15 days
\$58,000	400	20 days

The points indicate how valuable that selection is to you. In this negotiation, you can earn a maximum of 750 points. You should walk away from the negotiation (impasse) if you cannot achieve at least 150 points.

**Take a few minutes and list three tactics you will use to meet this goal (of getting what you want / creating a deal that works for both you and the company)**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

This table shows the options that you will discuss:

Option	Points	Option	Points	Option	Points
<b><u>First-year Bonus</u></b>		<b><u>Company Car</u></b>		<b><u>Training Opportunities</u></b>	
\$1,000	0	Honda	0	Every 6 months	200
\$2,000	100	Hyundai	25	Every 12 month	100
\$4,000	200	Mazda	50	Every 18 months	50
\$6,000	300	BMW	100	Every 24 months	25
\$8,000	400	Mercedes	150	Every 32 months	0

The points indicate how valuable that selection is to you. In this negotiation, you can earn a maximum of 750 points. You should walk away from the negotiation (impasse) if you cannot achieve at least 150 points.

**Take a few minutes and list three tactics you will use to meet this goal (of getting what you want / creating a deal that works for both you and the company)**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Appendix D

Goals and First Offer

The following questions concern your plans for the upcoming negotiation. Please indicate...

The <b>ideal</b> number of points you want to achieve in the negotiation (that is your goal)	
The <b>least</b> number of points you are willing to accept before walking away from the negotiation at an impasse (that is your limit)	

Now, make your first offer to your counterpart.  
For each category **please circle one value.**

**Circle one value for each category:**

Option	Points	Option	Points	Option	Points
<b><u>Salary</u></b>		<b><u>Vacation Days</u></b>		<b><u>Starting Date</u></b>	
\$50,000	0	5 days	0	June 1	200
\$52,000	100	8 days	25	June 15	100
\$54,000	200	12 days	50	July 1	50
\$56,000	300	15 days	100	July 15	25
\$58,000	400	20 days	150	August 1	0

The following questions concern your plans for the upcoming negotiation. Please indicate...

How much (in total points value) do you think you can reasonably ask for without your counterpart perceiving you to be a pushy person?	
How much (in total points value) do you think you can reasonably ask for without causing your counterpart to punish you for being too demanding?	

Now, make your first offer to your counterpart.  
For each category **please circle one value.**

**Circle one value for each category:**

Option	Points	Option	Points	Option	Points
<b><u>First-year Bonus</u></b>		<b><u>Company Car</u></b>		<b><u>Training Opportunities</u></b>	
\$1,000	0	Honda	0	Every 6 months	200
\$2,000	100	Hyundai	25	Every 12 month	100
\$4,000	200	Mazda	50	Every 18 months	50
\$6,000	300	BMW	100	Every 24 months	25
\$8,000	400	Mercedes	150	Every 32 months	0

Appendix E

Negotiator Self-efficacy (Sullivan, O'Connor, & Burris, 2006)

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:

1. Persuade the other negotiator to make most of the concessions.	_____
2. Convince the other negotiator to agree with me.	_____
3. Gain the upper hand against the other negotiator	_____
4. Prevent the other negotiator from exploiting your weaknesses.	_____
5. Find trade-offs that benefit both parties	_____
6. Exchange concessions	_____
7. Look for an agreement that maximizes both negotiators' interests'	_____
8. Establish a high level of rapport with the other negotiator	_____

Appendix F

## Negotiator Anxiety (Brooks &amp; Schweitzer, 2011)

For the upcoming negotiation, how strongly do you feel:

	<b>Not strongly at all</b>			<b>Moderately</b>		<b>Very Strongly</b>	
	1	2	3	4	5	6	7
Anxious	1	2	3	4	5	6	7
Neutral	1	2	3	4	5	6	7
Apprehensive	1	2	3	4	5	6	7
Indifferent	1	2	3	4	5	6	7
Worried	1	2	3	4	5	6	7
Unemotional	1	2	3	4	5	6	7
Nervous	1	2	3	4	5	6	7
Calm	1	2	3	4	5	6	7



Appendix H

Demographic Survey

1. How much formal experience have you had negotiating **face-to face** (this includes negotiation/mediation courses or formal experience)?

1            2                    3                    4                    5                    6  
7

(No experienced)

(Some experience)

(I'm an expert)

2. How much formal experience have you had negotiating **virtually through technology** (this includes negotiation/mediation courses or formal experience)?

1            2                    3                    4                    5                    6  
7

(No experienced)

(Some experience)

(I'm an expert)

3. On an average day, how many text-messages do you send?

\_\_\_\_\_

4. On an average day, how many emails do you send? \_\_\_\_\_

5. On an average day, how many phone calls are you on? \_\_\_\_\_

6. On an average day, how many video calls are you on (Skype, Facetime)?

\_\_\_\_\_

7. Please indicate your gender:

Male

Female

8. Please indicate your race/ethnicity:

Black/African American  
American Indian/Alaskan Native  
Asian /Pacific Islander  
Latino/Hispanic/Spanish Origin  
White  
Biracial  
Other

Appendix I

## Negotiator Relief/Regret (Kray &amp; Gelfand, 2009)

1. How relieved are you that there is no real negotiation?

1	2	3	4	5	6	7
(Not relieved)			(Moderately)			(Very relieved)

2. How much do you regret not being able to negotiate?

1	2	3	4	5	6	7
(Not regretful)			(Moderately)			(Very regretful)

## Appendix J

### Debriefing Forms

Thank you so much for participating in this research session, we very much appreciate your willingness to be involved in this research.

This study looked at negotiation, which is a very common interaction in many everyday situations. While you may have not been familiar with job negotiation, we wanted a task that was relevant to students.

We asked people to choose whether they prefer to negotiate via face-to-face or through a computer chat program. There is no actual negotiation involved in this study. We wanted you to have the same feelings that you might have if there would be an actual negotiation.

We are interested how factors like gender, self-efficacy, and anxiety influenced the choice to be face-to face or over the computer.

You no doubt understand that it is important to have a similar environment for everyone who participates in the study. Because of this, we need your help in not revealing information about this study to others who may be involved or might do this study in the future. This is very important so that we are able to compare across people and that participants enter the study with the same information.

Thank you so much for participating in this research session, we very much appreciate your willingness to be involved in this research.

This study looked at negotiation, which is a very common interaction in many everyday situations. While you may have not been familiar with negotiations, we wanted a task that was relevant to students.

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).

Below are a couple of references for more information on negotiation, and you can also contact Kaitlyn Gallagher ([kgalla26@depaul.edu](mailto:kgalla26@depaul.edu)) or Dr. Alice Stuhlmacher ([astuhlma@depaul.edu](mailto:astuhlma@depaul.edu), 773-325-2050) for more information. Again, thank you so much for your time and participation.

Elfenbein, H. A. (2015). Individual differences in negotiation: A nearly abandoned pursuit revived. *Current Directions in Psychological Science*, 24(2), 131-136.

Stuhlmacher, A. F., & Linnabery, E. (2013). Gender and negotiation: a social role analysis. In M. Olekalns, & W. Adair (Eds.), *Handbook of research on negotiation research* (pp. 221-248).

Thompson, L. L., Wang, J., & Gunia, B. C. (2010). Negotiation. *Annual Review of Psychology*, 61, 491-515.