

SUBSERVIENT SELLER SYNDROME: OUTCOMES IN ZERO-SUM GAME NEGOTIATIONS EXAMINING THE INFLUENCE OF THE SELLER AND BUYER ROLE/LABELS

MICHAEL J. COTTER, Grand Valley State University
JAMES A. HENLEY, JR., The University of Tennessee at Chattanooga

This study contrasts the success of negotiators in the roles of sellers and buyers while making the first offer or counter offers during high-stake, face-to-face, zero-sum game bargaining sessions. A total of 2,351 separate negotiations were examined. Results for the overall negotiations indicate the person acting as the buyer was significantly more successful than the seller. Further results indicated the lack of a first offer or counter offer advantage regardless of the buyer or seller role.

*“What’s in a name? That which we call a rose
By any other name would smell as sweet.”
William Shakespeare (circa 1600)*

INTRODUCTION

Each day we enter circumstances in which we must adapt our preferences with those of others in making decisions, addressing problems, and handling conflicts. Conflict management occurs in selling functions when we are interdependent with others with whom we must accommodate in a give-and-take relationship style to coordinate our actions. Development of effective negotiation skills as a seller or buyer is based on understanding dynamic factors that often shape the negotiation situations we face. Comprehending negotiation problems to ultimately select the strategies and tactics is a highly practical skill that may lead to optimal outcomes (Dion and Banting 1988).

A buyer in a negotiation is often automatically considered to enjoy a stronger position than the seller. An extreme circumstance is typically found in the relatively status-conscious Japanese society in which the buyer feels dominant and considers it normal to ask a great many things of the seller. The sellers show

acceptance of their subordinate status by using an honorific speaking style in dealing with the buyers and bowing deeper than the buyers (Herbig 1995). While the Japanese may go to greater length in illustrating situational status, such an attitude by sellers and buyers may permeate other cultures including Western.

The purpose of this paper is to contrast the outcome success of sellers compared to buyers in a situation in which neither party has an advantage. We further analyze seller and buyer success when interacting with first offer and counter offer variables. The negotiation results were garnered from freshly trained negotiators involved in face-to-face negotiations with deadlines in which outcomes involved significant stakes and no advantage to either party.

NEGOTIATION DIMENSIONS REVIEWED

A substantial number of variables found to significantly impact negotiation behavior may indicate considerable interest and consequence of the negotiation genre. A variable found to impact negotiation is the manner in which people prepare for negotiation (Bass 1966;

Druckman 1967, 1968; Klimoski 1972). Another factor considered was whether the negotiation situation has an all-or-nothing result or a manner of distributing winnings to competing parties (Kelley, Beckman and Fischer 1967; Zeckmeister and Druckman 1973). Druckman (1967) examined the participant's attitudinal orientation toward the negotiation. The communication types to the negotiator from the represented decision maker have also been examined (Organ 1971; Benton and Druckman 1974). Hammond (1965) considered the different effects derived from the type of conflict (interest or cognitive points of debate) addressed in the negotiation. Another area examined was negotiator prior experience (Conrath 1970; Thompson 1990) and amateur relative to expert negotiator (Neale and Northcraft 1986). Pre-negotiation familiarity and/or discussion with the negotiation opponents or lack thereof and its impact on the negotiation were assessed (Breaugh and Klimoski 1977; Korper, Druckman and Broome 1986; Druckman, Broome and Korper 1988; Druckman and Broome 1991).

Other dimensions found to impact negotiation include the visibility of the talks (Brown 1970; Pruitt et al. 1986). The opponent's bargaining strategy was determined to affect negotiation behavior (Gruder 1971; Johnson 1971; Frey and Adams 1972; Druckman, Zechmeister and Solomon 1972; Yukl 1974; Druckman and Bonoma 1976). The sheer magnitude of the conflict also can play a significant part in the negotiation (Thibaut and Faucheux 1965; Rappoport 1969; Deutsch, Canavan and Rubin 1971; Rozelle and Druckman 1971; Love, Rozelle and Druckman 1983). The factor of time pressure was examined and sometimes found telling in negotiation behavior (Komorita and Barnes 1969; Hamner 1974; Smith, Pruitt and Carnevale 1982; Carnevale and Lawler 1986).

Researchers have studied negotiator attempts to overcome the uncertainty surrounding the negotiation situation. Lichtenthal and Tellefsen (2001) found negotiators performed better when they had the ability to find areas of

internal similarity with their opponents. Tversky and Kahneman (1974) discovered that in conditions of uncertainty negotiators will use simple heuristics to help make judgments. However, Arkes (1991) warned that using these tactics could result in a negotiator bias.

Further work has been performed in developing frameworks of variables that connect the aspects of negotiation to aid in considering a broader landscape (Sawyer and Guetzkow 1965; Randolph 1966; Druckman 1977) and meta-analysis (Druckman 1994). To add to this, there have been summaries of the negotiation literature presented (Pruitt 1981; Druckman and Hopmann 1989; Pruitt and Carnevale 1993; Wall and Lynn 1993). A more specific summary of negotiation research considered interpersonal and intergroup conflict (Blake and Mouton 1989).

A study of an elaborate model pitting a seller versus a buyer in which neither the buyer nor seller had an advantage found the buyer enjoyed a more favorable outcome than the seller (Neslin and Greenhalgh 1983), although not to a large extent. The authors did not discuss the possibility of a buyer or seller label impact. We probed deeper into the negotiator's label in the dealing as a consideration in determining outcomes.

THE CONCEPTUAL BASIS FOR THE STUDY

The study focus is to examine the outcomes of sellers and buyers when placed in a controlled situation in which neither party retains an apparent advantage. Since no advantage appears to exist, the negotiators' outcome scores were not expected to significantly differ. The Chatterjee and Lilien (1984) study's conclusions indicate that neither buyers nor sellers gained an advantage when retaining two-sided, incomplete, and private information. The Neslin and Greenhalgh (1983) study mentioned above found a small advantage for the buyer over the seller, but their results were not considered statistically robust.

We combined the factor of buyer and seller labels in conjunction with determining which negotiator made the first offer and counter offer. Galinsky and Mussweiler (2001) studied the impact of a first offer in the buyer and seller roles. Their study results found that it did not matter whether the buyer or the seller made the first offer. The party making the first offer had a better outcome. They concluded the first offer, not the buyer or seller roles, was the most important variable. Our results stand in sharp contrast to Galinsky and Mussweiler's (2001) results.

In this study's procedure, the negotiator was told whether she or he was a "seller" or "buyer" and whether he or she would make the first offer or counter offer in the negotiation. We sought to determine if there was evidence of a role/label impact given to the negotiators. Our results may offer a fresh perspective for those determining advantages or disadvantages inherent in situations involving acting as "first-offer seller," "first-offer buyer," "counter-offer seller," or "counter-offer buyer."

Inconsistent Research Designs

Since the research designs differed, caution is necessary in comparing our results to past studies. We used 2,351 separate face-to-face negotiations over an eight-year period for the study. The participants were both undergraduate and graduate students who had received a half a semester of training in a negotiation course. Each student gained experience by negotiating in ten separate negotiations. Finally, 50 percent of a participant's course grade depended on his or her negotiated outcomes.

Similarly, the Neslin and Greenhalgh (1983) study used a student sample of MBA students taking a negotiation course. Their participants had also gained experience by partaking in more than 12 negotiations over the course of the semester. However, the Neslin and Greenhalgh (1983) study used 27 negotiations to arrive at their conclusions.

The Galinsky and Mussweiler (2001) article describes three experiments that used MBA students. The students were part of a negotiation class, however, two of the experiments were conducted on the first day of class and the other was conducted via email between the first and second week of class. Consequently, little or no training in negotiation skills was likely to have occurred. The sample sizes for the negotiations were 38 negotiations for experiment one, 35 negotiations for experiment two, and 40 negotiations for experiment four. The article offered no information about the personal stakes of the negotiation outcomes for the negotiators.

ANCHORING AND FIRST OFFER LITERATURE

Much of our analysis on the influence of the seller and buyer roles/labels uses the first or counter offer variables. In the Galinsky and Mussweiler (2001) study, the authors state that the buyer or seller's first offer was an anchor, which is consistent with the literature (Yukl 1974; Orr and Guthrie 2006). An anchor is a negotiator bias based on previously received information that influences an estimate of what a negotiator considers as reasonable (Tversky and Kahneman 1974). This previously received information often comes from the negotiator's opponent. The influence of anchors including first offers has been a topic of widespread research. The following sections review the anchoring and first-offer literature.

Anchoring

Mussweiler and Strack (1999; 2000) offered a theory to explain the anchor's influence. They state that people recall information consistent with the anchor, and this consistency is likely to cause a negotiator to accept an anchor. For example, if a first offer is a price on a negotiated item and the negotiator considering the first offer knows the item has many positive qualities, the negotiator would be more likely to feel a high price was reasonable.

Researchers have demonstrated anchoring effects in many areas. They have found that pricing anchors can increase sales (Wansink, Kent and Hoch 1998) and negotiated outcomes in real estate sales (Northcraft and Neale 1987; Black and Diaz 1996). Bottom and Paese (1999) found that positively biased anchors could result in higher profits to the receiving party. Joyce and Bittle (1981) studied anchoring effects on auditors. A person's own experience anchors his or her judgment toward others (Gilovich, Savitsky and Medvec 1998; Gilovich, Medvec and Savitsky 2000). Even irrelevant anchors influence consumers (Kristensen and Garling 2000).

The legal profession has examined extensively the effects of anchoring. Many studies found anchors have an influence on monetary awards (Malouff and Schutte 1989; Hinsz and Indahl 1995; Hastie, Schkade and Payne 1999; Robbennolt and Studebaker 1999; Englich and Mussweiler 2001). Anchors have influenced judges, juries and legal professionals (Raitz et al. 1990; Wistrich, Guthrie and Rachlinski 2005; Englich, Mussweiler and Strack 2006).

First Offer

Many studies revealed first offers may influence negotiated outcomes (Sterbenz and Phillips 2001; Poucke and Buelens 2002; Moran and Ritov 2002). Orr and Guthrie (2006) performed a meta-analysis of first offer studies and concluded that 25 percent of the variance in negotiated outcomes is explained by the first offer. Studies also found that first offers influence counter offers as well as the ultimate outcomes (Chertkoff and Conley 1967; Liebert et al. 1968; Benton, Kelley and Liebling 1972; Ritov, I. 1996; Galinsky and Mussweiler 2001; Orr and Guthrie 2006).

With regard to the size of the initial offer, some studies have looked at the role of the negotiator's gender. Although not strongly statistically significant, Eckel and Grossman (2001) found evidence that women's initial offers were more generous than men's initial

offers. Solnick (2001) found when women negotiated with men the women made more generous offers than men.

Overcoming the First Offer

The negotiator receiving a first offer is not defenseless against this tactic. There are a number of ways to mitigate the first-offer influence. The first-offer recipient can counter the first offer by considering information different from the first offer (Lord, Lepper and Preston 1984; Chapman and Johnson 1999), by evaluating reasons why the first offer was unacceptable (Mussweiler, Strack and Pfeiffer 2000), or by obtaining market price information (Kristen and Garling 2000). A negotiator can counter a first offer by determining the negotiator's best available alternative to an agreement (Buelens and Poucke 2004), by estimating the opponent's best available alternative to an agreement (Wansink, Kent and Hoch 1998), or by taking into account the negotiator's goal or aspirations (White and Neale 1994; Galinsky and Mussweiler 2001).

Study results on the mitigating effects of negotiator experience are mixed. Some studies have found that anchors influence people with experience in their field (Northcraft and Neale 1987; Englich and Mussweiler 2001; Guthrie, Rachlinski and Wistrich 2001; Englich, Mussweiler and Strack 2006). Other researchers have found that experience is an effective antidote to an anchor (Neale and Bazerman 1983; Orr and Guthrie 2006; Cotter and Henley 2008).

NEGOTIATION DATA

The study analyzed 2,351 negotiated outcomes. The negotiations were part of a negotiation class at a Midwestern university which enrolls over 23,000 students. The negotiations occurred from 1999 through 2007. The negotiation class consisted of undergraduate and graduate students. Student negotiations were a required course component with 50 percent of a student's grade dependent on the negotiation

outcomes. The students were required to participate in 10 face-to-face negotiations conducted on separate days.

The professor determined the negotiation circumstances, so the students had no opportunity to manipulate the situation to their advantage. The professor determined which students would negotiate with each other through a random selection process revealed just before the negotiation, assigned the buyer and seller roles to the students, and decreed which student would make the first offer. The professor gave the buyer and seller in each pairing unique cost information that provided an opportunity for profit in the negotiation. The negotiators did not know the product in the negotiation so that there was no possibility for one student to have greater product knowledge over the other student. The professor also determined the variables for negotiation by the students and the beginning and ending times for the negotiation based on the number of negotiation variables. The time was usually 25 to 35 minutes. In effect, every student had an equal opportunity for success.

The student negotiator's goal was to negotiate a higher percentage of profit on negotiation variables. The number of variables for negotiation were between five and ten per negotiation with separate prices. On a negotiation deal, for example, a buyer may be able to make a product for \$20,000, while the seller could make the same product for \$10,000. Therefore, there is \$10,000 of profit available. If the negotiators came to agreement on the a deal with a final price of \$14,000, the seller gets \$4,000 or 40 percent of the profit and the buyer \$6,000 or 60 percent of the profit.

If the negotiation resulted in no deal at the end of the time allocated, the students earned a zero for the negotiation. Students also received a zero if they were absent for the negotiation. Therefore, there was high motivation to complete a deal. For the study, the analysis excluded negotiations resulting in no deals and absences. Only completed deals made up the database.

PARTICIPANT MOTIVATION

Our study used a student sample for negotiation outcomes. This practice is common in negotiation studies (Stulhlmacher and Walters 1999). Using student samples calls into question the level of student motivation and amount of training the students have received in negotiation. Our study differs from most negotiation studies in that our student sample had a strong motivation and they had received considerable negotiation training prior to their actual negotiations.

If access to negotiation data involving actual business negotiations were readily obtainable, the question of negotiator motivation and relevance of the results for negotiators might be less of an issue. When using students, however, the question of relevance and motivation has merit. Some studies using student negotiation samples avoid the question altogether (Kimmel, Pruitt, Magenau, Konar-Goldband and Carnevale 1980; Galinsky and Mussweiler 2001). Other studies have used monetary rewards to increase student motivation. Unfortunately, probably because of limited financial resources, the monetary rewards have been rather small (Eckel and Grossman 2001; Solnick 2001). Consequently, the motivation level may not be as high as that of a professional negotiator in a "real world" situation.

The motivation level of our student sample appeared strong. With 50 percent of a student's course grade determined solely by their negotiation performance, the desire and effort to bring back the majority of the profit was extremely high. This strong motivation results from the zero-sum game situation for the negotiation. The negotiation competition among students in the classes was so intense that it was not uncommon to have emotional outbursts by the students.

Our student sample received significant negotiation training. They received instruction on negotiation for half the semester (24 classroom hours) before they were allowed to

negotiate. Many of the other student negotiation studies used students with minimal or no training in negotiation. For example, Galinsky and Mussweiler (2001) had the students negotiate on the first day of class in two negotiations, and before the third week of class in an email negotiation. Another study trained their participants for six hours prior to the negotiations (Stevens, Baveta and Gist 1993).

NEGOTIATION HYPOTHESES

Five hypotheses were tested in this study. Hypothesis 1 tested the negotiation outcome score of negotiators acting as sellers in contrast to those acting as buyers. Hypothesis 2 examined negotiators making the first offer while contrasting the success of sellers and buyers. The test of Hypothesis 3 compared the success of sellers and buyers when taking on the role of the negotiator making the counter offer. Hypothesis 4 sorted out the negotiators acting as the seller while comparing results of those making the first offer versus the counter offer. Hypothesis 5 addressed the negotiation outcomes of buyer with a contrast between those made the first offer and those who made the counter offer.

HYPOTHESES TESTING

We tested the equality hypotheses, in null form, using a two-tailed t-test to detect both size and direction of any difference in the negotiators' outcome means. When the mean of the null hypothesis is known and the standard deviation is unknown, the t-test is appropriate. The population of scores was assumed to be normally distributed because population size in all hypotheses tests is considerably greater than 30 (Pagano 1990). The level of significance for the study was a p-value of .05. All calculations used SPSS 14.0.1. Table 1 contains the hypotheses while Table 2 shows the hypotheses test results.

Results for Sellers versus Buyers

We began by testing the overall negotiation outcomes of sellers versus buyers. As previously stated, Neslin and Greenhalgh (1983) found a small advantage for the buyer. Based on their results, we expected to find a slight advantage for the buyer or no advantage for either the seller or buyer.

TABLE 1
Hypotheses

-
- H₁:** There is no difference in negotiation results between negotiators acting in the role of seller and those acting as buyers.
- H₂:** There is no difference in negotiation results between negotiators making the first offer who act as sellers and those who act as buyers.
- H₃:** There is no difference in negotiation results between negotiators making the counter offer who act as sellers and those who act as buyers.
- H₄:** There is no difference in negotiation results between negotiators acting as sellers who make the first offer and those sellers who make the counter offer.
- H₅:** There is no difference in negotiation results between negotiators acting as buyers who make the first offer and those buyers who make the counter offer.
-

The testing of Hypothesis 1 contrasted the outcome success of those negotiators acting as sellers compared to those acting as buyers. The overall mean scores of those buying (52.72 percent) was higher than the mean selling scores of those selling (47.28 percent). The two-tailed t-test p-value was calculated as $< .001$, therefore the null H_1 was rejected. Consequently, the Neslin and Greenhalgh (1983) finding was supported. Whereas their results for the buyer were not a great advantage, our results indicate a solid buyer advantage.

To test further the role/labels of seller and buyer, we considered the seller and buyer roles

TABLE 2
Hypotheses Test Results

Hypothesis and Negotiation	Score of possible 100%	Score of possible 100%	P-Value	Sample Size	Standard Deviation
H₁	47.28% All Sellers	52.72% All Buyers	< .001	2351	25.40%
H₂	47.15% Seller – First Offer	52.56% Buyer – First Offer	<.001	Seller – 1259 Buyer - 1092	Seller – 26.00% Buyer – 24.69%
H₃	47.44% Seller – Counter Offer	52.85% Buyer – Counter Offer	<.001	Seller – 1092 Buyer – 1259	Seller – 24.69% Buyer – 26.00%
H₄	47.15% Seller – First Offer	47.44% Seller – Counter Offer	.785	First Offer – 1259 Counter Offer – 1092	First Offer – 26.00% Counter Offer– 24.69%
H₅	52.56% Buyer – First Offer	52.85% Buyer – Counter Offer	.785	First Offer – 1092 Counter Offer - 1259	First Offer – 24.69% Counter Offer– 26.00%

and held constant first offers and counter offers. Galinsky and Mussweiler (2001) found the negotiator making the first offer met with greater success regardless of the negotiator acting as seller or buyer. Based on their finding that the first offer or counter offer role was more important than the seller or buyer role, we expected the results to show no differences between buyers and sellers since both were making first offers in H₂ and counter offers in H₃.

In Hypothesis 2, negotiation scores for sellers making the first offer were contrasted to buyers making the first offer. The testing indicated the mean scores of negotiators making the first offer when selling (47.15 percent) were lower than the mean scores of those making the first

offer when acting as buyers (52.56 percent). The two-tailed t-test p-value was calculated as < .001. Null H₂ was rejected.

The negotiation scores of those required to make the counter offer acting as the sellers versus buyers was tested in Hypothesis 3. Results of testing showed the mean scores of negotiators selling when making the counter offer (47.44 percent) were lower than negotiators buying when making the counter offer (52.85 percent). The two-tailed t-test p-value was calculated as < .001, therefore null H₃ was rejected.

The rejections of null Hypotheses 2 and 3 indicated the buyer and seller role/labels might have more importance than previously

expected. When comparing first offers of buyers and sellers (H_2), we expected no differences because Galinsky and Mussweiler (2001) found first offers to be more important than the buyer and seller roles. In fact, buyers' outcomes were significantly higher. Similarly, buyers and sellers making counter offers (H_3) were expected to have no differences. Again, the buyers' outcomes were significantly higher.

To examine further the importance of the buyer and seller roles, we held the seller (H_4) and buyer (H_5) roles constant and varied the first and counter offers. Based on Galinsky and Mussweiler's (2001) findings, we expected the first offer to be more successful. In terms of the hypotheses, we expected to reject the null Hypotheses H_4 and H_5 .

Hypothesis 4 tested for any differences between sellers making first and counter offers. The mean scores of the selling negotiators making the counter offer (47.44 percent) were slightly higher than the mean scores of the selling negotiators making the initial offer (47.15 percent). The two-tailed t-test p-value was found as .785; therefore, the null H_4 was not rejected.

The testing of Hypothesis 5 contrasted the outcome success of buyers making the first offer and buyers making the counter offer. The overall mean scores of those making the first offer when buying (52.56 percent) was slightly lower than the mean selling scores of negotiators buying when making the counter offer (52.85 percent). The two-tailed t-test p-value was found as .785. Null H_5 was not rejected.

Comparing sellers making first and counter offers (H_4), the first-offer advantage did not prevail. Similarly, when comparing buyers making first and counter offers (H_5), the first-offer advantage was not evident. Our results indicated that the role/label of seller or buyer might be more important than the role of making the first or counter offer. The Galinsky and Mussweiler (2001) finding of the first offer

being the most important variable was not supported.

DISCUSSION

The overall objective of this paper is to compare the outcomes of negotiators in a zero-sum game situation in which neither party enjoys an advantage. Outcome contrasts were made of sellers with buyers, first offer sellers with first offer buyers, counter offer sellers with counter offer buyers, first offer sellers with counter offer sellers, and first offer buyers with counter offer buyers.

In the analysis of outcomes of sellers (47.28 percent) versus buyers (52.72 percent) (considered in H_1), the buyers enjoyed a statistically significant (p-value < .001) advantage. This strikes us as an intriguing result especially in light of the negotiation situation enacted. While in "real world" situations, it is typical for the salesperson to call on the buyer with the understanding that the salesperson is in a subordinate position with the buyer in the dominant position (else the buyer would likely be calling on the seller). In the "real world" circumstance, it might be expected that the dominant buyer would enjoy the negotiation advantage. However, in this study's negotiation circumstance, pains were taken to ensure that neither the seller nor the buyer had an automatic advantage. Both face the same deadlines, lack of product information, lack of even a "guesstimate" of the opponent's financial specifics, and inability to determine partners or who makes the first offer. In spite of these variables held in control, the seller is still found to arrive at a significantly lower outcome than the buyer. In contrast to the spirit of Shakespeare's notion about the impact of a label in considering a rose, perhaps there is a stigma at work in the unconscious minds of the negotiators. Even in an arena in which there is no built-in disadvantage, the seller may still act as the subordinate in the dealing while the buyer acts dominant.

The possibility of the seller stigma presented itself in our further analysis. When assessing

the impact of buyer versus seller outcomes when both parties are forced to make the first offer (considered in H₂) in the negotiation, the buyer is found to enjoy a significant advantage. The same is true of outcomes for the buyer when both seller (47.44 percent) and buyer (52.85 percent) are contrasted when delegated as the party to make the counter offer (considered in H₃).

The power of the buyer and seller roles/labels to hold sway over the first and counter offers was evident in our last two hypotheses. When reflecting on the outcomes when the seller made the first offer (47.15 percent) are contrasted to sellers making the counter offer (47.44 percent), it appears the impact of order in these negotiations played little role in influencing the outcome (considered in H₄). This also seems to hold true in the assessment of the negotiators acting as buyers when directed to make the first offer (52.56 percent) or counter offer (52.85 percent) (considered in H₅).

MANAGEMENT IMPLICATIONS

A pragmatic implication arises from the data analysis. There might be some psychological component at play for either the seller, buyer or both which results in an advantage for the buyer in a zero-sum game negotiation on a level playing field.

Management of negotiators or salespeople may seek to fortify the power of their employees relative to their counterparts in sales and negotiation sessions. The objective would be to disassemble the seller's sense of feeling as an inferior in the negotiation sessions. A number of tactics might be employed such as controlling the negotiation site and time, directing the agenda, writing the contract, etc. Further, extensive training for those in the selling role may inspire an optimal mind-set in negotiation. This training may help them guard against "playing defense" only and may aid in mitigating the subordinate perspective.

This is not to say that there are not times when the selling party in a negotiation is in a clearly weaker position. We suspect it would be rare to find a "real world" negotiation in which one party does not enjoy an advantage of some sort relative to its bargaining partner. However, mentally tugging a forelock while en route to a negotiation probably will not result in the best outcome for the seller. Another consideration is that just because the opposing negotiator has a more advantageous position does not mean that a deal must be struck. The ability to walk away from the deal is often a strong possibility and point of leverage for the weaker party, even at the loss of potential profits.

STUDY LIMITATIONS

While commonly used as participants in negotiation studies, student negotiators generate the primary study limitation. The student sample sought to generate successful negotiation results to bolster their grades, however; the motivation intensity for the students may not be the same as for negotiators in the "real world." Further, the desire of each student to earn higher grades may not be equal. Therefore, the findings could differ from negotiators in other situations.

The student-subject, enlistment procedure used may also be a limitation. The negotiation course, in which the students make up the sample, is a popular course and often not everyone wishing to enroll can secure a spot in class. Further, the course is an elective. It is likely that only students with an inclination toward negotiation may attempt to enroll in the course. Since they have an interest in negotiation, their motivations may differ from the general population.

The negotiation format also curbs general conclusions about negotiations. The negotiation procedure implemented in this analysis required the negotiators to participate in a zero-sum game. In reality, many negotiations are not zero-sum games. In some "real world" negotiation circumstances, negotiators could obtain results such that both parties in the negotiation win. A

cooperative, rather than a competitive, spirit may be in both parties' best interest. Such an atmosphere could engender a very dissimilar style of negotiation behavior than that found in a zero-sum game. Consequently, the suitability of this study's conclusions regarding those types of negotiations would not be appropriate.

To ensure that no negotiator had a knowledge advantage in dealing, the participants did not negotiate for a specific product in the study. However, this unrealistic facet does create problems for thoughtful use of the results. Indeed, students who had professional negotiation experience prior to the class negotiations often remarked that negotiating over an unspecified product with no general price information was far more difficult than negotiating over a concrete product with "ballpark guestimate" price knowledge.

FUTURE RESEARCH

The purpose of this study was to examine negotiation success of sellers and buyers and to consider the impact of acting as the seller or buyer when in the role of making first offer or counter offer in the deal. The study assessed the results of 2,351 negotiations by students engaged in zero-sum games with 50 percent of their course grade at stake.

Student negotiations may not be directly comparable to situations faced outside the classroom. Future negotiation studies could use a different population base such as professional negotiators to determine if the results reported by this study do apply to other situations. It may be fruitful to understand if the results of this study were mirrored in negotiation situations in which the negotiators who cooperate might achieve "win-win" outcomes. Negotiation requiring a team may also impact the situation dynamics such that results could change. Tinkering with some dimensions of the negotiations such as eliminating the time limit, making product or price information available to the participants, or shifting the stakes to money or other reward from grades might also

inspire fresh insights in understanding negotiation.

REFERENCES

- Arkes, Hal R. (1991), "Costs and Benefits of Judgment Errors: Implications for Debiasing," *Psychological Bulletin*, 10 (3), 486-98.
- Bass, Bernard M. (1966), "Effects on the Subsequent Performance of Negotiators of Studying Issues or Planning Strategies Alone or in Groups," *Psychological Monographs*, 80 (6, whole no. 614).
- Benton, Alan A., Harold H. Kelley and Barry Liebling (1972), "Effects of Extremity of Offers and Concession Rate on the Outcomes of Bargaining," *Journal of Personality and Social Psychology*, 24 (1), 73-83.
- Benton, Alan A. and Daniel Druckman (1974), "Constituent's Bargaining Orientation and Intergroup Negotiations," *Journal of Applied Social Psychology*, 4, 141-50.
- Black, Roy T. and Julian Diaz III (1996), "The Use of Information versus Asking Price in the Real Property Negotiation Process," *Journal of Property Research*, 13 (4), 287-97.
- Blake, Robert R. and Jane S. Mouton (1989), "Lateral Conflict." In *Productive Conflict Management*, edited by Dean Tjosvold and David W. Johnson, Edina, MN: Interaction Books.
- Bottom, William P. and Paul W. Paese (1999), "Judgment Accuracy and the Asymmetric Cost of Errors in Distributive Bargaining," *Group Decision and Negotiation*, 8 (4), 349-64.
- Breaugh, James A. and Richard J. Klimoski (1977), "The Choice of a Group Spokesman in Bargaining. Member or Outsider?" *Organizational Behavior and Human Performance*, 19, 325-36.
- Brown, Bert R. (1970), "Face-Saving Following Experimentally Induced Embarrassment," *Journal of Experimental Social Psychology*, 6, 255-71.
- Buelens, Marc and Dirk V. Poucke (2004), "Determinants of a Negotiator's Initial Opening Offer," *Journal of Business and Psychology*, 19 (1), 23-35.

- Carnevale, Peter J. and Edward J. Lawler (1986), "Time Pressure and the Development of Integrative Agreements in Bilateral Negotiation," *Journal of Conflict Resolution*, 30, 636-59.
- Chapman, Gretchen B. and Eric J. Johnson (1999), "Anchoring, Activation, and the Construction of Values," *Organizational Behavior and Human Decision Processes*, 79 (2), 115-53.
- Chatterjee, Kalyan and Gary L. Lilien (1984), "Efficiency of Alternative Bargaining Procedures," *The Journal of Conflict*, 28 (2), 270-95.
- Chertkoff, Jerome M. and Melinda Conley (1967), "Opening Offer and Frequency of Concessions as Bargaining Strategies," *Journal of Personality and Social Psychology*, 7 (2), 181-85.
- Conrath, David W. (1970), "Experience as a Factor in Experimental Gaming Behavior," *Journal of Conflict Resolution*, 14, 195-202.
- Cotter, Michael J. and James A. Henley, Jr. (2008), "First Offer Disadvantage in Zero-Sum Game Negotiation Outcomes," *Journal of Business-to-Business Marketing*, 15 (1), 25-44.
- Deutsch, Morton, Donnan Canavan and Jeffery Rubin (1971), "The Effects of Size of Conflict and Sex of Experimenter upon Interpersonal Bargaining," *Journal of Experimental Social Psychology*, 7, 258-67.
- Dion, Paul. A. and Peter M. Banting (1988), "Industrial Supplier-Buyer Negotiations," *Industrial Marketing Management*, 17, 43-7.
- Druckman, Daniel (1967), "Dogmatism, Prenegotiation Experience, and Simulated Group Representation as Determinants of Dyadic Behavior in a Bargain Situation," *Journal of Personality and Social Psychology*, 6, 279-90.
- Druckman, Daniel (1968), "Prenegotiation Experience and Dyadic Conflict Resolution in a Bargaining Situation," *Journal of Experimental Social Psychology*, 4, 367-83.
- Druckman, Daniel, Kathleen Zechmeister and Daniel Solomon (1972), "Determinants of Bargaining Behavior in a Bilateral Monopoly Situation; Opponent's Concession Rate and Relative Defensibility," *Behavioral Science*, 17, 514-31.
- Druckman, Daniel (1977), *Negotiations: Social-Psychological Perspectives*, Beverly Hills, CA: Sage.
- Druckman, Daniel, Benjamin J. Broome and Susan H. Korper (1988), "Value Differences and Conflict Resolution: Facilitation or Delinking?" *Journal of Conflict Resolution*, 32, 489-510.
- Druckman, Daniel and Thomas V. Bonoma (1976), "Determinants of Bargaining Behavior in a Bilateral-Monopoly Situation II: Opponent's Concession Rate and Similarity," *Behavioral Science*, 21, 252-62.
- Druckman, Daniel and P. Terrence Hopmann (1989), "Behavioral Aspects of Negotiations on Mutual Security" In *Behavior, Society, and Nuclear War*, edited by Philip E. Tetlock, Jo L. Husbands, Robert Jervis, Paul C. Stern and Charles Tilly, New York: Oxford University Press.
- Druckman, Daniel and Benjamin J. Broome (1991), "Value Differences and Conflict Resolution: Familiarity or Liking?" *Journal of Conflict Resolution*, 35, 571-93.
- Druckman, Daniel (1994), "Determinants of Compromising Behavior in Negotiation: a Meta Analysis," *The Journal of Conflict Resolution*, 38 (3), 507-56.
- Eckel, Catherine C. and Philip J. Grossman (2001), "Chivalry and Solidarity in Ultimatum Games," *Economic Inquiry*, 39 (2), 171-188.
- Englich, Birte and Thomas Mussweiler (2001), "Sentencing under Uncertainty: Anchoring Effects in the Courtroom," *Journal of Applied Social Psychology*, 31 (7), 1535-1551.
- Englich, Birte, Thomas Mussweiler and Fritz Strack (2006), "Playing Dice with Criminal Sentences: The Influence of Irrelevant Anchors on Experts' Judicial Decision Making," *Personality and Social Psychology Bulletin*, 32 (2), 188-200.
- Frey, Robert L. and J. Stacy Adams (1972), "The Negotiator's Dilemma: Simultaneous Ingroup and Outgroup Conflict," *Journal of Experimental Social Psychology*, 8, 331-46.
- Galinsky, Adam and Thomas Mussweiler (2001), "First Offers as Anchors: The Role of Perspective-Taking and Negotiator Focus," *Journal of Personality and Social Psychology*, 81 (4), 657-669.

- Gilovich, Thomas, Kenneth Savitsky and Victoria H. Medvec (1998), "The Illusion of Transparency: Biased Assessments of Other's Ability to Read One's Emotional States," *Journal of Personality and Social Psychology*, 75 (2), 332-346.
- Gilovich, Thomas., Victoria H. Medvec and Kenneth Savitsky (2000), "The Spotlight Effect in Social Judgment: An Egocentric Bias in Estimates of the Salience of One's Own Actions and Appearance," *Journal of Personality and Social Psychology*, 78 (2), 211-222.
- Gruder, Charles L. (1971), "Relations with Opponent and Partner in Mixed-Motive Bargaining," *Journal of Conflict Resolution*, 15, 403-16.
- Guthrie, Chris, Jeffrey J. Rachlinski and Andrew J. Wistrich (2001), "Inside the Judicial Mind," *Cornell Law Review*, 86 (4), 777-867.
- Hammond, Kenneth R. (1965), "New Directions in Research on Conflict Resolution," *Journal of Social Issues*, 21, 44-66.
- Hamner, W. Clay (1974), "Effects of Bargaining Strategy and Pressure to Reach Agreement in a Stalemated Negotiation," *Journal of Personality and Social Psychology*, 30 (4), 458-67.
- Hastie, Reid, David A. Schkade and John W. Payne (1999), "Juror Judgments in Civil Cases: Effects of Plaintiff's Requests and Plaintiff's Identity on Punitive Damage Awards," *Law and Human Behavior*, 23 (4), 445-470.
- Herbig, Paul (1995), *Marketing Japanese Style*, 72-73, Westport, CT: Quorum Books.
- Hinsz, Verlin B. and Kristin E. Indahl (1995), "Assimilation to Anchors for Damage Awards in a Mock Civil Trial," *Journal of Applied Social Psychology*, 25 (11), 991-1026.
- Johnson, David W. (1971), "Effects of Warmth of Interaction, Accuracy of Understanding, and the Proposal of Compromises on Listener's Behavior," *Journal of Counseling Psychology*, 18, 207-16.
- Joyce, Edward J. and Gary C. Biddle (1981), "Anchoring and Adjustment in Probabilistic Inference in Auditing," *Journal of Accounting Research*, 19 (1), 120-145.
- Kelley, Harold H., Linda L. Beckman and Claude S. Fischer (1967), "Negotiating the Division of a Reward under Incomplete Information," *Journal of Experimental Social Psychology*, 3, 361-98.
- Kimmel, Melvin J., Dean G. Pruitt, John M. Magenau, Ellen Konar-Goldband and Peter G.D. Carnevale (1980), "Effects of Trust, Aspiration, and Gender on Negotiation Tactics," *Journal of Personality and Social Psychology*, 38 (1), 9-22.
- Klimoski, Richard J. (1972), "The Effects of Intragroup Forces on Intergroup Conflict Resolution," *Organizational Behavior and Human Performance*, 8, 363-83.
- Komorita, Samuel S. and Marc Barnes (1969), "Effects of Pressures to Reach Agreement in Bargaining," *Journal of Personality and Social Psychology*, 13, 245-52.
- Korper, Susan H., Daniel Druckman and Benjamin J. Broome (1986), "Value Differences and Conflict Resolution," *Journal of Social Psychology*, 126, 415-7.
- Kristensen, Henrik and Tommy Garling (2000), "Anchoring Induced Biases in Consumer Price Negotiations," *Journal of Consumer Policy*, 23 (4), 445-460.
- Liebert, Robert M., William P. Smith, J.H. Hill and Miriam Keiffer (1968), "The Effects of Information and Magnitude of Initial Offer on Interpersonal Negotiation," *Journal of Experimental Social Psychology*, 4 (4), 431-441.
- Lichtenthal, J. David and Thomas Tellefsen (2001), "Toward a Theory of Business Buyer-Seller Similarity," *The Journal of Personal Selling & Sales Management*, 21 (1), 1-14.
- Lord, Charles G., Mark R. Lepper and Elizabeth Preston (1984), "Considering the Opposite: A Corrective Strategy for Social Judgment," *Journal of Personality and Social Psychology*, 47 (6), 1231-43.

- Love, Rhonda L., Richard M. Rozelle and Daniel Druckman (1983), "Resolving Conflicts of Interest and Ideologies: A Simulation of Political Decision-Making," *Social Behavior and Personality*, 11, 23-8.
- Malouff, John M. and Nicola S. Schutte (1989), "Shaping Juror Attitudes: Effects of Requesting Different Damage Amounts in Personal Injury Trials," *Journal of Social Psychology*, 129 (4), 491-95.
- Moran, Simone and Ilana Ritov (2002), "Initial Perceptions in Negotiations: Evaluation and Response to 'Logrolling' Offers," *Journal of Behavioral Decision Making*, 15 (2), 104-24.
- Mussweiler, Thomas and Fritz Strack (1999), "Hypothesis-Consistent Testing and Semantic Priming in the Anchoring Paradigm: A Selective Accessibility Model," *Journal of Experimental Social Psychology*, 35 (20), 136-64.
- Mussweiler, Thomas and Fritz Strack (2000), "The Use of Category and Exemplar Knowledge in the Solution of Anchoring Tasks," *Journal of Personality and Social Psychology*, 78 (6), 1038-52.
- Mussweiler, Thomas, Fritz Strack and T. Pfeiffer (2000), "Overcoming the Inevitable Anchoring Effect: Considering the Opposite Compensates for Selective Accessibility," *Personality and Social Psychology Bulletin*, 26 (9), 1142-50.
- Neale, Margaret A. and Max H. Bazerman (1983), "The Role of Perspective-Taking Ability in Negotiating under Different Forms of Arbitration," *Industrial and Labor Relations Review*, 36 (3), 378-88.
- Neale, Margaret A. and Gregory B. Northcraft (1986), "Experts, Amateurs, and Refrigerators: Comparing Expert and Amateur Negotiators in a Novel Task," *Organizational Behavior and Human Decision Processes*, 38, 305-17.
- Neslin, Scott A. and Leonard Greenhalgh (1983), "Nash's Theory of Cooperative Games as a Predictor of the Outcomes of Buyer-Seller Negotiations: An Experiment in Media Purchasing," *Journal of Marketing Research*, 20, 368-79.
- Northcraft, Gregory B. and Margaret A. Neale (1987), "Expert, Amateurs, and Real Estate: An Anchoring-and-Adjustment Perspective on Property Pricing Decisions," *Organizational Behavior and Human Decision Processes*, 39 (1), 84-97.
- Organ, Dennis W. (1971), "Some Variables Affecting Boundary Role Behavior," *Sociometry*, 34, 524-37.
- Pagano, Robert R. (1990), *Understanding Statistics in the Behavioral Sciences*, 3rd ed., 295-96, St. Paul, MN: West Publishing Company.
- Poucke, Dirk V. and Marc Buelens (2002), "Predicting the Outcome of a Two-Party Price Negotiation: Contribution of Reservation Price, Aspiration Price and Opening Offer," *Journal of Economic Psychology*, 23 (1), 67-76.
- Orr, Dan and Chris Guthrie (2006), "Anchoring, Information, Expertise, and Negotiation: New Insights from Meta-Analysis," *Ohio State Journal on Dispute Resolution*, 21 (3), 597-628.
- Pruitt, Dean G. (1981), *Negotiation Behavior*, New York: Academic Press.
- Pruitt, Dean G., Peter J. Carnevale, Blythe Forcey and Michael van Slyck (1986), "Gender Effects in Negotiation: Constituent Surveillance and Contentious Behavior," *Journal of Experimental Social Psychology*, 22, 264-75.
- Pruitt, Dean G. and Peter J. Carnevale (1993), *Negotiation in Social Conflict*, Pacific Grove, CA: Brooks/Cole.
- Raitz, Allan, Edith Greene, Jane Goodman and Elizabeth F. Loftus (1990), "Determining Damages: The Influence of Expert Testimony on Jurors' Decision Making," *Law and Human Behavior*, 14 (4), 385-95.
- Randolph, Lillian (1966), "A Suggested Model of International Negotiation," *Journal of Conflict Resolution*, 10, 344-53.
- Rappoport, Leon (1969), "Cognitive Conflict as a Function of Socially-Induced Cognitive Differences," *Journal of Conflict Resolution*, 13, 143-8.
- Ritov, Ilana (1996), "Anchoring in Simulated Competitive Market Negotiation," *Organizational Behavior and Human Decision Processes*, 67 (1), 16-25.

- Robbennolt, Jennifer K. and Christina A. Studebaker (1999), "Anchoring in the Courtroom: The Effects of Caps on Punitive Damages," *Law and Human Behavior*, 23 (3), 353-73.
- Rozelle, Richard M. and Daniel Druckman (1971), "Role Playing vs. Laboratory Deception: A Comparison of Methods in the Study of Compromising Behavior," *Psychonomic Science*, 25, 241-3.
- Sawyer, Jack and Harold Guetzkow (1965), "Bargaining and Negotiation in International Relations," In *International Behavior: A Social-Psychological Analysis*, edited by Herbert C. Kelman, New York: Holt.
- Shakespeare, William (circa 1600), *Romeo and Juliet*, Act 2 Scene 2.
- Smith, D. Leasel, Dean G. Pruitt and Peter J. Carnevale (1982), "Matching and Mismatching: The Effect of Own Limit, Other's Toughness, and Time Pressure on Concession Rate in Negotiation," *Journal of Personality and Social Psychology*, 42, 876-83.
- Solnick, Sara J. (2001), "Gender Differences in the Ultimatum Game," *Economic Inquiry*, 39 (2), 189-200.
- Sterbenz, Frederic P. and Owen R. Phillips (2001), "Bargaining Experiments with Deadlines and Random Delays," *Economic Inquiry*, 39 (4), 616-26.
- Stevens, Cynthia K., Anna B. Bavetta, and Marilyn E. Gist (1993), "Gender Differences in the Acquisition of Salary Negotiation: The Role of Goals, Self-Efficacy, and Perceived Control," *Journal of Applied Psychology*, 78 (5), 723-35.
- Stuhlmacher, Alice F. and Amy E. Walters (1999), "Gender Differences in Negotiation Outcome: A Meta-Analysis," *Personnel Psychology*, 52 (3), 653-77.
- Thibaut, John and Claud Faucheux (1965), "The Development of Contractual Norms in a Bargaining Situation under Two Types of Stress," *Journal of Experimental Social Psychology*, 1, 89-102.
- Thompson, Leigh (1990), "An Examination of Naïve and Experienced Negotiators," *Journal of Personality and Social Psychology*, 59, 82-90.
- Tversky, Amos and Daniel Kahneman (1974), "Judgment under Uncertainty: Heuristics and Biases," *Science*, 185, 1124-31.
- Wall, James A. and Ann Lynn (1993), "Mediation: A Current Review," *Journal of Conflict Resolution*, 37, 160-94.
- Wansink, Brian, Robert J. Kent and Stephen J. Hoch (1998), "An Anchoring and Adjustment Model of Purchase Quantity Decisions," *Journal of Marketing Research*, 35 (1), 71-81.
- White, Sally B. and Margaret A. Neale (1994), "The Role of Negotiator Aspirations and Settlement Expectancies in Bargaining Outcomes," *Organizational Behavior and Human Decision Processes*, 57 (2), 303-17.
- Wistrich, Andrew J., Chris Guthrie, and Jeffry J. Rachlinski (2005), "Can Judges Ignore Inadmissible Information? The Difficulty of Deliberately Disregarding," *University of Pennsylvania Law Review*, 153 (4), 1251-345.
- Yukl, Gary A. (1974), "Effects of the Opponent's Initial Offer, Concession Magnitude, and Concession Frequency on Bargaining Behavior," *Journal of Personality and Social Psychology*, 30 (3), 323-35.
- Yukl, Gary A. (1974), "Effects of Situational Variables and Opponent Concessions on a Bargainer's Perception, Aspirations, and Concessions," *Journal of Personality and Social Psychology*, 29 (2), 227-36.
- Zeckmeister, Kathleen and Daniel Druckman (1973), "Determinants of Resolving a Conflict of Interest: A Simulation of Political Decision Making," *Journal of Conflict Resolution*, 17, 63-88.