

Running head: GENDER IN NEGOTIATION

Constraints and Triggers: Situational mechanics of gender in negotiation

Hannah Riley Bowles

Linda Babcock

Kathleen McGinn

Abstract

Authors propose two categories of situational moderators of gender in negotiation, one that constrains the potential for gender effects to emerge (structural ambiguity) and another that prompts divergent behavioral responses as a function of gender (gender triggers). A price negotiation experiment (Study 1) and field data on MBA salary negotiations (Study 2) demonstrate that sex differences (favoring males) are greater under high vs. low structural ambiguity. A compensation negotiation experiment (Study 3) shows that representation role (negotiating for oneself vs. someone else) functions as a gender trigger by affecting females' performance more than males'. Female sellers obtained significantly higher compensation agreements when negotiating for someone else than for themselves, while representation role manipulation had no significant effect on male sellers.

Constraints and Triggers: Situational mechanics of gender in negotiation

The first major wave of research on gender in negotiation surged and subsided with trends in the psychological study of individual differences. In the 1970s and early 1980s, there was an abundance of studies testing whether the sex of a negotiator would be a stable and reliable predictor of bargaining behavior and performance. Scholars who reviewed this literature reported an assortment of null and contradictory findings (Rubin & Brown, 1975; Thompson, 1990). By the early 1990s, most researchers in the field had discarded the gender variable with a heap of other individual differences that had failed over scores of tests to produce consistent results.

The contradictions from this first wave of research on gender in negotiation became the puzzles motivating a second generation of investigation. Consistent with contemporary theories of gender and social behavior (Deaux & LaFrance, 1998; Deaux & Major, 1987; Kray, Galinsky, & Thompson, 2002; Maccoby, 1990), this next generation of researchers started with the premise that gender effects in negotiation would arise under certain circumstances and be absent—or even reversed—in others (Kray et al., 2002; Kray, Thompson, & Galinsky, 2001; Pruitt, Carnevale, Forcey, & Van Slyck, 1986; Stuhlmacher & Walters, 1999; Walters, Stuhlmacher, & Meyer, 1998). Walters et al.'s (1998) meta-analysis, for instance, showed that sex differences (favoring females) in cooperative behavior were much larger in studies of explicit negotiations than in negotiation-related matrix games (e.g., Prisoner's Dilemma). In a second meta-analysis, Stuhlmacher and Walters (1999) found that females (as compared to males) reached less favorable negotiation outcomes but that factors, such as the relative power between the negotiators, the mode of communication, and the integrative potential of the task,

moderated that effect. Subsequent experimental research has demonstrated how the activation of sex stereotypes in the negotiating context may produce gender effects favoring male or female negotiators, depending on the content of the stereotype and how it is introduced (Kray et al., 2002; Kray et al., 2001).

The current paper contributes to this second generation of research by proposing two distinct categories of situational moderators that may help to organize our broader understanding of when gender matters in negotiation. The first is structural ambiguity, which we demonstrate has the potential to function as a form of constraint on gender effects in negotiation (Studies 1 and 2). The second category is what we call gender triggers. Gender triggers (explained in more detail below) are elements of a situation that cue the enactment of gender-relevant scripts. While structural ambiguity may constrain or release the potential for gender effects to emerge, gender triggers shape the manifestation of gender effects. As one example of a gender trigger, we demonstrate how the shift from negotiating for one's own self-interest to negotiating for someone else has a greater effect on female than on male negotiators (Study 3).

Situational Moderators of Individual Differences

The two situational moderators that we propose, structural ambiguity and gender triggers, are motivated by psychological theory on the fundamental situational moderators of personality on behavior: Mischel's (1977) notion of strong vs. weak situations and Snyder and Ickes' (1985) concept of precipitating situations.

Strong vs. Weak Situations

According to Mischel (1977), psychological situations are "strong" to the extent that everyone has the same understanding about how they are supposed to respond and

the will and ability to respond as expected. Strong situations are structured so that there is one clear and appropriate response, and, as a result, “individual differences become minimal and situational effects prepotent” (Mischel, 1977, p. 347). Weak situations are ambiguously structured so that people have to come up with their own interpretations as to what is the appropriate response, and the potential influence of individual differences is heightened.

There are a number of studies that show gender effects emerging only when the psychological situation becomes more ambiguously structured. Dovidio and colleagues, for instance, showed that, when there was a clearly established power asymmetry within a mixed-sex work pair, “visual dominance” (i.e., the ratio of looking when speaking to looking when listening) was positively correlated with power and unrelated to gender. However, when power relations were undefined, the nonverbal behavior of males was significantly more visually dominating than that of females. Wood and Karten (1986) reported similar effects on mixed-sex, group decision-making. When participants received test scores indicating asymmetric levels of task competence within the group, measures of perceived competence and task-oriented social behavior were correlated with test scores and unrelated to gender. When the experimenters provided no information on task competence, males were perceived to be more competent, and engaged in more task behavior and less social behavior than females. Brenda Major and colleagues’ investigations of the entitlement effect in compensation also reveal an interaction between situational ambiguity and gender. In the absence of external compensation standards, females reward themselves less than do males for equivalent labor (Callahan-Levy & Messe, 1979), work harder and with fewer errors for equivalent pay (Major,

McFarlin, & Gagnon, 1984), and have lower career-entry and career-peak pay expectations (Bylsma & Major, 1992; Major & Konar, 1984). This gender gap in entitlement diminishes, however, in the presence of unambiguous wage comparison information (Major et al., 1984) or explicit performance feedback (Bylsma & Major, 1992).

Because ambiguity provides a breeding ground for biased judgments of the self and others, ambiguity is also characteristic of those situations in which stereotypes are most virulent (Dunning, Meyerowitz, & Holzberg, 1989; Fiske & Taylor, 1991). Reviews of the literature on sex biases in work evaluations suggest that sex biases are positively associated with the amount of subjective inference required by the evaluator (Heilman, 1995; Nieva & Gutek, 1980). Experimental researchers have shown that the more clearly observable, job-relevant information there is available, the less likely it is that sex will be used as a source of information in hiring decisions (Heilman, 1984; Heilman, Martell, & Simon, 1988; Tosi & Einbender, 1985) and performance evaluations (Foddy & Smithson, 1999; Heilman, 1995; Lenney, Mitchell, & Browning, 1983; Pheterson, Kiesler, & Goldberg, 1971). Sociological field studies further indicate that statistical discrimination in wages is greater where job performance is difficult to evaluate (Pfeffer, 1977).

Precipitating Situations

While the strength of the psychological situation moderates the potential for individual differences to emerge, ambiguity itself is not a sufficient condition for individual differences to influence behavior. Therefore, Snyder and Ickes (1985, p. 907) proposed a second, complementary category of situational moderator, which they called “precipitating situations.” Precipitating situations make the individual difference relevant

and salient and prompt alternative modes of response as a function of the individual difference. Snyder and Ickes cited as an example Bem and Lenney's (1976) study in which they tested the extent to which sex-typed individuals preferred to be photographed engaging in feminine or masculine behaviors (e.g., preparing a baby bottle or oiling a squeaky hinge). This situation precipitated sex-type-based behavior by presenting participants with a forced choice which they would respond to differently depending on whether they identified with being masculine or feminine. The activation of sex-based performance stereotypes is another example of a precipitating situation. Sex-based performance stereotypes cue men and women differently with regard to their comparative skills and abilities and contribute through a dynamic of fulfilled expectations to sex differences in outcome (Beyer, 1990; Beyer & Bowden, 1997; Kray et al., 2002; Skrypnik & Snyder, 1982; Steele, 1997; Zanna & Pack, 1975). Gender roles similarly provide different information about what is the attractive or appropriate behavioral response to a situation depending on one's socially identified gender (Eagly, 1987). In studies where females act like males in situations where gender roles prescribe a divergence, participants make more negative judgments of females than of males for engaging in the same behaviors (Eagly, Makhijani, & Klonsky, 1992; Rudman, 1998; Rudman & Glick, 1999).

In sum, Mischel (1977) and Snyder and Ickes (1985) present two categories of situational characteristics that moderate the effects of individual differences on social behavior. One constrains or releases the potential for individual differences to influence behavior, and the other triggers divergent behaviors as a function of the individual difference.

Structural Ambiguity and Gender Triggers

We apply the notions of “weak” (Mischel, 1977) and “precipitating” (Snyder & Ickes, 1985) situations to the study of gender in negotiation in terms of “structural ambiguity” and “gender triggers.” We propose that the degree of structural ambiguity and the presence or absence of gender triggers within the negotiating context moderate the effects of gender on negotiation.

Structural Ambiguity

We use the term *structural ambiguity* to describe the degree of uncertainty in parties’ understanding of the economic structure of the negotiation. The economic structure is a centrally defining element of a negotiation situation and an important guide for negotiators’ behavior (Lax & Sebenius, 1986; Neale & Bazerman, 1991; Raiffa, 1982; Thompson, 1998; Walton & McKersie, 1965). It consists of the pool of resources available for distribution between the parties and the likely coordination points for agreement (Raiffa, 1982). Coordination points, such as “focal points” (e.g., a 50-50 split) and other standards for agreement (e.g., market values or social norms of fairness), help parties to agree on a specific settlement out of the potentially infinite set of possible outcomes (Schelling, 1980; White & Neale, 1994).

In a perfectly structurally *unambiguous* negotiation, all parties would have common knowledge about the dimensions of the pool of resources available and would mutually recognize a clear standard or principle for determining the distribution of those resources. For example, in a laboratory study of single-issue price negotiations, McGinn and Keros (2002) found that negotiations between friends involved almost no structural ambiguity. The pairs revealed information about their negotiating limits in order to create

a shared understanding of the bargaining range, and the preferred agreement was obvious to both (i.e., “an even split”). Decreased structural ambiguity “strengthens” the situation, in Mischel’s (1977) terms, by providing negotiators with clear behavioral guidelines.

Under such circumstances, we would not predict gender differences to emerge.

Structural ambiguity increases the less that is known by one or more parties about the bargaining range or standards for agreement. For instance, confusion or lack of information about one’s own or the other party’s negotiating limit (i.e., minimum willingness to accept or maximum willingness to pay or give) creates ambiguity about the bargaining range. Lack of clear standards for agreement (e.g., benchmarks or focal points), or the presence of multiple, contradictory standards, creates ambiguity about the range of likely agreement. Increased structural ambiguity “weakens” the situation, in Mischel’s (1977) terms, because it leaves parties with little guidance on how much to strive for, ask for, or agree to in the negotiation. We predict, therefore, that gender differences in negotiation expectations and performance will be greater under high (relative to low) structural ambiguity.

Gender Triggers

Gender triggers are contextual factors that, in Snyder and Ickes’s (1985) words, “precipitate” gender effects in negotiation by prompting gender-related behavioral responses. There are many potential forms of gender triggers. For instance, a recent meta-analysis by Stuhlmacher and Walters (1999) showed that the male advantage in negotiation is somewhat higher in single-issue negotiations (in which one party’s gain is the other’s loss) than it is in multi-issue negotiations with potential for mutual gain. This finding is consistent with social role-based expectations that men would be more likely

than women to engage in the types of highly competitive behaviors important to achieving good outcomes in single-issue negotiations (e.g., making aggressive first offers, refusing to yield) (Bakan, 1966; Eagly, 1987). In multi-issue negotiations, which call for a wider range of cooperative and competitive behaviors, there is less reason to expect gender-role conflicts to affect negotiation results.

Sex-stereotypes are another form of gender trigger, and one that has been tested directly in negotiation contexts (Kray et al., 2002; Kray et al., 2001). Kray and colleagues showed that they could activate a form of stereotype threat (Steele, 1997) (favoring males) by telling MBA students engaged in a competitive negotiation task that their performance would be highly diagnostic of their actual negotiating ability. Kray and colleagues then showed how explicitly activated stereotypes could elicit a form of stereotype reactance (Brehm, 1966) and produce counter-stereotypic negotiation results. When they told MBA students prior to a negotiation that personality differences between male and female MBAs tended to favor male negotiators, female negotiators outperformed their male peers (Kray et al., 2001). Kray and colleagues also demonstrated that they could reverse the gender gap in negotiation expectations and performance by manipulating sex stereotypes with regard to negotiation performance. They primed participants with associations between stereotypically masculine or feminine skills/traits and negotiation performance, and showed that participants' goal-setting and performance fulfilled the gendered expectations that the experimenters had created (Kray et al., 2002).

Representation Role. We propose that *representation role* (i.e., whether the negotiator is representing him/herself or someone else) is another potential gender trigger in negotiation. We hypothesize that manipulating representation role will have a greater

effect on female than on male negotiators and, more specifically, that female negotiators will perform better when negotiating for someone else than for themselves alone.

One argument for why a simple role shift from representative to self-advocate could affect negotiations stems from a long line of work on gender and self-construal. Starting in the 1970s, feminists working from a psychoanalytic perspective theorized that the lifecycle of parenting relationships leads women (as compared to men) to develop more interpersonally interdependent self-concepts and for men (as compared to women) to develop more independent, self-defined egos (Chodorow, 1978; Gilligan, 1993; Miller, 1986). More recently, Cross and Madson (1997) presented an extensive review of social psychological literature supporting the theory that gender differences in social behavior may be linked to gender differences in interdependent vs. independent self-construals. Echoing the feminist theorists, Cross and Madson explain that for individuals with an interdependent self-construal – which they theorize tends to be more characteristic of women than men – obligations to others and responsiveness to the needs others shape social interactions. Cross and Madson's interpretation of male behavior as indicative of a desire for separateness and independence has been challenged by evidence that men may have an interdependent self-concept that is more broadly social as opposed to interpersonal, but the notion that women are more other-oriented in terms of personal relationships than men has been met with relatively little debate (Baumeister & Sommer, 1997; Gabriel & Gardner, 1999; Kashima et al., 1995).

As Cross and Madson have pointed out, the notion of women having a more interpersonally interdependent self-construal than men is consistent with gender-based social roles that prescribe communal behavior to women and agentic behavior to men

(Bakan, 1966; Eagly, 1987). However, by setting the communal and agentic in opposition to one another, Cross and Madson argue, Bakan's (1966) theory implied that persons with communal vs. agentic tendencies (i.e., women vs. men) would lack instrumentality and self-assertiveness. Cross and Madson's theory predicts instrumentality and self-assertion among those with interdependent self-construals, but based on different motivations from those with more independent self-construals. The core of implication of Cross and Madson's theory for gender and negotiation is that women may be more assertive negotiators when attending to the needs and wishes of other people than to their personal self-interest (Cross & Madson, 1997, p. 24).

Another explanation for why women may be more effective at advocating on behalf of others than for themselves is that women (as compared to men) are more constrained by gender roles and stereotypes from advocating freely and effectively for themselves (Wade, 2001). Rudman and colleagues have demonstrated that women (as compared to men) who self-promote run a greater risk of social backlash (Rudman, 1998; Rudman & Glick, 1999).

Finally, research on the entitlement effect shows that women (as compared to men) experience a relative lack of perceived deservedness for themselves that does not appear to extend to similar others (Callahan-Levy & Messe, 1979; Major et al., 1984). If women experience depressed deservedness with regard to themselves vs. others, then shifting from promoting their own self-interest to advocating for others may lead them to have higher negotiating expectations.

Summary

In sum, motivated by theory on the situational factors that moderate the effects of

individual differences on social behavior (Mischel, 1977; Snyder & Ickes, 1985), we propose that two complementary categories of situational factors moderate the effects of gender on negotiation. They are the degree of structural ambiguity and the presence of gender triggers. We propose that structural ambiguity constrains or releases the potential for gender differences to emerge and that gender triggers prompt divergent behavioral responses as a function of gender. We hypothesize further that representation role will function as a gender trigger in negotiation by boosting female negotiators' expectations and performance when they are advocating for others as opposed promoting their own self-interest.

Study 1

In Study 1, we tested the effects of structural ambiguity on gender differences in expectations and performance in competitive negotiation. Competitive bargaining is more strongly associated with male (vs. female) negotiating strengths (Kray et al., 2001; Stuhlmacher & Walters, 1999) and behavior (Walters et al., 1998). It is a context in which negotiators who fulfill masculine stereotypes (e.g., being assertive, dominant, forceful, individualistic) are likely to outperform those who negotiate in a more stereotypically feminine manner (e.g., being sensitive to the needs of others, sympathetic, understanding, yielding) (Bakan, 1966; Bem, 1974). Because of the alignment of competitive bargaining with masculine (vs. feminine) behavior and performance advantages, it is a domain in which we would expect gender differences in negotiation expectations and performance to favor males over females (Beyer, 1990; Beyer & Bowden, 1997; Kray et al., 2001; Lenney, 1977). We predict that these gender differences will be greater under high vs. low structural ambiguity.

To test our hypotheses, we used a 2 (sex of buyer) \times 2 (high vs. low structural ambiguity for buyer) factorial design,¹ and manipulated structural ambiguity by altering the price comparison information available to the buyers in a single-issue price negotiation. Participants negotiated in mixed-sex pairs. In the low structural ambiguity condition, the buyers knew their negotiating limit and had clear and specific information about what would be a good agreement price in the negotiation. In the high structural ambiguity condition, the buyers knew their negotiating limit but had no price comparison information. The degree of structural ambiguity for sellers was held constant across conditions.

Methods

Participants. Participants were 320 adults (ages 18-30) recruited from university campuses. We removed four cases from the analysis because of evident lack of understanding of the negotiating instructions (e.g., due to language barriers). We created as many mixed-sex pairs as possible in each experimental session and assigned the remaining participants to same-sex pairs. We excluded data from 53 same-sex pairs.

Materials. The simulation involved a single-issue negotiation between a motorcycle manufacturer (buyer) and a supplier (seller) over the price of halogen headlights. The set of possible negotiated outcomes was bounded by the seller's \$10/unit cost of production and the buyer's alternative to fill the order through another supplier at \$35/unit. Confidential instructions informed the parties of their own but not the other side's negotiating limit (i.e., buyer's maximum willingness to pay and seller's minimum willingness to accept).

We embedded the experimental manipulation in the buyers' confidential instructions. In the low ambiguity condition, the buyers' instructions stated that the negotiating limit was \$35/unit and that the buyer's superior "hoped that you would be able to negotiate a deal for \$15/unit." In the high ambiguity condition, the buyers' instructions had no specific price references other than the maximum willingness to pay of \$35. All sellers received the same confidential instructions, indicating that their negotiating limit was \$10/unit and suggesting that they should be delighted by any agreement in the range of \$30/unit. We included this target price information for the sellers in order to minimize sex differences on the sellers' side. Prior testing of the sellers' confidential instructions in classroom negotiations showed no sex differences in prenegotiation performance targets. In sum, we manipulated structural ambiguity on the buyer's side by providing (low ambiguity) or withholding (high ambiguity) an external comparison standard for determining a good price in the negotiation (i.e., the superior's target of \$15/unit). We controlled the level of structural ambiguity on seller's side by providing the sellers with the same negotiating limit and target price information across conditions.

Procedure. At the beginning of the session, the experimenter distributed packets containing participant numbers, confidential instructions, a short pretest, and the pre- and post-negotiation surveys. The experimenter was blind to the ambiguity condition, but distributed packets discretely by gender in order to maximize the number of mixed-sex pairs. Participants had twenty minutes to read the confidential instructions and to complete the short pretest that confirmed their understanding of the negotiating instructions and how they would be paid based on their negotiation performance. After

finishing the short pretest, participants filled out a prenegotiation survey on their target price per unit and intended initial offer. (See Appendix for wording of pre- and post-negotiation questions.) In order to ensure that prior knowledge of their negotiating partners did not influence the participants' prenegotiation survey responses, the experimenter collected all prenegotiation surveys before pairing up the participants to negotiate. Any randomly matched pairs who happened to know each other before entering the study were reshuffled to negotiate with unfamiliar partners. Participants negotiated face-to-face for a maximum of twenty minutes. Once participants finished negotiating, they completed a brief post-negotiation survey indicating how many minutes they negotiated, whether they reached agreement, and, if so, at what price per unit. At the end of the negotiating period, the experimenter collected post-negotiation surveys from all of the participants and confirmed that both members of each pair reported the same negotiation outcome. Participants received a \$10 show-up fee and earned a minimum of \$5 additional payment for participating in the negotiation. If participants reached agreement, they received an additional 60 cents for every dollar per unit they improved upon their negotiating limit. The experimenter gave all participants a debriefing sheet and paid them in cash at the end of the session.

Results

All pairs reached agreement. There were no conflicts in the agreement prices reported by the buyer and seller in each negotiating pair. There was no significant difference in minutes negotiated under high structural ambiguity ($M = 7.84$, $SD = 5.32$) as compared to low structural ambiguity ($M = 8.20$, $SD = 5.35$), $t(98) = 0.34$, $p = .74$. (Three pairs did not report how long they had negotiated.) We analyzed indicators of

prenegotiation expectations at the individual level and agreement prices at the level of the negotiating pair. Levene's test for equality of variances showed no significant differences across ambiguity conditions for any of the dependent measures ($F_s < 2.40, p_s > .12$).

Figure 1 provides a graphical summary of the mean sex differences across conditions. As can be seen in Figure 1, the pattern of means observed across conditions was consistent with our predictions. Table 1 displays descriptive statistics for the buyers' target prices, intended initial offers and agreement prices by sex of buyer and structural ambiguity conditions. In the high structural ambiguity condition, the male buyers reported significantly lower (more optimistic) prenegotiation expectations than did female buyers. The mean difference in target was \$2.54/unit, $t(45) = -1.98, p = .05$. The mean difference in intended initial offer was \$3.65/unit, $t(46) = -2.09, p = .04$. Male buyers negotiated agreement prices that were \$6.25 lower than did female buyers, $t(46) = -5.00, p < .01$. In the low structural ambiguity condition, there were no significant sex differences in target price, intended initial offer or agreement price, $t(53) = 0.53, p = .60$ for target, $t(53) = 0.47, p = .64$ for intended offer, and $t(53) = -1.53, p = .13$ for agreement price.

The two measures of prenegotiation expectations were strongly correlated ($r = .58$), so we combined them in a composite indicator of prenegotiation expectations ($\alpha = .73$) to test for a significant interaction effect of sex of buyer \times structural ambiguity on prenegotiation expectations. Table 2 summarizes the results of ANOVA analyses of buyers' prenegotiation expectations and final agreement price by sex of buyer and structural ambiguity. As predicted, we observed significant interaction effects for sex of buyer \times structural ambiguity on negotiation expectations and performance, $F(1, 99) =$

4.25, $p = .04$ for prenegotiation expectations and $F(1, 99) = 5.75, p = .02$ for final agreement price. Prenegotiation expectations and agreement price were significantly correlated ($r = .42, p < .001$), but the prenegotiation expectations measure was not a significant mediator of the effect of the sex of buyer \times structural ambiguity interaction on agreement price, Sobel $z = 1.81, p = .07$.

Discussion

Study 1 supports the hypothesized effect of structural ambiguity on gender differences in negotiation expectations and performance in competitive bargaining. Under high ambiguity, male buyers entered the negotiation scenario expecting to pay 10% less and to offer 19% less than female buyers. Consistent with expectations, male buyers walked out of the negotiation paying 27% less than did female buyers. However, with the benefit of clear price comparison information in the low structural ambiguity condition, there were no significant sex differences in target prices, intended first offers, or negotiated outcomes. Employing a relatively subtle manipulation of structural ambiguity that controlled for perceptions of the bargaining range and changed only the negotiators' information about appropriate standards for agreement, we found that reduced ambiguity was associated with significantly diminished gender differences in competitive bargaining.

Study 2

In Study 2, we attempted to replicate the pattern of results observed in Study 1 using field data on salaries negotiated by graduating MBA students. Prior research has shown male MBAs to outperform female MBAs in salary negotiations (Gerhart & Rynes, 1991; Stevens, Bavetta, & Gist, 1993). We hypothesized that the gender gap in MBA

salaries would be greater in industries where there was relatively high (vs. low) structural ambiguity in salary negotiations.

Methods

Data. The data were obtained from a job placement survey administered to graduating students in the class of 2000 by the career services office of a major American business school. The original data set had 887 cases (596 males, 265 females, 27 unspecified). The sample of data analyzed contained 525 cases (358 males, 167 females). We deleted 27 cases where MBA sex was not specified, 57 cases due to other missing data, and 3 extreme outliers on salary. Because we were interested in analyzing the outcomes of salary negotiations, we removed 87 cases of individuals who reported that they were starting their own businesses, 142 cases where the MBA did not report having accepted a salary offer, and 46 cases where the same company had hired more than two MBAs and all at the same starting salary (indicating no negotiation took place).

Our dependent variable was the natural log of self-reported base salary offer accepted. We created a dummy variable, Female MBA, which was equal to 1 if the MBA student respondent was female and 0 if male. Because our dependent variable is in log form, the coefficient on Female MBA is interpreted as the percentage difference in the salaries of female as compared to male students.

We created a second dummy variable to indicate whether the student accepted a job in a high vs. low structural ambiguity industry. Interviews with three career service professionals at the business school where we collected the data indicated that there were some industries in which MBAs had a very strong sense of the range and appropriate standards for base salary and that there were others in which they did not. Based on the

information collected in the interviews and the distribution of industries in the sample, we assembled the following list of thirteen industry categories to be rated for structural ambiguity: investment banking, venture capital/private equity, other financial services, advertising/marketing, consulting, entertainment/media, healthcare/human services, retail, telecommunications, other services, consumer products, hi-tech and other manufacturing. We asked three career service professionals from other major business schools who had worked with MBAs on the job market in the year 2000 to rate the industries. We collected the ratings through an online survey. For each industry category, we asked the raters to indicate their agreement with the following statement on a scale of 1-7 (1 = strongly disagree, 7 = strongly agree): “Class of 2000 MBAs knew exactly how much money to expect when they were discussing salary with a prospective employer in the [category inserted] industry.” There was high effective reliability among the judges, Spearman Brown $R = .80$ (Rosenthal & Rosnow, 1991). We used a median split of the ratings to separate industry categories into high vs. low ambiguity ($Mdn = 5.33$). The high ambiguity industry categories (in order of increasing ambiguity) were telecommunications, other financial services, health/human services, other manufacturing, other services, advertising/marketing, retail and entertainment/media (percent of sample = .31; rating $M = 4.50$, $Max = 5.33$, $Min = 3.33$). The low ambiguity industry categories (in order of increasing ambiguity) were investment banking, consulting, consumer products, venture capital/private equity and high technology (percent of sample = .69; rating $M = 6.20$, $Max = 6.67$, $Min = 5.67$).

The data set included a range of other potential salary predictors. In order to reduce the potential for omitted variable bias when testing for gender effects on salary,

we employed a total of 33 control variables representing five categories of potential salary predictors: job function, pre-MBA work experience, job market activity, geographic location of position, and job preferences. We did not control for industry because we had already used the industry categories to create the structural ambiguity variable and because there was extremely high collinearity with the job function variables (e.g., consulting industry, consulting function). We controlled for job function using dummy variables for each of the following seven job function categories: business development, consulting, general management, investment banking, marketing, venture capital/private equity or other job functions (i.e., remaining 6% of sample not captured by other categories). The pre-MBA work experience variables included years worked, pre-MBA salary and two dummy variables indicating whether the student was returning to a pre-MBA job function or industry (function experience, industry experience). The three controls for job market activity were pre-MBA employer (dummy variable equal to 1, if returning to pre-MBA employer), number of offers received and job search activity. Job search activity consisted of the composite mean of the number of job letters the MBA sent out and the number of interviews of received. Because the two variables were so highly correlated ($r = .82$), we combined them into one variable ($\alpha = .80$). We controlled for the geographic location of the position with dummy variables indicating whether the student had accepted a position in a major U.S. city, Europe or other location. The job preference controls were 16 dummy variables indicating whether or not the MBA had ranked each of the following concerns among their top-three job search priorities: debt payment, salary, equity/options, dual-career couple considerations, work/life balance, growth potential in company, expand experience, job content/level of responsibility,

geography, people/company culture, obligation to previous employer, past experience at company, wanted company type (e.g., dot com), wanted function, wanted industry, and other (filled in by respondent; 5% of sample).

Results

Table 3 displays descriptive statistics for salary by sex of MBA and structural ambiguity.² The average salary accepted by male MBAs in the sample was \$5,941 higher than the average salary accepted by female MBAs, $t(436) = 3.69, p < .001$ (equal variances not assumed). (There was higher variance in the salaries accepted by male vs. female MBAs, Levene's $F = 7.71, p < .01$.) There was no significant difference in mean or variance between the salaries in high vs. low structural ambiguity industries, $t(523) = 0.91, p = .36$ and Levene's $F = 1.81, p = .18$.

Males in the sample were significantly more likely than females to accept positions in low vs. high structural ambiguity industries, $\chi^2(1, N = 525) = 8.54, p < .01$. Males were significantly more likely than females to take a position in venture capital/private equity ($\chi^2[1, N = 525] = 6.23, p = .01$), which was a low structural ambiguity industry. Females (as compared to males) were significantly more likely to enter health/human services ($\chi^2[1, N = 525] = 5.13, p = .03$) and retail ($\chi^2[1, N = 525] = 5.91, p = .02$), which were high structural ambiguity industries. There were no other sex differences in the industry categories ($ps > .07$).

There were significant sex differences in six of the 33 control variables. Consistent with the aforementioned sex differences in industry, males were significantly more likely to report venture capital/private equity as their job function than were females, $\chi^2(1, N = 525) = 7.73, p < .01$. Males were significantly more likely than

females to report salary and equity/options among their top 3 job search priorities, $\chi^2(1, N = 525) = 6.76, p < .01$ for salary and $\chi^2(1, N = 525) = 4.85, p = .03$ for equity/options.

Males (as compared to females) were also more likely to accept a position in Europe, $\chi^2(1, N = 525) = 6.05, p = .01$. Females were more likely than males to accept a position in a U.S. city ($\chi^2[1, N = 525] = 9.08, p < .01$) and to report dual career couple considerations to be among their top 3 job search priorities ($\chi^2[1, N = 525] = 17.96, p < .001$).

Table 4 displays the results of hierarchical regression analyses of the log of salary by MBA sex and structural ambiguity. Step 1 indicated that the salaries accepted by female MBAs were 5.3% lower than those accepted by male MBAs, $t = -3.03, p < .01$. In Step 2, we added the control variables. Controlling for job function, pre-MBA work experience, job market activity, geographic location and job preferences, the sex difference in salaries accepted declined to 4.8%, $t = -2.90, p < .01$. The only statistically significant control variables were investment banking function ($B = -.29, t = -4.01, p < .001$), venture capital/private equity function ($B = .19, t = 2.82, p < .01$), marketing function ($B = -.17, t = -2.81, p < .01$), pre-MBA salary ($B = .12, t = 2.90, p < .01$) and major U.S. city ($B = .17, t = 3.83, p < .001$).

In Step 3 of the regression analysis, we tested the significance of the sex \times structural ambiguity interaction. As predicted, the analyses revealed a significant sex \times structural ambiguity interaction ($t = -2.00, p < .05$), indicating a (statistically non-significant) 2.8% sex difference in low ambiguity industries as compared to a 9.4% sex difference (favoring males) in high ambiguity industries. The same control variables were significant in the third step as in the second step of the regression analysis.

Discussion

The results of Study 2 show that structural ambiguity has the potential to moderate the effects of gender on economically important negotiation outcomes. Controlling for job function, pre-MBA work experience, job market activity, geographic location and job preferences, we found that female MBAs accepted salary offers that were 4.8% lower on average than the offers accepted by male MBAs. This initial finding is consistent with previous research on MBA salary negotiations (Gerhart & Rynes, 1991; Stevens et al., 1993). What this study contributes is a demonstration that the effect of gender is contingent on the quality of information available to MBAs about the range and standards for agreement (structural ambiguity). Controlling for a broad array of potential salary predictors, the gender gap (favoring males) in starting salary for MBAs was approximately \$10,000 for those entering high structural ambiguity industries as compared to only about \$3,000 for those entering low structural ambiguity industries. Study 2 replicates the pattern of results observed in Study 1 and provides external validation for the hypothesis that structural ambiguity moderates the effects of gender on negotiation.

Study 3

In Study 3, we tested the hypothesized effects of representation role as a gender trigger in negotiation in a 2 (sex of seller) \times 2 (self- vs. other- representation for seller) factorial design. All of the buyers in the negotiation were male. The scenario involved negotiating the compensation for an internal candidate for a new management position within a corporation. In the self-representation condition, the participant adopted the role of the candidate. In the other-representation condition, the participant adopted the role of

the candidate's mentor and negotiated on behalf of the candidate. We hypothesized that the representation role manipulation would have a greater effect on female than on male negotiators. We expected female sellers to set higher compensation targets and to negotiate higher compensation agreements when they were negotiating on behalf of the candidate as compared to when they were negotiating for themselves.

Methods

Participants. The participants in this experiment were mid-career professionals who took part in one of two executive programs. We collected pre- and post-negotiation data from 120 mid-career professionals (86 men, 34 women) who took part in a 1-day, open-enrollment executive training program on negotiation and from 56 mid-career professionals (38 males, 18 females) who participated in a three-week, university-based executive program. The participants were senior executives from private-sector enterprises or government agencies, with the exception of a few individuals who held senior administrative positions in a hospital or university setting. Representative titles included chairman, chief executive officer, chief operating officer, director, deputy director, president, vice president, senior vice president, manager, senior manager or general manager. As explained below, we removed three pairs from the analysis, leaving a total sample of 170 participants (120 men, 50 women).

Materials. The simulation involved a single-issue negotiation over compensation for the position of director of product marketing for a medium-sized software company. The candidate for the position (the seller) has an alternative offer estimated at approximately \$145,000 including salary and bonus from the professional services department of the same company, but confidential instructions made clear that the

professional services position is less attractive to the candidate than is the marketing position. The confidential instructions for the head of the marketing department (the buyer) included some background information on typical starting salaries for product managers at the company (\$100,000-\$120,000) and in the industry (\$70,000-\$140,000), but also made clear that the candidate is exceptional and that the buyer could set whatever (monetary) compensation level he deemed appropriate. In order to provide some context for the representation manipulation, the buyers' instructions indicated that, "It's not clear to you whether you'll be meeting with [the candidate] and [the mentor], or with just one of them." All roles had gender-ambiguous names, and the text contained no gender-specific pronouns referencing the negotiating parties.

The representation manipulation was embedded in the sellers' confidential instructions. The sellers either received confidential instructions indicating they were the candidate themselves or the mentor (head of the sales department). In either case, their task was to negotiate the compensation that the candidate would receive in the director of marketing position. With the exception of references to the candidate or mentor being in either the second or third person, the confidential instructions for the sellers were identical across representation conditions. All buyers received the same confidential instructions.

Procedure. The participants received packets of information containing a coversheet, an individual prenegotiation questionnaire, confidential instructions, and a joint post-negotiation questionnaire (attached to the back of buyers' confidential instructions). The coversheet informed them of their pairing number and role in the negotiation and directed them not to include non-monetary incentives in their terms of

agreement. The individual prenegotiation questionnaire asked what would be the total annual compensation in the best agreement they hoped to negotiate. On the joint post-negotiation survey, participants reported whether they had reached agreement and, if so, what would be the total annual compensation that the candidate would receive. To confirm that the sellers had enacted their roles consistent with the representation manipulation, the buyers reported whether they had negotiated with the candidate or the mentor. (See Appendix for wording of pre- and post-negotiations questions.)

The researchers collected the prenegotiation surveys in class before the participants paired up by participant number and learned with whom they would negotiate. Following the negotiation, the participants reported their negotiation outcomes on the joint post-negotiation survey. The researchers collected the completed post-negotiation surveys before the participants returned to the classroom to debrief their negotiation experiences.

Results

We removed three pairs from the sample before analyzing the data: one had failed to report whether the seller was the candidate or the mentor, another misidentified the seller's representation role, and the third reported an incalculable commission-based compensation agreement. All buyers in the sample of data analyzed reported correctly whether the seller had negotiated as the candidate (self-representation) or mentor (other-representation). In the data analyzed, there were 50 cases in which the seller was female (28 self-representation, 22 other-representation) and 35 cases in which the seller was male (17 self-representation, 18 other-representation).

Thirty-eight percent of the pairs failed to reach to agreement, and there was a significant main effect by sex of seller on the agreement rate. Female sellers were significantly more likely to reach agreement than were male sellers, female $P = .74$ and male $P = .46$, $\chi^2(1, N = 85) = 7.02, p < .01$. The representation manipulation had no significant effect on the agreement rate, self $P = .61$ and other $P = .64$, $\chi^2(1, N = 85) = 0.09, p = .76$. Logit regression analyses showed no significant interaction between the sex of the seller and representation role on agreement rate, $z = 0.73, p = 0.47$.

We analyzed compensation targets at the individual level and compensation agreements at the level of the negotiating pair. As predicted, the representation role manipulation had a significant effect on the compensation agreements negotiated by female sellers. Female sellers negotiated mean compensation agreements for \$141,643 ($SD = \$26,585$) when representing themselves and for \$167,250 ($SD = \$48,121$) when representing the candidate, $t(35) = 2.07, p < .05$. There was no significant effect, however, of the role manipulation on target compensation for female sellers, $t(48) = -0.20, p = .84$, self $M = \$173,000, SD = \$37,819$ and other $M = 171,000, SD = \$30,482$.

Consistent with expectations, the representation role manipulation had no significant effects on male sellers' performance or prenegotiation expectations. Male sellers negotiated mean compensation agreements for \$146,093 ($SD = \$26,828$) when representing themselves and for \$146,667 ($SD = \$10,897$) when representing the candidate, $t(14) = 0.05, p = .95$. There were also no significant differences by representation condition in the target compensation levels reported by male sellers, $t(33) = 1.28, p = .21$, self $M = \$174,167, SD = \$38,966$ and other $M = 191,118, SD = \$39,528$.

There were no significant sex differences within the self- or other-representation condition for target compensation or final agreement, $t_s < 1.79$, $p_s > .08$. However, the mean performance of female negotiators in the other-representation condition was significantly higher than the mean performance of negotiators in all other categories combined, $t(51) = 2.41$, $p = .02$.

As illustrated in Figure 2, negotiated outcomes across conditions followed the predicted pattern, such that the female sellers were significantly more successful negotiating for others than for themselves and males seemed unaffected by their representation role assignment. As summarized in Table 5, we used an ANCOVA model to test for an interaction effect between sex of seller and representation role on compensation. Consistent with our hypotheses, the results revealed a significant interaction between sex of seller and representation role, $F(1, 47) = 5.26$, $p = .03$.

In order to confirm that our results were not biased by the higher agreement rate among female than male sellers, we used a statistical measure developed by Heckman (1979) that jointly estimates an equation for who reaches agreement and for the amount of the negotiated agreement, with the latter equation being corrected for the biased sample. When we use this procedure, the effect of the interaction between sex of seller and representation role on total compensation remains significant, $z = 2.73$, $p < .01$.

Discussion

Study 3 supports the hypothesis that representation role is a gender trigger in negotiation, by demonstrating that the shift in perspective from negotiating for oneself to advocating for someone else has a significantly greater effect on female than on male negotiators. Female executives negotiated compensation agreements that were 18%

higher when they were representing a mentee as opposed to themselves, whereas the representation manipulation had no measurable effect on the compensation agreements negotiated by male executives.

Contrary to our expectations, the representation manipulation had no effect on the target compensation values reported by female executives. Our hypothesis that representation role would function as a gender trigger in negotiation was motivated by three bodies of literature: gender and interdependent self-construal, gender roles and the backlash effect, and the entitlement effect. The entitlement effect literature, in particular, would suggest that females might enter compensation negotiations with lower expectations for themselves than for others (Callahan-Levy & Messe, 1979; Major et al., 1984). The results of this experiment suggest that depressed entitlement does not explain the effect of representation role on female negotiators, because there was no evidence that the female executives had lower pay expectations than their male peers.

The finding that females were more effective advocates than self-promoters during the negotiation is consistent with both the literatures on gender and interdependent self-construal and on gender roles and the backlash effect. The literature on gender and interdependent self-construal suggests that women would be particularly energized in negotiations in which they felt a personal sense of responsibility or obligation to another person (Cross & Madson, 1997). The female executives in the other-representation condition did appear to be the most motivated among all sellers, attaining compensation agreements that were 16.4% higher on average than those negotiated by all other participants. However, if a heightened sense of responsibility to another were motivating this effect, one might expect it to be reflected in negotiation targets as well as outcomes,

and it was not. The literature on gender roles and the backlash effect suggests an alternative interpretation that women may be resisted more strongly by their counterpart when negotiating for themselves, because self-promotion is a stereotypically male (agentic) behavior that contradicts communal prescriptions for female behavior (Rudman, 1998; Rudman & Glick, 1999).

Finally, it is worth noting that we operationalized representation role in terms of representing oneself vs. another person. Representation of a group might have different effects than representation of an individual. For instance, if men are motivated more than woman to respond to the interests of broader social groups of which they are a member (Baumeister & Sommer, 1997; Gabriel & Gardner, 1999), then representation role might have the opposite gender effect when negotiators represented teams or organizations vs. individual others. Future research should explore the implications of various forms of representation relationships and the mechanisms underlying representation role effects.

Conclusion

In combination, the three studies presented in this paper demonstrate two distinct categories of situational moderators of gender effects in negotiation. The first, structural ambiguity, functions as a form of constraint on potential gender effects in negotiation by “strengthening” or “weakening” the psychological situation (Mischel, 1977). In Studies 1 and 2, we observed—both in the lab and in the field—that gender effects on negotiation performance were significantly greater under conditions of high vs. low structural ambiguity. The second category, gender triggers, “precipitate” (Snyder & Ickes, 1985) gender effects by prompting alternative modes of response as a function of gender. In Study 3, we demonstrated the effect of representation role (i.e., negotiating for oneself vs.

another person) as a gender trigger, which activates a stronger response in female than in male negotiators. The results of this research not only contribute to the list of potential situational moderators of gender in negotiation, they also advance the study of gender in negotiation more broadly by proposing two organizing constructs for understanding how situational variables influence gender effects.

This conceptualization of the mechanics of gender effects in negotiation as the joint product of factors that constrain or release the potential for gender effects and others that trigger their manifestation has important implications for negotiation research. Experimental settings tend, by design, to be “strong” situations and tend, therefore, to minimize potential effects of gender and other individual differences on behavior (Mischel, 1977; Snyder & Ickes, 1985). If we as researchers are not sensitive to the constraints embedded in how we structure negotiation simulations, we may miss opportunities to explore the conditions under which gender—or other individual differences—influence negotiation behavior and performance. Moreover, we should consider, when comparing findings across studies, whether variation in structural ambiguity as well as gender triggers may explain any inconsistency in results.

A promising direction for future research is to explore how gender may affect the initiation of negotiations (Babcock & Laschever, 2003). Van Lange and Visser (1999) have extended the Snyder and Ickes’ (1985) work on precipitating situations by exploring conditions under which individual differences predict not only situational response but also situation selection. Structural ambiguity and gender triggers may also moderate the effect of gender on individuals’ propensity to negotiate.

Gender is not always a significant factor in negotiation and, even when it is, its effect size tends to be relatively small. It warrants emphasis, however, that even small and situationally bound effects can have economically important implications (Eagly, 1996). The results of Study 2 provide a striking example of this. In Study 2, we found—after controlling for a broad range of salary predictors—a gender gap in MBA salaries of approximately \$10,000 on average in industries with high structural ambiguity (31% of the total sample). Assuming that MBAs graduate at age 30 and work until they are 65 and that they receive only a 3% raise per year, then the value of a gender gap in starting salary of \$10,000 amounts to a gender gap in earnings of more than \$600,000 over the course of a career. Assuming 5% annual interest on those additional earnings, that gender gap in earnings becomes a wealth gap of \$1.45 million.

Gender does not always matter in negotiation, but it can have material effects. A situational approach not only leads to a more nuanced understanding of gender in negotiation, it also shines the spotlight on those circumstances under which prescriptive interventions are likely to be most valuable. Heightened awareness of the triggers and constraints embedded in the negotiating context will help us to identify levers for harnessing those situational circumstances that heighten negotiator performance and for ameliorating those that work to a negotiator's disadvantage.

References

- Babcock, L., & Laschever, S. (2003). *Women don't ask*. Princeton, NJ: Princeton University Press.
- Bakan, D. (1966). *The duality of human existence*. Chicago: Rand McNally.
- Baumeister, R. F., & Sommer, K. L. (1997). What do men want? Gender differences and two spheres of belongingness: Comment on Cross and Madson (1997). *Psychological Bulletin*, *122*(1), 38-44.
- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*, *42*(2), 155-162.
- Bem, S. L., & Lenney, E. (1976). Sex typing and the avoidance of cross-sex behavior. *Journal of Personality and Social Psychology*, *33*, 48-54.
- Beyer, S. (1990). Gender differences in the accuracy of self-evaluations of performance. *Journal of Personality and Social Psychology*, *59*(5), 960-970.
- Beyer, S., & Bowden, E. M. (1997). Gender differences in self-perceptions: Convergent evidence from three measures of accuracy and bias. *Personality and Social Psychology Bulletin*, *23*(2), 157-172.
- Brehm, J. W. (1966). *A theory of psychological reactance*. New York: Academic Press.
- Bylsma, W. H., & Major, B. (1992). Two routes to eliminating gender differences in personal entitlement: Social comparisons and performance evaluations. *Psychology of Women Quarterly*, *16*(2), 193-200.
- Callahan-Levy, C., & Messe, L. A. (1979). Sex differences in the allocation of pay. *Journal of Personality and Social Psychology*, *37*(3), 433-446.

- Chodorow, N. (1978). *The reproduction of mothering: Psychoanalysis and the sociology of gender* (2nd ed.). Berkeley, CA: University of California Press.
- Cross, S. E., & Madson, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin*, 122(1), 5-37.
- Deaux, K., & LaFrance, M. (1998). Gender. In D. T. Gilbert, S. Fiske & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., pp. 788-827). Boston: McGraw-Hill.
- Deaux, K., & Major, B. (1987). Putting gender into context: An interactive model of gender-related behavior. *Psychological Review*, 94(3), 369-389.
- Dunning, D., Meyerowitz, J. A., & Holzberg, A. D. (1989). Ambiguity and self-evaluation: The role of idiosyncratic trait definitions in self-serving assessments of ability. *Journal of Personality and Social Psychology*, 57(6), 1082-1090.
- Eagly, A. H. (1987). *Sex difference in social behavior: A social-role interpretation*. Hillsdale, NJ: Erlbaum.
- Eagly, A. H. (1996). Differences between women and men: Their magnitude, practical importance, and political meaning. *American Psychologist*, 51(2), 158-159.
- Eagly, A. H., Makhijani, M. G., & Klonsky, B. G. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin*, 111(1), 3-22.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition*. New York: McGraw-Hill.
- Foddy, M., & Smithson, M. (1999). Can gender inequalities be eliminated? *Social Psychology Quarterly*, 62(4), 307-324.
- Gabriel, S., & Gardner, W. L. (1999). Are there 'his' and 'hers' types of interdependence? The implications of gender differences in collective versus relational

- interdependence for affect, behavior, and cognition. *Journal of Personality and Social Psychology*, 77, 642-655.
- Gerhart, B., & Rynes, S. (1991). Determinants and consequences of salary negotiations by male and female MBA graduates. *Journal of Applied Psychology*, 76(2), 256-262.
- Gilligan, C. (1993). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Heckman, J. J. (1979). Sample selection bias as a specification error. *Econometrica*, 47(1), 153-162.
- Heilman, M. E. (1984). Information as a deterrent against sex discrimination: The effects of applicant sex and information type on preliminary employment decisions. *Organizational Behavior and Human Performance*, 33(2), 174-186.
- Heilman, M. E. (1995). Sex stereotypes and their effects in the workplace: What we know and what we don't know. *Journal of Social Behavior and Personality*, 10(6), 3-26.
- Heilman, M. E., Martell, R. F., & Simon, M. C. (1988). The vagaries of sex bias: Conditions regulating the undervaluation, equivaluation, and overvaluation of female job applicants. *Organizational Behavior and Human Decision Processes*, 41(1), 98-110.
- Kashima, Y., Yamaguchi, S., Kim, U., Choi, S.-C., Gelfand, M., & Yuki, M. (1995). Culture, gender, and self: A perspective from individualism-collectivism research. *Journal of Personality and Social Psychology*, 69(5), 925-937.

- Kray, L. J., Galinsky, A., & Thompson, L. (2002). Reversing the gender gap in negotiations: An exploration of stereotype regeneration. *Organizational Behavior and Human Decision Processes*, 87(2), 386-409.
- Kray, L. J., Thompson, L., & Galinsky, A. (2001). Battle of the sexes: Gender stereotype confirmation and reactance in negotiations. *Journal of Personality and Social Psychology*, 80(6), 942-958.
- Lax, D., & Sebenius, J. (1986). *The manager as negotiator: Bargaining for cooperation and competitive gain*. New York: Free Press.
- Lenney, E. (1977). Women's self-confidence in achievement settings. *Psychological Bulletin*, 84(1), 1-13.
- Lenney, E., Mitchell, L., & Browning, C. (1983). The effect of clear evaluation criteria on sex bias in judgments of performance. *Psychology of Women Quarterly*, 7(4), 313-328.
- Maccoby, E. (1990). Gender and relationships. *American Psychologist*, 45(4), 513-520.
- Major, B., & Konar, E. (1984). An investigation of sex differences in pay expectations and their possible causes. *Academy of Management Journal*, 27(4), 777-792.
- Major, B., McFarlin, D. B., & Gagnon, D. (1984). Overworked and underpaid: On the nature of gender differences in personal entitlement. *Journal of Personality and Social Psychology*, 47(6), 1399-1412.
- McGinn, K., & Keros, A. (2002). Improvisation and the logic of exchange in socially embedded transactions. *Administrative Science Quarterly*, 47(3), 442-473.
- Miller, J. B. (1986). *Toward a new psychology of women* (2nd ed.). Boston: Beacon Press.

- Mischel, W. (1977). The interaction of person and situation. In D. Magnusson & N. S. Endler (Eds.), *Personality at the crossroads: Current issues in interactional psychology*. Hillsdale, NJ: Erlbaum.
- Neale, M. A., & Bazerman, M. H. (1991). *Cognition and rationality in negotiation*. New York: The Free Press.
- Nieva, V. F., & Gutek, B. A. (1980). Sex effects on evaluation. *Academy of Management Review*, 5(2), 267-276.
- Pfeffer, J. (1977). Toward an examination of stratification in organizations. *Administrative Science Quarterly*, 22(4), 553-567.
- Pheterson, G. I., Kiesler, S. B., & Goldberg, P. A. (1971). Evaluation of the performance of women as a function of their sex, achievement, and personal history. *Journal of Personality and Social Psychology*, 19(1), 114-118.
- Pruitt, D. G., Carnevale, P. J., Forcey, B., & Van Slyck, M. (1986). Gender effects in negotiation: Constituent surveillance and contentious behavior. *Journal of Experimental Social Psychology*, 22(3), 264-275.
- Raiffa, H. (1982). *The art and science of negotiation*. Cambridge, MA: Harvard University Press.
- Rosenthal, R., & Rosnow, R. L. (1991). *Essentials of behavioral research: Methods and data analysis*. New York: McGraw-Hill.
- Rubin, J. Z., & Brown, B. R. (1975). Bargainers as individuals. In *The social psychology of bargaining and negotiation* (pp. 157-196). New York: Academic Press.

- Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counterstereotypical impression management. *Journal of Personality and Social Psychology, 74*(3), 629-645.
- Rudman, L. A., & Glick, P. (1999). Feminized management and backlash toward agentic women: The hidden costs to women of a kinder, gentler image of middle managers. *Journal of Personality and Social Psychology, 77*(5), 1004-1010.
- Schelling, T. C. (1980). *The strategy of conflict*. Cambridge, UK: Harvard University Press.
- Skrypnik, B. J., & Snyder, M. (1982). On the self-perpetuating nature of stereotypes about women and men. *Journal of Experimental Social Psychology, 18*(3), 277-291.
- Snyder, M., & Ickes, W. (1985). Personality and social behavior. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (3rd ed., Vol. 2, pp. 883-947). New York: Random House.
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual ability and performance. *American Psychologist, 52*(6), 613-629.
- Stevens, C. K., Bavetta, A. G., & Gist, M. E. (1993). Gender differences in the acquisition of salary negotiation skills: The role of goals, self-efficacy, and perceived control. *Journal of Applied Psychology, 78*(5), 723-735.
- Stuhlmacher, A. F., & Walters, A. E. (1999). Gender differences in negotiation outcome: A meta-analysis. *Personnel Psychology, 52*(3), 653-677.
- Thompson, L. (1990). Negotiation behavior and outcomes: Empirical evidence and theoretical issues. *Psychological Bulletin, 108*(3), 515-532.

- Thompson, L. (1998). *The mind and heart of the negotiator*. Upper Saddle River, N.J.: Prentice Hall.
- Tosi, H. L., & Einbender, S. W. (1985). The effects of the type and amount of information in sex discrimination research: A meta-analysis. *Academy of Management Journal*, 28(3), 712-723.
- Van Lange, P. A. M., & Visser, K. (1999). Locomotion in social dilemmas: How people adapt to cooperative, tit-for-tat, and noncooperative partners. *Journal of Personality and Social Psychology*, 77(4), 762-773.
- Wade, M. E. (2001). Women and salary negotiation: The costs of self-advocacy. *Psychology of Women Quarterly*, 25(1), 65-76.
- Walters, A. E., Stuhlmacher, A. F., & Meyer, L. L. (1998). Gender and negotiator competitiveness: A meta-analysis. *Organizational Behavior and Human Decision Processes*, 76(1), 1-29.
- Walton, R. E., & McKersie, R. (1965). *A behavioral theory of labor negotiations*. New York: McGraw Hill.
- White, S. B., & Neale, M. A. (1994). The role of negotiator aspirations and settlement expectancies in bargaining outcomes. *Organizational Behavior and Human Decision Processes*, 57(2), 303-318.
- Wood, W., & Karten, S. J. (1986). Sex differences in interaction style as a product of perceived sex differences in competence. *Journal of Personality and Social Psychology*, 50(2), 341-347.

Zanna, M. P., & Pack, S. J. (1975). On the self-fulfilling nature of apparent sex differences in behavior. *Journal of Experimental Social Psychology*, 11(6), 583-591.

Footnotes

¹In all three studies the distinction between male and female is based on indicators of biological sex rather than on sex-role identification (i.e., masculinity, femininity, androgyny) (Bem, 1974). We state hypotheses and discuss results in terms of “gender differences” as opposed to “sex differences” because the latter connotes “stable dispositions” rather than “fluctuating patterns” (Deaux & LaFrance, 1998, p. 789). Embracing a gender-in-context perspective, we approach gender as a role that is enacted according to contextual cues (Deaux & LaFrance, 1998; Deaux & Major, 1987).

²In the interests of space and protection of the identity of the business school and because the control variables were included only to reduce the potential for omitted variable bias, we do not report a full set of descriptive statistics for these control variables.

Appendix

Study 1

Prenegotiation Survey Questions

1. What is your target price in this negotiation? In other words, what price per unit would you consider to be a good outcome for you in this negotiation? _____
2. Regardless of whether you want to make the first offer, if you had to put the first serious price number on the table, what amount would you offer? _____

Post-negotiation Survey Questions

1. Did you reach agreement? Yes ____ No ____
2. If yes, at what price per unit? _____
3. For how many minutes did you negotiate? _____

Study 3

Prenegotiation Survey Question

1. What would be the total annual compensation in the best agreement that you hope to negotiate? _____

Post-negotiation Survey Questions

1. Did you and your negotiating counterpart reach agreement? Yes ____ No ____
2. If you reached agreement, please describe below the total annual compensation package that [the candidate] will receive. _____
3. Did you negotiate with [the candidate] or [the mentor]? I negotiated with [the candidate]. ____ I negotiated with the [the mentor]. ____

Table 1

Study 1: Descriptive Statistics for Buyers' Target Prices, Intended Initial Offers and Agreement Prices (dollars per unit) by Sex of Buyer and Structural Ambiguity

		Target Price	Intended Offer	Agreement Price
Sex of Buyer		High Structural Ambiguity		
Male	<i>M</i>	25.98	19.31	23.13
	<i>SD</i>	4.67	6.37	5.22
	<i>n</i>	24	24	24
Female	<i>M</i>	28.52	22.96	29.38
	<i>SD</i>	4.09	5.71	3.19
	<i>n</i>	23	24	24
		Low Structural Ambiguity		
Male	<i>M</i>	19.36	15.17	23.47
	<i>SD</i>	4.93	6.44	4.47
	<i>n</i>	29	29	29
Female	<i>M</i>	18.62	14.46	25.41
	<i>SD</i>	5.61	4.53	4.97
	<i>n</i>	26	26	26

Table 2

Study 1: Analysis of Variance of Prenegotiation Expectations and Agreement Price by Sex of Buyer and Structural Ambiguity

Source	<i>df</i>	<i>MS</i>	<i>F</i>	η^2
Prenegotiation Expectations				
Sex	1	30.63	1.53	.02
Structural Ambiguity	1	1327.35	66.34**	.40
Sex \times Structural Ambiguity	1	85.04	4.25*	.04
Error	99	20.01		
Agreement Price				
Sex	1	430.04	20.87**	.17
Structural Ambiguity	1	83.90	4.07*	.04
Sex \times Structural Ambiguity	1	118.43	5.75*	.06
Error	99	20.61		

Note. η^2 = effect size.

* $p < .05$. ** $p < .01$.

Table 3

Study 2: Descriptive Statistics for Salary (in thousands of dollars) by MBA Sex and Structural Ambiguity

		Overall	Female	Male
Total Sample	<i>M</i>	98.14	94.09	100.03
	<i>SD</i>	19.49	15.08	20.99
	<i>n</i>	525	167	358
Low Structural Ambiguity	<i>M</i>	98.66	96.16	99.63
	<i>SD</i>	18.78	15.20	19.93
	<i>n</i>	360	100	260
High Structural Ambiguity	<i>M</i>	96.99	90.99	101.10
	<i>SD</i>	20.98	14.53	23.67
	<i>n</i>	165	67	98

Table 4

*Study 2: Regression Analysis of Log of Salary by MBA Sex and Structural Ambiguity**Rating of Industry (N = 525)*

	Variables	B^a	SEB	ΔR^2
Step 1	Female MBA	-.053**	.02	0.02**
Step 2	Female MBA	-.048**	.02	0.27***
	Control Variables ^b			
Step 3	Female MBA	-.028	.02	0.01*
	Control Variables ^b			
	High Structural Ambiguity	.056*	.02	
	Female MBA × High Structural Ambiguity	-.066*	.03	

^aWe do not report standardized beta coefficient, because dependent variable is in log form. ^bModel included 31 control variables from five categories of salary predictors: job function (business development, consulting, general management, investment banking, marketing and venture capital/private equity as compared to other job functions), pre-MBA experience (years worked, pre-MBA salary, function experience, industry experience), job market activity (pre-MBA employer, offers received, job search activity), geographic location (U.S. city and Europe as compared to other location), and job preferences (debt payment, salary, equity/options, dual-career couple considerations, work/life balance, growth potential in company, expand experience, job content/level of responsibility, geography, people/company culture, obligation to previous employer, past experience at company, wanted company type, wanted function, wanted industry, other).

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5

Study 3: Analysis of Covariance of Compensation Agreement by Sex of Seller and Representation Role

Source	<i>df</i>	<i>MS</i>	<i>F</i>	η^2
Sex	1	348.87	0.41	.01
Representation	1	171.20	0.20	.004
Sex \times Representation	1	4523.06	5.26*	.10
Seller's Target Compensation	1	11626.77	13.53**	.22
Buyer's Target Compensation	1	1868.66	2.17	.04
Error	47	859.51		

* $p < .05$. ** $p < .01$.

Figure Caption

Figure 1. Study 1: Mean difference in male and female buyers' target prices, intended initial offers and agreement prices under low and high structural ambiguity (female M – male M). Asterisks indicate significant mean sex difference within ambiguity condition. * $p \leq .05$. ** $p < .01$.

Figure 2. Study 3: Mean compensation agreements by sex of seller and representation role. Asterisk indicates significant mean difference between self- and other-representation conditions.

* $p < .05$.



