CALLING THE SHOTS IN NEGOTIATIONS: THE EFFECTS OF SELF-EFFICACY, COGNITIVE STYLE, GOAL ORIENTATION, INFORMATION ABOUT PAST PERFORMANCE, AND OPPONENTS' BEHAVIOR ON NEGOTIATORS' RISK TAKING

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These past seven years have not just earned me a Ph.D. but also have taught me a great deal about life. I feel so incredibly lucky to have had my family and my extended family with me all these years. I can only hope that each one of the individuals mentioned below feels the time and energy invested in me were well spent. I dedicate this dissertation to my loved ones.

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ABSTRACT

Risk taking is a central element in negotiations. Currently, a significant amount of information exists as to different negotiators' techniques, behaviors, and styles. However, very little is known about their risk taking behaviors and about the determinants of these behaviors. The purpose of this study is to investigate six factors affecting risk taking behaviors in negotiations.

In this study I focus on three risk taking behaviors that serve as the dependent variables: (1) revealing one's best alternative to a negotiated agreement (known as BATNA), (2) revealing one's payoffs, and (3) making high demands (or low offers).

The six independent variables I examine are: self-efficacy, cognitive style, goal orientation, information about negotiators' past performance, opponent's call for risk taking, and opponent's risk taking. Drawing from the current negotiation literature, I developed hypotheses as to the relationships among the independent and dependent variables. Subsequently, in order to test these hypotheses, I conducted a controlled experiment, in which confederates and subjects engaged in a negotiation role play over three separate issues.

As for the manipulated variables, the results indicate that negotiators take more risks (reveal information about BATNA and about payoffs) when their opponents ask them to do so and when their opponents take risks themselves. Negotiators take more risks when their

opponents both called for risk taking and engaged in risk taking. Negotiators also take more risks when presented with information that in past similar scenarios negotiators did either well or either poorly, than when presented with information about average past performance.

As for the measured variables, contrary to the respective hypotheses, the results indicate that individuals with low negotiation self-efficacy engage in more risk taking than negotiators with high self-efficacy; that cognitive style is not related to risk taking; and that the performance approach goal orientation rather than the learning approach goal orientation is related to risk taking.

These findings contribute to our understanding of risk taking, which is central to negotiation and has not been investigated systematically thus far. Finally, I discuss the implications of this study for both research and practice, and suggest avenues for further study.

INTRODUCTION

Conflict, defined as a perception of incompatibility between values, needs, interests or actions (Deutsch, 1973; Putnam & Poole, 1987; Wall & Callister, 1995), is an inherent part of our daily life, both at work and in other settings. The field of conflict resolution is vast and has been studied in many different disciplines including psychology, communication, business, and law.

Throughout the years, scholars have focused on different aspects of conflict and its resolution. The main areas of investigation in the past decade have been: the antecedents and outcomes of different kinds of conflicts (e.g. task vs. personal conflicts in the workplace), conflict resolution styles and behaviors, the effect of unresolved conflict on the individuals involved – both at the group level and at the individual level, the characteristics of major conflict resolution processes such as negotiation and mediation, and the management of inter-cultural (or international) conflict.

In this dissertation, I focus on one of these conflict resolution processes - the negotiation. Within the negotiation context, the dependent variable I studied is risk taking. I decided to study risk taking because of the central role it has in negotiations and because it is less than well-studied.

Negotiation is an interpersonal interaction that involves uncertainty, mainly because individuals seldom know what their counterparts will do, when they will do so, or what will be the outcome of the negotiation. The uncertainty involved in negotiations reduces one's ability to choose the ideal tactic and increases the risk involved in using any particular tactic.

In negotiations, one can take an aggressive stance, make very low demands, make ultimatums, and reveal information about outside alternatives. The fact that one cannot know

how the other party would react to those tactics makes them risky as they may cause the negotiation to break down. For example, when negotiators reveal information about their outside alternatives they hope that may encourage their opponents to do the same and that this cooperation would lead to a better outcome. However the opponent's reaction is uncertain. The opponent may take advantage of knowing that information and make lower concession. This uncertainty makes revealing information risky in the context of negotiation.

Even though risk taking is central to negotiation it is understudied in several important areas, as I will demonstrate shortly, and that is the reason I chose this topic for my dissertation.

To measure risk taking I will focus on three specific behaviors that are particularly frequent in negotiations: (a) revealing one's best alternative to a negotiated agreement (BATNA), (b) revealing the value of one's settlement payoffs, and (c) making very high demands (See Table 1). Revealing one's BATNA gives the opponent the advantage of knowing at what point the other party would opt out of the negotiation to exploit his alternative. Revealing one's settlement options enables the other party to make better decisions about making offers and counter offers. Making very high demands might alienate the other party and cause him/her to drop out of the negotiation.

Table 1: Dependent Variable

Risk Taking Behaviors
1. Revealing one's BATNA
2. Raveling one's payoffs
3. Making high demands/low offers

The independent variables in this study are grouped into two categories (see Table 2). The first category is individual differences and it includes the variables: negotiation self-efficacy, cognitive style, and goal orientation. The second category is labeled opponent's behavior and it includes the variables: information about negotiators' past performance (presenting individuals with information of other negotiators' past performance in a similar negotiation. For example: telling negotiators: "previously negotiators in a similar case achieved an excellent result"); opponent's call for risk taking (a party asking his counterpart to do something risky); and opponent's risk taking (the opponent actually engaging in a risky behavior). I chose these variables because they have not been examined in relation to risk taking even though they may significantly contribute to our understanding of this important dependent variable. I discuss the hypothesized relations between each independent variable and risk taking later.

Table 2: Independent Variables

Individual Differences	**Others' Behavior**
1. Self-efficacy	1. Information about high and low versus average past performance
2. Cognitive style	2. Opponent's Call for Risk Taking
3. Goal orientation	3. Opponent's Risk Taking

The dissertation is organized in five main chapters. In chapter 1 I review the literature relevant to the dependent variable and independent variables included in this study, and relevant to other factors that have been shown to affect risk taking. I begin the review with an overview of negotiation research, followed by a review of the literature on negotiation behaviors in general, and a review of the literature on risk taking in particular. Subsequently, I review the literature relevant to the independent variables studied in this dissertation in the order in which I have listed them above (see Table 2). In chapter 2, I develop different hypotheses based on the review of the relevant literatures. In chapter 3, I discuss the design of the experimental study and outline the methods and measures I used to test my hypotheses. In chapter 4, I present the results of the study; and in chapter 5, I discuss the implications of the results, the limitations of the study, and some avenues for future research based on the results of this study.

CHAPTER 1

LITERATURE REVIEW

1. Negotiation - General

Negotiation is a fundamental phenomenon in social interaction and may be defined as a social interaction between two or more parties who disagree and are striving to reach agreement (Carnevale & Pruitt, 1992). In defining the scope of negotiation, scholars have identified different components or characteristics that are common to all negotiations. In general, scholars agree these components are: two or more parties, perceptions of conflict, interpersonal communication, and both parties wish to reach agreement (see for example: Lewicki, 1992; Thompson, 1990).

The elements of negotiation, as listed above, apply to almost any interpersonal conflict whether to a conflict that involves measurable or quantifiable resources (i.e. a sum of money, the value of goods or services, providing specific services, parties' rights, etc.) or to a conflict that involves non-measurable issues, such as a conflict between two neighbors over different behaviors and disturbances.

Often, disputants discuss different matters that are neither measurable nor well defined, and agree on how to resolve those matters without exchanging offers and counteroffers or reaching intermediate solutions. For example, in organizations people often have conflict about how to perform a task, or have conflicts that stem from differences in personality. Those issues may involve some negotiation but would not necessarily involve bargaining. Rather, parties would exchange ideas employing different communication styles and behavioral patterns.

Scholars have identified two main kinds of negotiations: distributive negotiation and integrative negotiation (Putnam, 1990). Each type of negotiation is characterized by different motivations, behaviors, and outcomes. In distributive negotiations, parties typically view the negotiation as a zero-sum or a win-lose situation, in which one party's gain is the other party's loss. Rather than trying to collaborate in an effort to find a solution that would satisfy both parties' interests, the parties compete over gaining the better outcome. In result, outcomes of distributive negotiations are more favorable to one party.

In integrative negotiations, on the other hand, parties typically view the conflict as a non zero-sum situation or as a potentially win-win situation in which there is a possibility to craft a solution that would address both parties' interests so that there are no "winners" and "losers". Parties that engage in integrative negotiations collaborate with each other to achieve a solution that addresses both parties' interests as fully as possible.

Scholars agree that each type of negotiation has its own advantages and disadvantages and thus, in terms of recommending one type over the other, one has to consider different factors. Distributive negotiations are often easier to pursue because they are less creative. Rather than strive to create value for both parties, parties in distributive negotiations try to maximize their own gains. Distributive negotiations are especially easier to pursue when one party has superior power over the other party as in a conflict between a supervisor and an employee or in a conflict between a parent and a child. Integrative negotiations, on the other hand, require more effort and creativity because satisfying both parties' interests is more challenging than satisfying those of one party.

Throughout the years, scholars developed three main approaches to studying negotiation (Carnivale & Pruitt, 1992). The first approach focuses on giving practical advice

to professionals (lawyers, mediators, negotiators, etc) or to the general public about how to manage negotiations effectively in different arenas (e.g. national vs. international; work related vs. personal). The vast majority of the works following this approach are based on the personal experience of different authors, rather than on empirical study (for example the national bestseller "Getting to Yes" by Fisher, Ury, & Patton, 1981; and the bestselling "Difficult Conversations" by Stone, Patton & Heen, 1999).

The second approach to the study of negotiation involves developing mathematical models of how negotiations should work. The proponents of this approach are mainly mathematicians and game theorists (for example, Nash, 1950; Luce & Raiffa, 1957; Roth, 1985). These scholars explain negotiation behaviors and outcomes and offer recommendations for maximizing outcomes in negotiation by focusing on parties' rational choices. In general, this approach views rational thought and rational behavior as central (without considering the role of emotions, personality, and other psychological factors). It is also narrow in terms of the number of variables it considers and the assumptions it makes (Carnevale & Pruitt, 1992).

The third approach to negotiation research, which I follow in this dissertation, is the psychological approach that began to flourish in the 1960s, and apart from a certain decline in the late 1970s, remains very active today (Bazerman, 2000). The psychological study of negotiation regards the negotiation process as a dynamic process that is influenced by both individual differences factors (e.g. personality and personal goals) and interpersonal behavior. The ultimate goals of this approach are to understand the antecedents and outcomes of negotiators' behaviors and to examine the effectiveness of these behaviors in terms of negotiation outcomes.

The negotiation literature, from a psychological perspective, devotes attention primarily to three dependent variables: the negotiation process (operationalized as number of rounds in a negotiation and the intensity of the rounds (measured by the number of offers, counter offers and concessions), negotiation outcomes, and negotiation behaviors.

The literature operationalized negotiation outcomes as a dependent variable in different ways. Some studies look at the value of the outcome for each of the parties. The party who achieved the highest value is deemed more successful. Other studies operationalize negotiation outcomes in terms of the agreement rate, regarding a higher rate of agreement as a more positive outcome for the parties, in general. Yet another operationalization of negotiation outcomes is the agreement type. Here, the literature compares negotiations that end with integrative agreement to negotiation resulting in distributive agreements. Integrative agreements are agreements that fulfill the interests of both parties rather equally or that create value for both parties. Distributive agreements, on the other hand, are agreements that clearly prefer one party's interests over the other party's interests.

In this dissertation I focus on risk taking which is a set of negotiation behaviors. In the next section I will review the literature on negotiation behaviors and devote the following section to risk taking in specific.

2. Negotiation Behaviors

As mentioned above, negotiators' behaviors are a major dependent variable in the negotiation literature. Examining the antecedents of negotiators' behavior is a central stream in negotiation research from a social psychological perspective (Graham et al., 1994), and is the main focus of this dissertation. The importance of negotiators' behavior stems from the

fact that negotiators' behaviors are at the heart of any negotiation. Moreover, negotiators' behaviors ultimately determine how successful the negotiation would be for both parties (Graham et al., 1994).

It is helpful to distinguish between two streams of research that deal with behaviors in negotiation. One stream of research deals with negotiation styles. Researchers in psychology use the term "style" when examining psychological structures or behavioral patterns (Brigham, De Castro, & Shepherd, 2007). Behavioral patterns include numerous behaviors that have a common thread or a common nature. For example, sharing information, generating alternatives for resolution, and active listening are specific behaviors that are a part of a collaborative negotiation style. High initial offers, use of power and coercion are specific behaviors that are a part of a forcing or a contending negotiation style.

The other stream of research deals with specific behaviors or tactics that people employ when they negotiate. I will elaborate on such specific behaviors shortly.

In sum, the main difference between negotiation styles and specific tactics or behaviors is that specific behaviors are more limited in time and scope. Negotiation *styles,* on the other hand, are patterns of behaviors that comprise of several behaviors (or they may include several repetitions of the same behavior), and are more prolonged than any specific behavior.

2.1 The Negotiation Styles Framework.

The most well established operationalization of styles is based on Blake and Moutons' (1964) two-dimensional conflict management model that was the basis for numerous later models for assessing and conceptualizing conflict and bargaining behavior. Blake and Mouton suggested that the two dimensions of concern for self-interests, and

concern for the other party or for the relationship, create five distinct types of conflict management styles: collaborating (sometimes labeled integrating), accommodating, compromising, forcing (sometimes labeled competing), and avoiding (sometimes labeled withdrawing). Later work has empirically confirmed the relationships between the dual concern model and the five styles (Sorenson, Morse, & Savage, 1999).

In terms of Blake and Mouton's framework, collaborating is characterized by a high concern for one's own interests and a high concern for the interests of the other. Consequently, people who adopt a collaborative conflict style strive to resolve a conflict in a way that would take into account both parties' interests or concerns. Forcing is characterized by high concern for one's interests but low concern for the interests of the other party. Consequently, people who have a forcing style manage a conflict with primarily their own interests in mind and would strive to achieve a resolution that reflects that. Accommodating is characterized by a low concern for one's own interests but a high concern for the other's interests. People with an accommodating style would rather concede or agree to a resolution that addresses the other party's interests than to strive for a resolution that addresses their own concerns. Avoiding is characterized by low concern for one's interests and low concern for the interests of the other party. This style simply drives people to avoid conflict altogether rather than to engage in a resolution process. Finally, compromising is characterized by an intermediate concern for both the interests of the self and those of others. People with a compromising conflict style seek a compromise solution that would address at least some of both parties' concerns (Aquino, 2000; Brewer, 2002).

Despite the vast amount of research conducted on conflict styles, there seems to be no consensus among researchers as to the nature of the conflict style construct. An example of

the debate over the nature of conflict styles is on the question of whether conflict styles are relatively stable or rather more malleable. Some view a conflict style as a product of cognitive processes that people engage in to choose the most effective strategy to deal with a conflict (Moberg, 2001). Others view conflict styles as pre-dispositions people hold toward behavior in conflict situations and as driven by relatively stable personality traits (Shell, 2001).

Though it is not the focus of this dissertation, the nature of conflict and negotiation styles is an important area for future research.

2.2 Other Negotiation Behaviors.

Scholars who examined specific behaviors (also called techniques) that people employ when they negotiate, have studied behaviors such as demands and concessions, response modes (Pietroni, 2008), apologies and promises (Schweitzer, 2006), display of emotions (Kopelman, Rosette, & Thompson, 2008), humor (Vuorela, 2005), and non-verbal communication (Lincoln, 2000). In addition, there are numerous behaviors that are risky such as the ones I focus on: making high demands, revealing one's alternative options to a negotiated agreement (BATNA) and revealing one's payoffs (for a list of other risky negotiation behaviors see Appendix A). In the next section I review the literature relevant to risk taking behaviors, looking first at the dependent variables and turning then to the independent variables.

3. Dependent Variables: Risk-Taking Behaviors

The term risk has numerous definitions. Merriam-Webster dictionary defines risk as: possibility of loss or injury. This definition has two elements. The first involves probability or uncertainty, and the second is a negative outcome. For example, bungee jumping is

considered risky because it involves the possibility of severe injury and death; gambling is risky because you may lose money, etc.

The negotiation literature addresses risk but does not define it nor does is examine risk taking behaviors explicitly. Although the negotiation literature does not offer one agreed upon definition for risk taking behavior, most scholars have operationalized risky behavior similarly – as a behavior that might, potentially, have a negative outcome for a negotiator. For example, scholars have viewed taking an aggressive stand in a negotiation as risky because it may have a negative outcome – it may cause the negotiation to end without agreement (Ghosh, 1994). Similarly, delaying offers and counter offers, whether deliberately or not, is a risky behavior because a delay may cause the other party to either drop out of the negotiation or take a more aggressive stand as well. Other risky behaviors in the context of negotiation are: behaviors that might reduce one's outcome, behaviors that might reduce one's best alternative to a settlement in negotiation (BATNA), and behaviors that might damage your power or status in an ongoing relationship with the other party. The behaviors I examine in this dissertation are a part of these general behavioral categories.

To sum, for the purposes of this dissertation, I define risk taking behavior in negotiation as a behavior that may either enhance or reduce one's outcome. As mentioned above, the negotiation literature has indicated that negotiations do involve risky behaviors (e.g. delaying offers, taking an aggressive stand, etc.).

The three risk taking behaviors that I focus on in this dissertation (Table 1) answer the criteria set above for risky behaviors. Revealing one's BATNA and one's payoffs is risky because the other party may take advantage of knowing this information and make offers that are lower than what he/she would have made otherwise. This could lower the "revealing"

party's outcome. Making high demands (or very low offers – depending on the perspective taken) is risky because it may cause the other party to either "harden" his/her approach reducing his/her willingness to make concessions, or it may cause the other party to drop out of the negotiation altogether. I assume that both of these outcomes are undesirable to the party making the high demands.

Next, I will review the literature on the different independent variables identified that affect risk taking behavior (see Table 2). In my review, I follow the following format: first, I review individual differences variables (self efficacy, cognitive style, and goal orientation); and second, I review opponent's behavior variables (information about negotiators' past performance, opponent's call for risk taking, and opponent's risk taking).

4. Independent Variables - Individual Differences (Self-Efficacy, Cognitive Style, and Goal Orientation)

4.1 General

The importance of individual differences (also referred to as dispositions) as independent variables has been a matter of debate among social scientists in general and among negotiation scholars in specific. Some researchers argue that relatively stable individual differences like demographics and personality, alone, do not supply a sufficient explanation for the process of negotiation and its outcomes (Wall & Blum, 2000; Pruitt & Carnivale, 1993; White et al., 2004). Moreover, these scholars have argued that such dispositional variables that are out of negotiators' control would have very limited practical utility (Bazerman, 2000).

Other researchers argue that because people react differently to different situations and because people tend to be fairly consistent in their reactions across different situations, it is important to study those steady attributes which guide peoples' behaviors (Ross & Nisbett,

1991). Scholars who agree with the importance of individual differences as independent variables, continue to study such variables and occasionally do find interesting and useful relationships between them and negotiation outcomes.

In this dissertation I decided to focus on three individual differences variables that potentially have both theoretical and practical applications relevant to negotiation risk taking: self-efficacy, cognitive styles, and goal orientation. I review the literature on these variables next.

4.2 Self-Efficacy.

Self-efficacy is an important construct that originated from social cognitive theory, a theory that explains the interaction between behavior, cognition, and the environment (Gist & Mitchell, 1992). Self-efficacy refers to the degree of confidence people have in their ability to effectively control specific situations, to accomplish specific tasks or to succeed in challenges (Bandura, 1982; O'Connor & Arnold, 2001; Eccles & Wigfield, 2002). In other words, a person with high self-efficacy has a high degree of confidence in her/his ability to accomplish a certain task or to solve a problem effectively in certain settings.

The nature of self-efficacy. Self-efficacy is complex in nature having both stable and dynamic facets. Bandura, in his original work on self-efficacy (1982), asserted that individuals form perceptions of self-efficacy based upon their appraisals of past performance. This frame indicates that self-efficacy may evolve and develop over time. However, many authors argue that self-efficacy is in part stable and that individuals' initial self-efficacy perceptions greatly determine later evolution of these perceptions (O'Connor & Arnold, 2001).

Bandura argued that self-efficacy is a multidimensional construct that varies in strength and level of generality (Bandura, 1997). For example, individuals may have a weak, an intermediate, or a strong sense of self-efficacy (variation of strength) and may feel they have high self-efficacy in a many situations or in very few situations (a variation of level of generality).

An important distinction in the self-efficacy literature is between general self-efficacy and specific self-efficacy. The main difference between the two is that general self-efficacy is considered a relatively stable trait-like construct of competency perceptions across different situations. Task specific self-efficacy, on the other hand, is a more malleable state-like construct that is true to a specific task (Chen, Gully, Whiteman, & Kilcullen, 2000; DeRue & Morgeson, 2007). This distinction is not quite absolute because research indicates that people keep adjusting both their general and their task-specific self-efficacy as they express success or failure in their everyday life (O'Connor & Arnold, 2001). However, it still seems that the general self-efficacy is less affected by performance feedback than is the task-specific self-efficacy. In this dissertation I examine specific self-efficacy as an independent variable, because rather than examining the effects of self-efficacy across different situations, I am interested in the relationship between self-efficacy and negotiation specifically.

The consequences of self-efficacy. Self-efficacy directly influences individuals' motivation and affect (Bandura, 1989; Chen, 2000). Research indicates that self-efficacy affects individuals' causal attributions regarding their own performance. Individuals with high general self-efficacy tend to attribute success to their ability or skills and to attribute failure to external factors, such as not having enough information about the task or challenge, or such as not having enough time or resources to perform a task. Individuals with low self-

efficacy, on the other hand, tend to have the opposite attribution logic, attributing success to external factors such as luck, receiving help from another person, or attributing failure to their own lack of ability (Bandura, 1997).

These causal attributions affect individuals' motivation and affect. Individuals with high task specific self-efficacy, as opposed to individuals with low self-efficacy, tend to persist in a task or to engage in future similar tasks, even in the face of failure, because they do not attribute the failure to their ability (O'Connor & Arnold, 2001). Likewise, individuals with low self-efficacy, as opposed to individuals with high self-efficacy, experience negative affect (e.g. stress and anxiety) following failure, because they do not believe in their ability to cope with challenging tasks or situations (O'Connor & Arnold, 2001).

Traditionally, research has shown a positive relationship between self-efficacy and performance on a task in the work environment (Gist & Mitchell, 1992; see Stajkovic & Luthans, 1998 for a meta-analysis). However, interestingly, more recent studies have indicated that the effects of self-efficacy on performance depend on time and level of analysis, and in some cases, may hinder individuals' performance (Vancouver, Thompson, & Williams, 2001; Vancouver, Thompson, Tischner, & Putka, 2002; Yeo & Neal, 2006). The studies cited above indicate that high levels of task specific self-efficacy at times may cause individuals to be overconfident in their abilities and thus to direct less effort in the task, and in turn to perform poorly on it. However, it should be noted that there seems to be agreement that, overall, there is a positive relationship between specific self-efficacy and performance at the between individuals level.

Very few studies have examined the effects of specific self-efficacy on negotiations; however, the few existing studies indicate that self-efficacy has indeed several important

effects in this contexts. For example, O'Cconnor and Arnold (2001) found that in failed negotiations (i.e. those that reached an impasse) individuals with high self-efficacy (operationalized as specific negotiation self-efficacy) still believed that negotiation is a useful conflict resolution process, and they were willing to negotiate with their counterparts in the future.

More recently, Sullivan and colleagues (2006) found that self-efficacy affected negotiators' preferred negotiation strategies. These authors measured very specific self-efficacies – those for integrative negotiation and for distributive negotiation, and found that negotiators who had high integrative negotiation self-efficacy, tend to initially prefer integrative techniques (such as: finding tradeoffs and establishing rapport) while those who had high distributive negotiation self-efficacy prefer to begin with more distributive techniques (such as convincing the other party to agree to something and trying to gain the upper hand).

A close examination of the literature reveals very few studies that have examined the relationship between self-efficacy and risk taking behaviors in general and no articles that examine the relationship between self-efficacy and risk taking in a negotiation setting. In general, the articles all indicate that there is a positive relationship between self-efficacy and risk taking behaviors. Krueger and Dickson (1994) conducted one of the pioneering studies on the relationship between entrepreneurial self-efficacy (individuals' self-efficacy as to their ability to start a new business) and risk taking behaviors (starting a new venture). In an experimental study, the authors found that entrepreneurial self-efficacy is positively related to making riskier decisions – individuals who were higher on entrepreneurial self-efficacy started more new ventures compared to individuals low on entrepreneurial self-efficacy.

Zhao, Seibert, and Hills (2005) examined the relationship between entrepreneurs' entrepreneurial self-efficacy and entrepreneurial career intentions. Their study indicates that entrepreneurs who had successful experiences with new ventures in the past, had higher entrepreneurial self-efficacy, and in turn, had more intentions of starting new ventures in the future. Since starting a new venture involves risk taking, the Zhao et al. study provides some evidence about the link between self-efficacy and intentions to take risks.

Dulebohn (2002), and Cho and Lee (2006) examined the relationship between self-efficacy and investor's risk taking in stock investments. Both studies indicate that investors high on specific self-efficacy (investment judgment self-efficacy) engaged in more risky investments in comparison to investors with lower investment judgment self-efficacy.

Finally, Tabak and Barr (1999) examined the relationship between decision makers' general self-efficacy (trait) and their intentions to adopt technological innovations, which is a risky behavior, and found a positive relationship between the two.

In sum, the existing literature about the relationship between self-efficacy and risk taking in general indicates that there is a positive relationship between one's general and task specific self-efficacy and one's willingness to engage in risk taking. In this study, I will test this relationship in the context of negotiation. I propose that individuals high on negotiation self-efficacy engage in more risk taking in a negotiation than individuals low on negotiation self-efficacy, because their confidence in their negotiation skills affects their perception of the risk involved in those risky behaviors. I will elaborate further in the hypotheses development chapter.

4.3 Cognitive Styles.

Cognitive styles are relatively stable trait-like individual differences that represent individuals' automatic preferences regarding the organization and processing of information (Hayes & Allinson, 1994; Barbosa, Gerhardt, & Kickul, 2007; Brigham, De Castro, Shephard, 2007). In other words, cognitive styles are "high order heuristics" (Brigham et al., 2007:31) that operate in a sub-conscious level and guide people in processing information and in responding to different situations.

There is wide agreement among organizational researchers that cognitive styles are important determinants of decision making and individual behavior, such as problem solving, learning, and responding to different situations (Barbosa, Gerhardt, & Kickul, 2007; Brigham, De Castro, & Shephard, 2007). And, numerous studies indicate that cognitive styles may be a better predictor of individual performance than general intelligence or other situational factors (Kozhevnikov, 2007).

The operationalizations of cognitive styles. Ever since the early 1950s researchers have conceptualized cognitive styles as varying along different continuums (for example: verbilizer-visualizer, adaptors-innovators, field dependent-field independent. For a review of these different conceptualizations see Hayes & Allinson, 1994 and Kozhevnikov, 2007). Despite several attempts to create a unified theory of cognitive styles it seems that there is not enough evidence to prefer any one conceptualization of cognitive styles over another (Kozhevnikov, 2007). In this dissertation I conceptualize cognitive styles as varying along a continuum of two opposing poles that are labeled intuitive and analytical or rational. This conceptualization has received wide support in previous research (Pask, 1976; Briggs & Myers, 1976; Hayes & Allison, 1988; Alison & Hayes, 1996), and seems to be most suitable for explaining negotiators' decisions about risky behaviors in negotiations.

Numerous different definitions of intuition exist. In a relatively recent theoretical review paper, Dane and Pratt (2007) define intuition as "effectively charged judgments that arise through rapid, non-conscious, and holistic associations." (pp. 40) This definition highlights four elements of intuition. Intuition operates in a rapid cognitive process, it involves emotions, it involves a non-conscious cognitive process, and it involves making holistic and associative connections between situations and information. The analytic style is simpler because the term analysis is more common; it refers to a conscious, deductive, rigorous, and detailed process. From the brief definitions of the two concepts it is quite clear why they are situated on opposing poles.

The consequences of intuitive vs. analytical cognitive styles. In general, research indicates that people who have a more intuitive cognitive style employ a more open ended, exploratory, and innovative approach to problem solving as compared to more analytical individuals who employ a more structured and systematic approach to problem solving, and usually employ several steps in their decision making process (Allinson & Hayes, 1996).

Several researchers have argued that intuitiveness is an advantage in some managerial situations – those that involve uncertainty, that are complex and dynamic, that require a fast response and therefore that do not allow for a thorough and systematic processing and planning, etc. (Minzberg, 1976; Isenberg, 1984, Parikh, 1994).

Several studies have examined the unique role of intuition in entrepreneurship and have indicated that there is a positive relationship between an intuitive cognitive style and entrepreneurial intentions and behaviors (moderated by risk preference such that a high risk preference strengthens the relationship and vice versa) (Hisrich & Jankowicz, 1990; Barbosa et al., 2007). Moreover, studies indicate that individuals who employ an intuitive cognitive

style are more innovative (Olson, 1985), are able to better recognize opportunities for creating new ventures (Allinson et al., 2000), and are more efficient at decision making (Allinson et al., 2000).

Based on the past research reviewed above, I suggest that individuals' pre-dispositions to use intuitive or analytic decision making is related to the amount of risk taking they will employ in negotiations. In general (I will elaborate on the hypothesized relation between cognitive style and risk taking in chapter 2) I argue that individuals who are more intuitive – who make quick, innovative, and holistic decisions, would be more inclined to take risks compared to individuals who are more analytical, because often identifying risk in an analytic process rather than an intuitive one. In other words, considering the risks versus the benefits of an action is a more analytic process than an intuitive one.

4.4 Goal Orientation.

In the previous section I reviewed the literature on self-efficacy and cognitive styles. In the following section, I review the literature on goal orientation, which is a motivational independent variable in my study.

The history of goal orientation theory. Researchers' approach to the field of achievement motivation in general and achievement goals in particular has developed significantly over the past 40 years. The classical approach to achievement motivation from the late 1950's and early 1960's originated from Atkinson's model of achievement behavior (Atkinson, 1957).

Atkinson viewed achievement behavior as a conscious and linear choice people make about approaching success or avoiding failure, and proposed a mathematical model for achievement motivation and behavior (Atkinson, 1957). Atkinson's model included a formula designed to predict achievement-related behaviors: Ta = Ts – Taf, where Ta is the

tendency to achieve (i.e., to approach success or avoid failure), Ts is achievement behavior, and Taf is tendency to avoid failure. According to this formula, when achievement behavior is greater than the tendency to avoid failure, people will tend to approach success; and when the tendency to avoid failure is greater than the tendency to approach success, people will tend to avoid challenging situations in order to avoid failure.

In the field of educational psychology in the mid-1980's, Dweck (1986; 1988) and her colleagues developed the theory of goal orientation as a cognitive approach that focuses on "goals people adopt in achievement situations" (Reeve, 2005, p.170). About a decade later, goal orientation theory was introduced to the organizational science literature, framed similarly as a theory that explains individuals' cognitive frameworks for approaching achievement situations.

Definition and basic framework. Achievement goals were originally defined as the mental antecedents of achievement-relevant behavior or as a cognitive schema for interpreting and responding to achievement-relevant situations (see, for example, Elliot & Harackiewicz, 1996, p. 461). Because goal orientation research began in an educational setting, researchers focused on the achievement-relevant context of school exams. Later, when goal orientation entered the organizational literature, researchers studied job interviews, job training, and work-related tasks as achievement-relevant situations.

I argue that a negotiation is also an achievement-relevant situation because it involves the same elements. College exams, job interviews, job training, and other work-related tasks, all previously regarded as achievement-relevant situations, involve some challenge and some evaluation (either self-evaluation or evaluation from the environment). Negotiations, too, involve those elements. The incompatibility between one's own interests, ideas or actions

and those of another creates a challenge to resolve that incompatibility. The outcome of the negotiation is then subject to evaluation both from the self and from the environment. For example, consider a negotiation over a task conflict (a conflict about how to perform a work-related task) between two co-workers A and B. This situation presents a problem, and the parties are challenged to resolve it somehow. Assume that the negotiation ends in an agreement to accept A's opinion. A will evaluate this outcome as favorable to him and as an achievement on his part. On the other hand, B will feel either that his initial suggestion was not appropriate or that the outcome is not appropriate. Either way, parties evaluate the outcome of the negotiation.

The research on the basic framework of achievement goals evolved in three stages. In the first stage, scholars distinguished between two types or categories of goals: mastery or learning goals, and performance goals (Ames & Archer, 1988; Dweck & Leggett, 1988; Elliot & Dweck, 1988; Elliot & Church, 1997). According to the achievement goal literature, people with performance goals tend to evaluate their ability to perform different tasks relative to others. Thus, achieving a performance goal means doing better than others or better than a certain standard (Reeve, 2005). Performance goals, in the context of achievement, are associated with negative feelings toward challenging tasks (e.g., fear of failure), ineffective behaviors toward such tasks (e.g., disengaging), and lower achievement over time.

Learning goals, on the other hand, are more intrinsic because they direct people to evaluate the progress they are making toward achievement rather than their ability compared to others'. In other words, "achieving a mastery goal means making progress" (Reeve, 2005, p. 176). Learning goals are generally associated with approaching or engaging in challenging

tasks, maintaining persistence and increasing effort in such tasks, and attaining higher achievements in the long run.

In the second stage, research indicated that performance goals could be divided into two subcategories: performance-approach and performance-avoidance (e.g., Elliot & Harackiewicz, 1966; Elliot & Church, 1997). According to this distinction, performance-approach goals are performance goals that direct people to engage in an achievement task for performance purposes (i.e. to prove one is competent), whereas performance-avoidance goals direct people to disengage for performance reasons (i.e., to avoid being perceived as incompetent).

In the third stage, research indicated that the learning goal orientation could also be partitioned into two subcategories: learning-approach and learning-avoidance. Elliot and McGregor (2001) suggested that learning-avoidance goals have a "mixed antecedent profile" (p. 515). They have positive antecedents, such as perceiving a class as engaging and interesting, and negative factors, such as fear of failure and low self-determination. Learning-approach goals, on the other hand, are rooted in purely positive antecedents, such as perceiving a class as engaging and interesting, perceiving intelligence as malleable, and having high self-determination. In other words, the authors concluded that the main difference between learning-avoidance and learning-approach goals is that learning-avoidance goals are related to more negative antecedents than learning-approach goals (although they are related to more positive antecedents than are performance-avoidance goals).

In sum, the achievement goal literature supports four distinct achievement goal categories with different characteristics and consequences. Generally, researchers agree that

learning goals have more positive consequences than performance goals and, more specifically, that the approach subcategories have more positive consequences than the avoidance subcategories (Reeve, 2005; Elliot & McGregor, 2001).

The nature of achievement goals. A major consideration regarding the construct of goal orientation is its stability over time. A review of the goal orientation literature indicates that scholars are divided in their opinions and findings in this regard. Some have concluded that a goal orientation is more stable than mutable, with antecedents such as personality traits (Hough, 1992), implicit theories about intelligence (Dweck, 1986), cognitive ability (Eison, 1981), and implicit and explicit need for achievement (Elliot & Church, 1997; Thrash & Elliot, 2002). These antecedents are relatively stable traits or trait-like individual differences. For example, studies show that individuals who hold entity theories about intelligence, and view intelligence as a predetermined, fixed trait, tend to adopt performance goals. On the other hand, people who hold incremental theories about intelligence and view intelligence as a malleable trait tend to adopt learning goals (Dweck & Legget, 1988; Elliot & McGregor, 2001).

In a recent meta-analysis, Payne, Youngcourt, and Beaubien (2007) concluded that although the stability of goal orientation has yet to be established, most scholars to date conceptualize goal orientation as a disposition, and most empirical work to date has measured goal orientation as a trait-like individual difference variable. In this article I also consider goal orientation as a more stable construct: I believe that people are predisposed to pursue either performance goals or learning goals, and that this predisposition is relatively stable over time.

In sum, goal orientation theory indicates that people are pre-disposed to pursuit one of two kinds of goals when they are faced with challenging situations: one goal is to improve their skills (learning goal), and the second goal is to outperform others (a performance goal). In this study I argue that this basic theory is relevant to negotiators' risk taking because a negotiation is a challenging task. Therefore, in a negotiation some people are predisposed to pursue performance goals and to outperform their opponent, while others are predisposed to pursue learning goals and exhibit good negotiation skills. For negotiators who pursue learning goals reaching a good agreement should be more important than outperforming the opponent because the purpose of most negotiations is to reach agreement. I will develop more specific hypotheses in this regard in chapter 2.

5. Independent Variables – Information about Negotiators' Past Performance and Opponents' Behavior (Opponent's Call for Risk Taking, and Opponent's Risk Taking)

In this section I review the literature relevant to three independent variables included in this study under the category of "Opponents' Behavior." The first variable is information about negotiators' past performance. This variable involves presenting negotiators with information about other negotiators' performance in past similar negotiations. The second variable is opponent's call for risk taking. This involves having one party ask the other to do something risky (i.e. to reveal the BATNA or the payoffs). The third variable is opponent's risk taking. This involves a party actually engaging in one of the risky behaviors: revealing one's BATNA, revealing one's payoffs, and making high demands.

5.1 Information about Negotiators' Past Performance as an Independent Variable

In this study I am interested in whether and how information about other negotiators' past performance affects a negotiator's current risk taking. The question is whether

individuals' risk taking is affected by being compared to others who allegedly performed very well, very poorly, or at an average level, in the past. In the next paragraphs I review social comparison theory that is relevant to this question.

Social comparison theory, introduced by Festinger in a seminal article (1954), deals with the way people evaluate their own abilities. The premise of this theory is that all individuals have a need to evaluate themselves, and to discover that they are better than others in terms of the ability or trait compared (Festinger, 1954). At the heart of Festinger's theory was the assumption that in the absence of an objective standard, individuals compare their performance to that of others.

Research on social comparisons have evolved since then and suggests that the process involved with these comparisons is quite complicated. One fundamental issue, perhaps the central one, is about the differences between upward versus downward comparisons. In upward comparisons an individual compares his/her ability to high performers whereas in downward comparison an individual would compare him/herself to poor performers.

The central question here that is relevant to this dissertation is what kind of comparison would have a beneficial impact on individuals' performance? For example, in a certain work related task – would individuals perform better if their supervisor would indicate that other employees have performed very well in the past (upward comparison), or perhaps would they perform better if their supervisor would indicate that others have previously performed poorly on that task (downward comparison)? Very little empirical research exists on this important question and what research does exist does not offer consistent findings (Johnsonson & Stapel, 2007).

In one of the earliest studies on this issue, Seta (1982) found that individuals who were paired up with an excellent performer, performed better than individuals who were paired up with a poor performer. Few later studies supported these results (e.g. Blanton, Buunk, Gibbons, & Kuyper, 1999). However, other studies found contrasting results indicating that upward comparisons, especially to extremely intelligent or high performers, lead to lower perceiver performance whereas downward comparisons lead to improved performance (Dijksterhuis et al. 1998; Stapel & Suls, 2004).

More consistent research exists on a closely related issue – the relationship between social comparisons and self-evaluation (individuals' evaluations about how capable they are relatively to others). There seem to be three main factors affecting the relationship between social comparison and self evaluations. The first two factors that are closely related are the relationship between the focal individual and the target of the comparison (the individual we refer to as a "standard" for performance) and the importance of the domain of the comparison.

Research indicates that an upward comparison when individuals feel close with the target of the comparison and when they feel the domain is not so relevant to them, would result in assimilation – a high self evaluation. On the other hand, an upward comparison to a close individual on a domain that is directly relevant to both individuals may cause contrast - a negative self evaluation (Tesser, 1988).

The third main factor affecting the relationship between the direction of social comparison and behavior is the use individuals make of the comparison information (Stapel & Koomen, 2000). Research indicates that when individuals use comparison information to define their identity, upward comparison is likely to inspire higher performance. On the other

hand, when individuals use comparison information to evaluate themselves in specific abilities an upward comparison is more likely to lead to distinction from the target of the comparison and not positively affect performance (Stapel & Koomen, 2000).

Johnson and Staple (2007) suggested that there is a close link between self-evaluation and performance. These authors found that when a social comparison (whether upward or downward) threatened individuals' self self-evaluation, they would try to repair that by boosting their performance; and vice versa -- when a social comparison does not threaten or boost individuals' self-evaluation, they would not need to repair their self evaluation and would perform relatively poorly.

Building upon Johnson and Staples' (2007) logic and upon other findings discussed above, in this dissertation I examine the relationship between social comparisons and risk taking in a negotiation context. In general, I suggest that when negotiators are compared to individuals who either did very well or very poorly in past negotiations they exert more effort and try to do better than the poor performers and at least as well as the high performers. This is because negotiators have a need to maintain a high evaluation and to maintain their perceptions of self-worth. I argue that trying to perform better in a negotiation would involve engaging in more risk taking.

On the other hand, comparing negotiators to opponents who demonstrated average performance should not threaten negotiators' perception of self worth and should not result in more risk taking. I will elaborate on the specific hypotheses in this regard at the hypotheses development chapter. Next, I turn to a discussion on the other two independent variables in the opponent behavior category: opponent's call for risk taking and opponent's risk taking.

5.2 Opponent's Call for Risk Taking and Opponent's Risk Taking as Independent Variables

In addition to examining the effect of information about negotiators' past performance on risk taking, I am interested in examining how one party's call for risk taking (one party asking the other to do something risky) and actual risk taking (operationalized as either revealing the BATNA, revealing the payoffs, or making a very high demand) affects the other party's risk taking behavior. Surprisingly there is no empirical evidence for that and therefore it is one of the contributions I hope to make with this dissertation.

The theoretical foundation of explaining the effect of the opponents' call for risk and opponent's risk taking on negotiator's risk taking lies within the norm of reciprocity. The phenomenon of reciprocity is central to any situation that involves interpersonal communication between two or more individuals as with negotiations (Deutsch, 1973; Putnam & Jones, 1982). The phenomenon that is labeled norm of reciprocity is a universal social norm that refers to people's tendency to reciprocate the behaviors of their counterpart (Gouldner, 1960). Many regard the norm of reciprocity as subconscious because it is a social norm – a rule that is internalized by members of society (Brett, Shapiro, & Lytle, 1998; DeRidder & Tripathi, 1992).

In the context of negotiation, research reveals that negotiators reciprocate various different communication types, both cooperative and non-cooperative. For example, offers that are perceived as fair are reciprocated by similar offers, and threats made by one party tend to be reciprocated by threats from the other party (Putnam, 1983). Research indicates that negotiators also reciprocate their counterparts' negotiation strategy (see for example, Brett, Shapiro, & Lytle, 1999; Rubin & Brown, 1975; Pruitt, 1981; Putnam & Jones, 1982; Frazier & Rody, 1991). So, for example, when negotiators use a cooperative strategy, such as making unilateral concessions, the other party will reciprocate with further concessions

(Pruitt, 1981). On the other hand, when a party uses a competitive or distributive strategy, such as high initial demands, counterparts tend to reciprocate with very high counter demands (Bartos, 1974).

For the most part, scholars have focused on the negative aspect of reciprocation. Scholars have studied reciprocation of hindering behaviors that escalate conflict terming this escalation conflict spirals (Brett et. al., 1998; Putnam & Jones, 1982). Scholars have defined hindering behaviors as behaviors that "impose, or threaten to impose unfavorable or costly consequences on [the] other."(Rubin, Pruitt, & Kim, 1994: 48). In sum, research indicates that the reciprocation of certain hindering behaviors causes negotiation spirals.

The literature on the norm of reciprocity is relevant to risk taking in negotiation. I suggest that when an opponent takes a risk - revealing his/her BATNA for example - a negotiator will feel bound by the norm of reciprocity and thus will reciprocate this behavior by engaging in a similar risky behavior (e.g. revealing the BATNA).

The discussion so far explains how an opponent's risk taking affects negotiator's risk taking via the process of reciprocity. The effect of an opponent's *call* for risk taking on negotiator risk taking is less straight forward, because in this situation the opponent is simply asking the negotiator to do something risky. I contend that when an opponent asks a negotiator to do something risky, such as to reveal his/her payoffs, the negotiator will tend to comply expecting the opponent to reciprocate that behavior later. This is consistent with the norm of reciprocity.

However, this dynamic of calling for risk taking by an opponent and compliance by the negotiator may or may not recur. If the opponent indeed reciprocates the behavior (that he himself called for) a pattern of reciprocation exists, and the next time the opponent calls for

risk taking, the negotiator will comply again. In this case a sense of trust is created between the negotiator and the opponent. However, if the opponent will not reciprocate, the negotiator will not comply with a future call for risk taking. For example, assume A asks B to reveal his payoffs. B complies. If A then reveals his payoffs the norm of reciprocity is fulfilled and the next time A asks B to do something risky B will most likely agree to do so, trusting that A will reciprocate again. However, if A asks B to reveal his payoffs but refuses to reciprocate that upon receiving the information from A, this would violate B's expectations and the next time A will ask B to do something risky B would most likely refuse to do so. I will discuss more specific hypotheses in the next chapter.

In sections 4 and 5 I have reviewed the literature on the independent variables included in this study. In the following section I will review other independent variables that are not included in this study but that have received considerable attention in the literature and that are important to the understanding of the negotiation field.

6. Other Independent Variables (Not Included In This Study: Cognitive Processing, Risk Propensity, Personality Types, Self Esteem, Incentives, Aspirations, and Goals)

Cognitive processing. One major variable that affects risk-taking is the cognitive process employed by the individual. Two main cognition theories exist for explaining non-impulsive risk taking behavior: expected utility theory and prospect theory. Until the late 70s expected utility theory (EUT) was the leading theory for explaining decision making under risk, which leads to risky behavior. According to expected utility theory individuals choose among different prospects by considering three issues. The first is the expected value or usefulness of the outcome. The second is the added value of the outcome as compared to the

individual's situation without the outcome. The third is risk aversion. Individuals vary in the degree to which they prefer a more certain outcome to a risky outcome.

In their classic article, Kahneman and Tversky (1979) offered a critique of EUT and suggested an alternative theory to explaining risk taking that they labeled prospect theory. Prospect theory has since become the most widely cited theory of decision making in risky situations.

In general, the main tenet of prospect theory is that people tend to be risk averse when they perceive themselves as in a gain, and they would be more risk seeking when they perceive they are in a situation of a loss. In order to make a decision people analyze their options by comparing the risky option/s to their base line – their current situation, and assign a value to the option. Kahneman and Tversky (1979) label that value utility value. The main difference between Expected Utility Theory and prospect theory is that even though they both measure losses and gains, prospect theory does not consider absolute wealth as a factor in the decision making process.

Kahneman and Tversky (1979) suggest that two main effects are in play in decision making in the context of risk taking. The first is the certainty effect according to which people tend to underweight prospects or outcomes that are probable as compared to prospects that are certain and that contributes to risk aversion. According to the certainty effect, when people are faced with choice between a sure gain and a probable gain or loss they will prefer the sure gain, or be risk averse, because they will underweight the probable outcome. When people are faced with a sure loss however, they will exhibit risk taking trying to avoid the loss and choose the probable or risky alternative. The second effect is termed the isolation

effect, according to which people make inconsistent choices in similar situations because they tend to ignore similarities among the different choices they are considering.

According to Kahneman and Tversky (1979) individuals make decisions regarding risk taking in a two-phase cognitive process. In the first phase, labeled the editing phase, the individual conducts an initial analysis the different options or prospects. This phase's purpose is to simplify the choice and to facilitate the ultimate decision the individual will make in the second phase. In the second phase the individual evaluates the different prospects including the probability and the actual outcome, and chooses to pursuit the prospect with the highest value.

Scholars have also suggested that sometimes decision making processes in uncertainty situations are more intuitive and impulsive or instinctive. Rottenstreich and Kivetz (2006) argue that real life situations may be classified into two categories: those that elicit a probabilistic mindset and those that elicit a non-probabilistic mindset. More specifically, the authors argue that some situations elicit a probabilistic mindset that guides people to assess the probability of the outcomes in their decision making process (such as cases that prospect and utility theories apply to). However, other situations elicit a non-probabilistic mindset.

Kahneman and Tversky's Prospect Theory (1979) has also been criticized by other scholars who claimed that this theory ignores the issue of framing. Numerous empirical studies (for example, MacCrimmon & Wehrung, 1986; Hollenbeck et al., 1994; Highhouse & Payam, 1996; Sullivan & Kida, 1995) have indicated that framing a risky situation as a potential gain or a potential loss has a profound impact on whether people pursuit the risky option or not.

More specifically, these studies indicate that when people perceive a risky option as a potential for gain they are more likely to pursuit this option. On the other hand people are less likely to pursuit a risky option framed a potential loss or as a threat. Moreover, these studies indicate that in a risky situation the framing issue and the perspective of the individual are *both* in play. More specifically, scholars agree that when people perceive they are in a loss situation they would be more likely to pursuit a risky option because they perceived it as an opportunity rather than as a threat. And on the other hand, when people are in a gain they are more risk averse because they perceive the risky option as a threat. However, framing the same situations as gains is likely to change peoples' decision regardless of whether they are at a loss or at a gain.

Risk propensity. Risk propensity, also labeled risk preference, is an individual difference variable – a facet of extraversion, which is one of the personality traits in the "big five" personality theory (Mount & Barrick, 1995). This categorization of risk propensity as a personality trait implies that it is relatively stable – like all other personality traits. However, there is some evidence that in some cases risk propensity might be dependent upon other personality traits and upon context (Soane & Chmiel, 2005). More specifically, Soane and Chmiel found that individuals higher on risk propensity, higher on the personality trait - neuroticism and low on the personality trait – agreeableness were inconsistent in their risk preferences. Those individuals take more risks in career related issues and they take less risks in health and personal finance issues (Soane & Chmiel, 2005).

Regardless of the stability of risk propensity, scholars agree that this construct, defined as individuals' predispositions toward risk taking, is an important factor affecting negotiator behavior and negotiation outcomes (Ghosh, 1996). Essentially, individuals high on

risk propensity are risk seeking whereas individuals who are low on risk propensity are risk averse.

In general, researchers agree that individuals with high risk propensity tend to attain higher outcomes in negotiations than individuals with low risk propensity (Ghosh, 1996). More specific findings indicate that negotiators with high risk propensity engage in risky behavior (Shure & Meeker, 1967) and make fewer concessions than individuals with high risk propensity (Harnett, Cummings, & Hughes, 1968). In a theoretical article Westbrook (1996) asserts that individuals with high risk propensity would use more aggressive techniques and would be willing to take the risk of the effect of those techniques on the negotiation. This proposition has yet to be tested empirically and is an important area for future research. On the other hand, Bottom and Studt (1993) found that negotiators with low risk propensity tend to be more cooperative.

Given that the relationship between risk propensity and risk taking in general and in the context of negotiation in particular is relatively well established, I decided not to include risk propensity as an independent variable in my study.

Personality. Several studies have focused on the relationship between the personality traits in the "big-five" personality model and the Myers-Briggs Type Indicator (MBTI) and risk taking behavior. These findings suggest that people who are high on openness to experience (one of the "big five" personality traits), and excitement seeking (as measured by a sub-scale of the extroversion "big-five" trait), and intuitive behavior (as measure by a sub-scale of the MBTI) tend to employ more risk taking. On the other hand, people high on conscientiousness (one of the "big-five" personality traits), and Judging (one of the MBTI types) tend to avoid risk (Kowert & Hermann, 1997; Nicholson, 2004).

Greenhalgh, Neslin, and Gilkey (1985) found that personality variables interact with negotiator outcome preferences to affect negotiation outcomes. Barry and Friedman (1998) found that in distributive negotiations, negotiators who were high on extraversion and agreeableness (two of the ‘‘Big Five’’ personality dimensions) reach inferior settlements compared to negotiators with different personality types. Moreover, the authors found that the effects of personality were higher when negotiators' aspirations were not high. Conscientiousness was generally unrelated to bargaining success. The authors also examined the affect of cognitive ability on negotiation outcome and found that it did not affect outcomes of distributive bargaining but was positively related to attaining joint outcomes in integrative negotiations.

Self esteem. Self-esteem is a relatively stable evaluation that individuals form about themselves (Trzesniewski, Donnellan, & Robins, 2003). Generally, researchers agree that individuals may either form a negative or a positive evaluation of their ‘self’ (Mcelroy, Seta, & Waring, 2007). Research indicates that individuals with low self esteem tend to take more risks when issues are framed in a negative manner (as possible losses) and they tend to take less risk when issues are framed in a positive manner (as possible gains) (Mcelroy, Seta, & Waring, 2007).

Self esteem is quite similar to self-efficacy in that they both relate to individuals' self-evaluations and perceptions of self worth. Therefore, I concluded that examining both variables as determinants of risk taking would be redundant. Based on the self-efficacy literature reviewed above, I decided to focus on specific self-efficacy rather than on self-esteem.

Incentives, aspirations, and goals. The negotiation literature emphasizes the relationship between three main motivational factors (treated as independent variables) and parties' behavior and negotiation outcome (dependent variables). The independent variables are: incentives (Axelrod & May, 1968; Locke & Latham, 1990), aspirations, and goals.

Researchers in most areas dealing with human behavior agree that incentives have a strong influence upon peoples' behavior (Locke & Latham, 1990; Roth, 1995). In negotiations, researchers agree that individuals will behave in ways they think would improve their chances of attaining the highest outcome – that is their incentive. For example, research indicates that when parties have high incentives for cooperation, they will indeed engage in more cooperative behaviors (share information, brainstorm, etc.) and parties will achieve higher joint outcomes (Huber & Neale, 1987).

Aspirations are also a motivational factor that affects negotiation behavior and outcomes. Most scholars would agree that aspirations are mainly about parties' expectations regarding the outcome of the negotiation (for example, Siegel & Fouraker, 1960; Pruitt, 1981; White & Neale, 1994).

Research has examined the relationship between aspiration level and negotiation outcomes and has consistently found that: the higher the level of aspirations the more favorable the outcomes for that individual party (Siegel & Fouraker, 1960; Bottom, 1990; Huber & Neale, 1986), but the lower the concessions and rate of agreement (Pruitt, 1981). Moreover, research indicates that the competitiveness or cooperativeness of the parties moderates that relationship such that higher aspirations lead to higher outcomes when parties are more cooperative; and vice versa the relationship between level of aspirations and

negotiation outcomes becomes negative when parties are competitive (use competitive tactics).

Researchers have also studied the role that goals and goal setting play in negotiation. Two dominant theories about the influence of goals in negotiations are: goal setting theory (Locke & Latham, 1990) and multiple goal theory (Fukushima & Ohbuchi, 1996; Ohbuchi, Fukushima, & Tedeschi, 1999; Ohbuchi, &Tedeschi, 1997).

According to goal setting theory, when individuals set specific and challenging goals in negotiations, which are specific desirable outcomes (e.g. an amount of money to be collected, goods to be handed, etc.) they are motivated to achieve those goals and they have better chances of attaining them (Brett, Pinkley, & Jackofsy, 1996). This motivation translates into putting more effort to finding different strategies and into persisting until goal is attained or until the goal cannot be attained (Pruitt, 1981; Locke & Latham, 1990). In other words, research indicates that there is a positive relationship between effective goal setting (challenging and specific goals) and level of outcomes in negotiation.

Multiple goal theory supplements goal setting theory in that it focuses on the kind of goals people pursuit in negotiations in addition to how those goals affect subsequent behavior. According to multiple goals theory, individuals often pursue two kinds of goals in any negotiation – *resource* goals, such as funds, objects, or rights, and *social* goals, such as relationships goals, identity goals, or power goals. Moreover, consistent with goal setting theory, multiple goal theory suggests that the goals influence individuals' tactics or behaviors. Specifically, research indicates that when people are familiar with each other they pursue relationship goals that activate integrative tactics or a conciliatory approach (Fukushima & Ohbuchi, 1996). In other words, research indicates that there is a high

correlation between the kind of goal that a party pursuits and that party's behavior in the negotiation.

In conclusion, in this section I have reviewed the literature on self-efficacy, cognitive styles, and goal orientations as individual differences independent variables and I have related those variables to risk taking in negotiation. I have also provided a review of additional variables that although not tested in this study, are important as background information to the field of negotiation. In the next chapter I present my hypotheses as to the relationships between the independent and dependent variables.

CHAPTER 2
HYPOTHESES DEVELOPMENT

In this chapter, I discuss the rationale for specific hypotheses about the relationships between the independent variables and risk taking behavior. Recall, the dependent variable in this study is risk taking. I chose to focus on three risk-taking behaviors that emerge in the negotiation literature as typical to negotiation (see Appendix A for a list of possible risky behaviors from which I chose the ones in this study). Those risky behaviors are (a) revealing information about one's BATNA (best alternative to a negotiated agreement), (b) making high demands (a very low offer is also viewed as a high demand from the other party's perspective), and (c) giving information about payoffs.

This study examines the effect of two categories of independent variables on the dependent variable: individual differences that include self-efficacy, cognitive style, and goal orientation; and opponents' behaviors that include information about negotiators' past performance, opponent's call for risk taking, and opponent's risk taking. I will lay out the logic of my specific hypotheses in a format that would follow the independent variables in the order mentioned above.

1. Self-Efficacy as an Antecedent

Recall, self-efficacy refers to the degree of confidence people have in their ability to effectively control a specific situation, to accomplish a specific task, or to succeed in a challenge (Bandura, 1982). So a person with a high self-efficacy has a high confidence in his or her ability to perform well on specific tasks.

The self-efficacy literature indicates that there is a positive relationship between self-efficacy and risk taking in different contexts. For example, individuals with high entrepreneurial self-efficacy (individuals' self-efficacy as to their ability to start a new business) start more new businesses (which is risky) compared to individuals with low entrepreneurial self-efficacy (Krueger and Dickson, 1994). Another example from the literature involves risky financial investments. Research indicates that individuals with high investment self-efficacy made riskier investments than do people with low investment self-efficacy (Dulebohn, 2002; Cho and Lee, 2006).

The negotiation context is very similar to the contexts described in the self-efficacy literature. It involves uncertainty and it involves various risks such as a risk of failing, a risk in achieving low outcomes, and a risk of damaging the relationship with the other party. Therefore, I hypothesize that the logic applied to other contexts would apply to negotiation. Thus, individuals with high negotiation self-efficacy will exhibit more risky behaviors in negotiation (i.e. will make high demands more often, will give information about payoffs more often, and will reveal BATNA more often) than individuals with low self-efficacy. Stated formally:

> **Hypothesis 1:** Negotiation self-efficacy will be positively related to risk taking in negotiations.

2. Cognitive Style as an Antecedent

As mentioned earlier, studies examining individuals' cognitive style along the dimension of analytical versus intuitive have provided evidence that individuals who employ a more intuitive style are more innovative and entrepreneurial than individuals who employ a more analytical cognitive style. Taking a risk means performing an action that may either increase or lower your outcomes.

It seems that people who are more analytical and rational in their decision-making will be very hesitant to take risks because they are fully aware that this may result in a lower outcome for them. Intuitive people, on the other hand, are able to make creative moves and are less opt to focusing on risks. They make quick decisions based on a wide range of information and consider other elements than the risk of lower outcomes, and therefore are willing more often to take risks. Stated formally,

Hypothesis 2: An intuitive cognitive style rather than an analytical cognitive style will be positively related to risk taking in negotiations.

3. Goal Orientation as an Antecedent

Several authors have written about the effect of goals on negotiation behaviors; however, as the literature review above indicated, there is no evidence to date as to the relationship between goal orientations and risk taking behaviors in the negotiation context. Rather, most authors have examined the relationship between more specific goals, such as those specified by the multiple goal theory (for example, Fukushima & Ohbuchi, 1996; Ohbuchi, Fukushima, & Tedeski, 1999), and various behaviors or tactics.

The main difference between multiple goal theory and goal orientation theory is that while multiple goal theory considers specific goals, such as relationship or resource goals, goal orientation theory is a motivational theory that uses broad goal *orientations* (i.e., performance vs. learning *types* of goals). Therefore, goal orientation theory adds a motivational explanation to behavior in conflict situations that may apply to a wider range of situations than specific goals do.

Katz and Block (2000) were the first to suggest a link between the motivational learning/performance goal orientation framework and conflict situations. Katz and Block argue that disputants' goal orientation affects their behavior in conflict situations because in a

conflict “people are motivated to achieve a certain goal so as to satisfy their needs, interests, or aspirations” (pp. 283). For example, the authors argue that people with a learning goal orientation should be more willing to put extensive effort into collaborating with the other party in order to find a mutually agreeable solution for their dispute. As part of that, the authors argue that individuals who have a learning goal orientation would welcome the challenge of achieving a mutually agreeable solution and would be more willing to take risks in order to achieve an agreement with their counterpart. Individuals with a performance goal orientation, on the other hand, are more geared toward outperforming (i.e. competing with) their counterpart and are more concerned with failure. This reasoning leads to the conclusion that individuals with a performance goal orientation would be more hesitant to take risks and would rather “play it safe”.

In this study I adopt Katz and Blocks’ rationale and apply it to the specific context of negotiation. I hypothesize that in a negotiation, individuals with a learning goal orientation would be more motivated than individuals with a performance goal orientation to put forth substantial effort to finding a mutually agreeable solution with their opponent. This is so, because negotiators who have a learning goal orientation are geared towards growth and development rather than on outperforming their opponent. One outcome of this willingness to put forth effort in order to find a mutually agreeable solution would include more risk taking in the form of revealing information about payoffs and outside options (BATNA).

As mentioned earlier, the goal orientation literature divides the learning and the performance goal orientations into approach-avoidance sub-categories. The literature indicates that for each main goal orientation, an approach orientation will motivate individuals to be proactive whereas an avoidance orientation would have the

opposite effect. This allows for a fine-tuned hypothesis, according to which individuals with a learning-approach goal orientation will engage in more risk taking than individuals with a learning-avoid goal orientation. Stated formally:

> **Hypothesis 3**: The learning-approach goal orientation will correlate positively with risk taking behavior in negotiations.

4. Information about Others' Performance in Past Negotiations as an Antecedent

As mentioned earlier, social comparison theory suggests that people look to others in order to form opinions about their own thoughts and abilities. In other words, social comparisons affect individuals' self-evaluation. There are two forms of social comparisons: upward comparisons and downward comparisons. Most individuals look to boost their self-worth or self- evaluations. Thus, the most prevalent comparison is the upward comparison in which individuals compare themselves to others who are considered successful in a relevant area, so as to boost their own self-evaluation. Recently, Johnson and Staple (2007) found that there is a close link between self-evaluation and performance. These authors found that in upward social comparison, individuals try to boost their performance to achieve a high self-evaluation.

Following the above, I suggest that a comparison to high performers should also affect risk taking, which is a behavior people engage in to boost their outcomes. As discussed earlier, individuals usually compare themselves to successful others because of the need to evaluate themselves highly. Thus, I hypothesize that individuals who are given information about others who have performed very well and also information about others who have performed very poorly in the past would pick the high performers as models, rather than calculate an average between high and low performers. As a result, these individuals will

have high aspirations in terms of the outcomes for the negotiation and will try to boost their performance in order to do well. I hypothesize that these individuals will also take more risks so that they can do as well as the top performers. On the other hand, individuals who are presented with evidence of average performers will not be as motivated and would not take as many risks.

Therefore,

> **Hypothesis 4a:** Negotiators presented with information indicating that in past negotiations negotiators achieved either a very high outcome or a very poor outcome will have higher goals/aspirations compared to negotiators presented with information indicating that in past negotiations negotiators achieved an average outcome.
>
> **Hypothesis 4b:** Negotiators presented with information according to which negotiators in past negotiations achieved either a very high outcome or a very poor outcome will take more risks in present negotiations compared to negotiators presented with information indicating that in past negotiations negotiators achieved a moderate outcome.

5. Opponent's Risk Taking and Opponent's Call for Risk Taking as Antecedents

The review of the literature on the role that the norm of reciprocity plays in human interaction in general, and particularly in negotiation, indicates that negotiators' behaviors are highly interdependent and should be studied as such. Because the norm of reciprocity has been found to affect peoples' behavior in interpersonal contexts, I am interested in examining how the norm of reciprocity might affect risk taking behaviors in negotiations.

The negotiation literature indicates that negotiators reciprocate each other's behaviors. For example, when one party makes an offer, the other party typically reciprocates with a similar offer; when one party makes a concession, the other party is likely to reciprocate with a similar concession; and when one party makes a threat, the other party is likely to make a threat as well (Putnam, 1983; Brett, Shapiro, & Lytle, 1998; Rubin & Brown, 1975; Pruitt, 1981). Because reciprocity does seem to be in place within negotiations, I predict it will impact upon risk taking behaviors such that when one negotiator engages in risk taking, the other party will reciprocate that behavior and engage in risk taking (i.e. reveal BATNA and payoffs). Therefore, I hypothesize:

> **Hypothesis 5a**: There is a positive relationship between opponent's risk taking (i.e. revealing of his/her BATNA, revealing information about payoffs and making high demands/low offers) and negotiator's revealing of his/her BATNA.
>
> **Hypothesis 5b**: There is a positive relationship between opponent's risk taking (i.e. revealing of his/her BATNA, revealing information about payoffs and making high demands/low offers) and the negotiator's revealing his/her payoffs.

I also argue that one's *call* for risk taking would result in more risk taking. This is also due to the norm of reciprocity, but in an indirect way. I argue that when negotiators are asked by their opponents to reveal their BATNA or their payoffs, they will expect that if they comply, the opponent will reciprocate that behavior, especially since they called for it. Stated formally:

Hypothesis 6a: There is a positive relationship between opponent's call for risk taking (i.e. revealing of his/her BATNA, and revealing information about payoffs) and negotiator's revealing of his/her BATNA.

Hypothesis 6b: There is a positive relationship between opponent's call for risk taking (i.e. revealing of his/her BATNA, and revealing information about payoffs) and the negotiator's revealing his/her payoffs.

So far, I discussed hypotheses about the relationship between opponent's call for risk taking and negotiator risk taking and between opponent's risk taking and negotiator risk taking, independently from each other. However, the effect of opponent's call for risk taking on negotiator risk taking should be stronger when the opponent also takes risk. This is so because when an opponent takes risks, in addition to asking a negotiator to take risks, he/she validates the norm of reciprocity. That increases trust (Pruitt & Lewis, 1977) and should motivate the negotiator to comply with the opponent's call for risk taking more readily than when the opponent merely calls for risk taking but does not *engage* in risk taking. Therefore, I hypothesize:

Hypothesis 7: There is an interaction effect between opponent's call for risk taking and opponent's risk taking on negotiator risk taking, such that the relationship between opponent call for risk taking and negotiator risk taking is stronger in combination with opponent risk taking.

CHAPTER 3

METHOD

In this chapter I provide a detailed description of the experimental design of the study included in this dissertation, and a description of the procedures and measures I employed.

1. Research Design

In order to test the hypotheses, I designed a 2 x 2 x 2 between-subject experiment with 2 levels of information about negotiators' past performance (information about high and low performance versus information about average past performance); 2 levels of opponent's risk taking (risk taking/no risk taking); and 2 levels of opponent's call for risk taking (Call for risk taking/No call for risk taking).

Controlled experiments are very common in negotiation and decision making research, perhaps due to the fact that most negotiation studies are focused on predicting the causality between different predictors and negotiation outcomes, and experiments are generally considered most suitable when hypotheses involve causality (Cook & Campbell, 1979). In this study I decided to use controlled experimentation for the same reason.

I used a slightly modified version of a scenario created by Arnold and O'Connor (1999) that involves a negotiation between a job applicant and an employer (see Appendices B1, B2). I chose this scenario because it involves matters that should appeal to students in general and to business majors in particular, and would encourage them to behave as though it were a real time negotiation.

2. Participants and Procedure

I recruited 120 undergraduate students from upper level undergraduate management classes to participate in this study. Of these 120 students, 77 were male and 43 were female. I

invited participants to participate in a study on "negotiation and decision making." Upon arrival, participants were randomly assigned to one of the experimental conditions. Participants then received written instructions describing the negotiation scenario and the task they are about to perform according to the manipulation they were assigned to (Appendices B1, B2); they were given a chart with the different agreement options and their dollar values (Appendix C), an agreement form (Appendix D) and a consent form (Appendix E).

In order to motivate participants to take the negotiation seriously, the instructions mentioned that all participants would receive the dollar amount assigned to each payoff option they settled for as listed in Appendix C.

As the participants read the instructions, I-the experimenter-walked in with a sheet (Appendix F) containing a list of the 3 risky behaviors I am measuring as the dependent variable (revealing BATNA, revealing payoffs, and making high demands). I read the information from the sheet to them. I mentioned that in case participants have little experience with negotiations it may be helpful to know that sometimes negotiators may engage in several risky behaviors that include the ones listed. I then left the room, and asked the participants to complete their preparation for the negotiation.

I employed seven MBA students as confederates to serve as the participants' opponents and to manipulate the "opponent's behavior" and "opponents call for risk" factors. Upon arriving at the lab, confederates also receive several forms, even though they have already been familiarized with the scenario and with their role. Likewise, the confederates received an issue and outcome chart (Appendix G) and a record form on which they recorded the manipulations they perform and the participants' reactions (Appendix H).

After verifying that participants had signed the consent form, I asked each participant to complete the three scales measuring negotiation self-efficacy, cognitive style, and goal orientation (a description of these scales appear in the next section) (Appendices I, J, K), and a pre-negotiation questionnaire (Appendix L) designed to measure the manipulation of information about negotiators' past performance, and to ensure that participants understood the task at hand.

After completing the scales and pre-negotiation questionnaire, participants were randomly paired with a confederate. After pairing the participants with confederates, the negotiations began. Confederates performed the manipulation of opponent's risk taking and opponents call for risk taking as detailed in Appendix H. They also recorded, throughout the negotiation, both their own actions and those of the participants.

At the end of each negotiation, each participant completed a post treatment questionnaire (Appendix M) designed to measure participants' goals and perceptions of their opponent's behaviors, in order to verify the effectiveness of the manipulations carried out by the confederate during the role play. Confederates also filled the post negotiation questionnaire (Appendix M) in order to appear as subjects as well.

After they had completed the questionnaires, each participant was debriefed with the statement: "thank you for completing this exercise. In this study I am interested in examining the affect of some factors on peoples' conflict styles. I would be happy to share our finding with you once I analyze the data I collected." Finally, subjects were paid, in cash, for their participation, according to the settlement they achieved.

3. Independent Variables – Measures and Manipulation

Recall, in this study I measured three independent variables: negotiation self-efficacy, cognitive style, and goal orientation. In addition, I manipulated three independent variables:

information about negotiators' past performance, opponent's call for risk taking, and opponent's risk taking. I will hereby describe the measures for the three measured variables followed by a description of the manipulations of the other variables.

Measured Variables

Negotiation self-efficacy. I measured negotiation self-efficacy using a 10-item scale adapted from Quinones (1995) that has been used several times in more recent studies (e.g. O'Connor & Arnold, 2001; Sullivan, O'Connor, & Burris, 2006). Items from this scale include "I am confident in my ability to establish high rapport with the other negotiator", and "I am confident in my ability to reach an agreement that would maximize both negotiators' interests".

Cognitive Styles. I measured cognitive style using the cognitive style index (CSI) (Allinson & Hayes, 1996). The CSI is a self-report measure that has 38 items formatted as true/false statements and are coded as 0/1. The CSI identifies individuals' cognitive styles as either intuitive or analytic. An intuitive style involves making decisions based on feelings and based on considering a wide range of information simultaneously. An analytic style involves making judgments based on reason, and based on processing specific information in a more organized manner and sequential manner.

Individuals may score between 0 and 76 on the CSI, where higher scores indicate a more intuitive cognitive style and lower scores indicate a more analytical style. Allinson and Hayes (1996) reported test-retest reliability of $r = 0.90$, $p < 0.001$ and internal consistency scores measured by Cronbach's alpha to ranging from 0.84 to 0.92.

Goal Orientation. I assessed the four achievement goal orientations using a slightly modified version of Elliot and McGregor's (2001) Achievement Goals Questionnaire. This measure has 12 items – 3 item's relevant to each goal that were by

in large adopted from pre-existing measures with solid psychometric properties. Participants are asked to rate their agreement with each item on a scale of 1 (strongly disagree) to 5 (strongly agree). The original items relate to peoples' motivations as to an exam in an educational setting. I modified the wording to relate the item to every day negotiations. Items from the modified scale include: "It is important for me to do better than the other party in a negotiation", "my primary concern in a negotiation is to improve my negotiation skills", and "I just want to avoid losing in a negotiation".

Manipulated Variables

Information about negotiators' performance in past negotiations. Recall, the social comparison factor will have 2 levels. Participants learned of others who had previously achieved a very high or very low outcome (level 1) or of others who had previously achieved an average outcome (level 2). I introduced the manipulation of the social comparison factor at the very end of the participant instruction sheet. Participants in the high and low performance condition read the following statement (see Appendix B1): "For your information, we have conducted this role play last year. Students who performed the same role as you will perform in the fall 2007 semester achieved an excellent outcome of $11 or more. On the other hand, students who performed the exact same scenario in the winter 2008 semester have achieved a low outcome of $3 or less."

Participants in the average condition read the following statement (see Appendix B2): "For your information, we have conducted this role play last year. Students who performed the same role as you will in the 2007-2008 academic year achieved an outcome of $6, which is an average outcome."

Opponent's call for risk taking. This factor has 2 levels: call for risk taking or no call for risk taking, and was manipulated by the confederate. In the call for risk taking condition,

confederates were instructed to ask the participants to engage in the risky behaviors (revealing of BATNA, and revealing of payoffs). In the no call for risk taking condition the confederate did not ask participants to engage in those risky behaviors. Confederates were trained and had a script with the exact timing and statements they made, in order to ensure that all the participants in each condition received the same treatment.

Opponent's risk taking. This factor has 2 levels: risk taking and no risk taking, and was also be manipulated by the confederates. In the opponent's risk taking condition, the confederates engaged in the three risky behaviors: reveal BATNA, reveal payoffs, and make high demands, according to the form attached as Appendix H. In the no opponent risk taking condition, confederates did not engage in any of these risky behaviors.

4. Manipulation Checks

The results in any experimental study cannot be interpreted unless the researcher performs a manipulation check, to check whether the manipulations of the independent variables were successful. Therefore, I now turn to discussing the manipulation checks I performed in this study.

Independent variable 1: Information about negotiators' past performance. In order to perform a manipulation check of this variable, subjects answered question number 7 in the pre-negotiation questionnaire (Appendix L) that reads "What total dollar amounts have people achieved in past similar negotiations?"

Independent variable 2: Opponent's risk-taking. The post negotiation questionnaire (Appendix M) included the following items that served as a manipulation check for the opponent's risk taking condition: " how often did your opponent engage in risky behaviors when negotiating with you? (e.g. how often did your opponent make very high demands or

very low offers, reveal the dollar values of his different settlement options, reveal his/her alternatives to negotiating this matter with you?)"

Independent variable 3: Opponent's call for risk taking. The post-negotiation questionnaire included the following items that would serve as a manipulation check for the opponent's call for risk taking factor: "how often did your opponent ask you to engage in risky behavior? (e.g. how often did your opponent ask you to reveal your dollar values for the different settlement options?", "how often did your opponent ask you to tell him your settlement options?)"

5. Dependent Variable

Negotiator Risk Taking. I measured the amount of risk taking behavior exhibited by each participant by tallying the entries made by confederates on the form attached as Appendix H. To clarify, confederates recorded the risky behavior exhibited by the participant, by briefly writing comments such as "x revealed outside option for $y". When processing the data gathered by the confederates, I tallied all these entries as the measure of participants' amount of risk taking.

6. Control Variables

The experimental design of this study provided controls for threats to the external validity of the results relevant to the manipulated variables in this study. However, I have controlled for gender when testing the relationships between the measured variables (self-efficacy, cognitive style, and goal orientation) and risk taking. Participants were very similar in all other relevant demographic issues, such as age and education, because they were all business undergraduate students at the same university.

CHAPTER 4

RESULTS

This chapter presents the statistical analyses for the manipulation checks and hypotheses tests.

1. Manipulation Checks

To check the manipulation of the independent variable ***information about past performance***, I analyzed subjects' responses to the question "What total dollar amounts have people achieved in the past?" that was presented in the pre-negotiation questionnaire (Appendix L). The analysis indicated that this manipulation was effective. Among 62 subjects who were in the "high and low past performance" condition, 58 replied "either $3 or $11"-a correct answer- and 4 replied incorrectly (X^2= 47.03; p<.001). Among 58 subjects in the "moderate past performance" condition, 55 replied "$6 on average"-a correct answer- and 3 replied incorrectly (X^2= 46.62; p<.001).

To check the manipulation of the independent variable ***opponent's risk taking*** I asked subjects to rate on a scale of 1 (not at all) to 7 (very often) the following questions in a post-negotiation questionnaire: "how often did your opponent make very high demands or very low offers, reveal the dollar values of his different settlement options, reveal his/her alternatives to negotiating this matter with you?"; The subjects' responses to this question revealed that this manipulation was effective. Those assigned to the "opponent risk taking" condition reported a mean of 6.34 while those assigned to the "no opponent risk taking" condition, reported a mean of 2.18 ($F_{(1,118)}$=314.199; p< .001).

To check the manipulation of the independent variable ***opponent's call for risk taking*** I asked subjects to rate on a scale of 1 (not at all) to 7 (very often) the following

question in a post-negotiation questionnaire: "how often did your opponent ask you to reveal your dollar values for the different settlement options and or to reveal your outside options?"

The subjects' responses indicated that the manipulation was effective. Subjects in the "opponent call for risk taking" condition indicated a mean of 5.98 call for risk taking instances, while subjects in the "no opponent call for risk taking" condition reported a mean of only 1.56 instances ($F_{(1,118)} = 335.67; p<.001$).

2. Hypotheses Testing

Turning to the hypotheses, the results for these are summarized in two tables. For Hypotheses 1 through 3, which deal with measured variables, correlations are provided in Table 3. For Hypotheses 4 through 7, which deal with manipulated variables, means are provided in Table 4.

Hypothesis 1 predicts that there is a positive relationship between individuals' negotiation self-efficacy and the amount of risk taking behaviors they engage in. To test this hypothesis, I conducted a regression analysis, regressing risk taking on self-efficacy. Contrary to Hypothesis 1, the analysis indicates that self efficacy is a significant predictor of risk taking; however, it-- opposed to the prediction--is negatively correlated with it ($r = -195$; $r^2 = .038$; $p=.017$)(see Table 3). That is, the results indicate that the *lower* one's negotiation self-efficacy, the more likely one is to take risks in a negotiation. I will discuss this counter intuitive finding in the following chapter. The negative relationship between self-efficacy and risk taking remained significant after controlling for gender.

Hypothesis 2 predicts that there is a relationship between individuals' cognitive style and their risk taking behavior, such that individuals who have a more intuitive cognitive style will engage in more risk taking compared to individuals with a more analytic cognitive style.

To test this hypothesis, I conducted a regression analysis, regressing risk taking on cognitive style. As Table 3 indicates, this prediction was not supported ($r = -.073$; $r^2 = .005$; $p = .430$).

Hypothesis 3 predicts that a learning-approach goal orientation is positively related to risk taking. To test this hypothesis, I conducted a regression analysis, regressing risk taking on goal orientation. As Table 3 indicates, this prediction was not supported ($r = .057$; $r^2 = .003$; $p = .524$).

Thus far, I have presented the results for *measured* independent variables. Now, I turn to a presentation of the results for the manipulated independent variables: Information about past performance, opponent risk taking, and opponent call for risk taking.

Hypothesis 4a predicts that negotiators presented with information about previous high *and* low performance of other negotiators in a similar context, will have higher aspirations for their own outcomes in the negotiation than will negotiators who receive information of moderate previous performance. This hypothesis was supported. As Table 5 indicates, the results of the ANOVA demonstrate a significant difference between the two groups of negotiators. Specifically, subjects in the "high and low" condition had mean aspirations of gaining $11.43 and those in the "moderate" condition had significantly lower mean aspirations of gaining $10.04 ($F_{(1,118)} = 7.51$; $p<.01$).

Hypothesis 4b predicts that negotiators presented with information that other negotiators in a similar past negotiation achieved either a high outcome or a low outcome will take risks more often than negotiators who receive information of moderate past outcomes.

Table 3-Correlation among Independent Variables and Dependent Variables

Variables	M	SD	N	1	2	3	4	5	6	7
Independent Variables:										
Self Efficacy	72.80	12.62	120	--						
Cognitive Style	44.10	11.49	120	-.131	--					
Performance Approach Goal Orientation	12.00	2.60	120	.030	.010	--				
Performance Avoid Goal Orientation	10.20	2.65	120	-.224*	-.027	-.216*	--			
Learning Approach Goal Orientation	13.18	1.96	120	.133	-.112	.085	-.032	--		
Learning Avoid Goal Orientation	8.90	2.81	120	-.172	.235**	.076	.128	-.053	--	
Dependent Variables:										
Negotiator Revealing BATNA	1.04	1.36	120	-.083	-.058	.169*	.184*	.107	-.014	--
Negotiator Revealing Payoffs	2.28	3.04	120	-.198*	-.075	.182*	.076	.029	.037	--
Negotiator Risk Taking	3.30	3.82	120	-.195*	-.073	.201*	.131	.057	.029	--

* Correlation is significant at the .05 level
**Correlation is significant at the .01 level

Table 4 – The effect of the independent variables: Opponent's Call for Risk taking, Opponent's Risk Taking, and Information about Previous Performance on the dependent variables: Negotiator Risk Taking, and Negotiator Aspirations (Hypotheses 5 through 8):

Information about *High and Low* Past Performance

Opponent's Risk Taking	Opponent's Call for Risk Taking: Yes	Opponent's Call for Risk Taking: No	
Yes	Negotiator Risk Taking: M=9.74 (Revealing BATNA M=2.94; revealing payoffs=6.76)	Negotiator Risk Taking: M=3.00 (Reveling BATNA M=0.62; revealing payoffs=2.38)	M= 6.35
No	Negotiator Risk Taking: M=2.00 (Revealing BATNA M=0.64; revealing payoffs=1.36)	Negotiator Risk Taking: M=0.33 (Revealing BATNA M=0.40; revealing payoffs=0.06)	M= 1.16
	M=5.85	M=1.66	

Information about *Moderate* Past Performance

Opponent's Risk Taking	Opponent's Call for Risk Taking: Yes	Opponent's Call for Risk Taking: No	
Yes	DV=Negotiator Risk Taking: M=5.38 (Revealing BATNA M=1.53; revealing payoffs=3.85)	Negotiator Risk Taking: M=3.13 (Revealing BATNA M=0.80; revealing payoffs=2.33)	M= 4.26
No	Negotiator Risk Taking: M=1.81 (Revealing BATNA M=0.81; revealing payoffs=1)	Negotiator Risk Taking: M=0.36 (Revealing BATNA M=0.35; revealing payoffs=0)	M= 1.08
	M=3.59	M=1.74	

Table 5: ANOVA results for the relationship between manipulated variables and the dependent variable**: negotiator aspirations**.

Independent Variable	MS	F	P
Call for Risk Taking	14.096	1.56	.214
Risk Taking	3.49	.387	.535
Information about past performance	67.87	7.51	.007
Risk Taking*Call for Risk Taking	79.86	8.84	.004
Risk Taking*Info. about Past Performance	.380	.042	.838
Call for Risk Taking*Info. about Past Performance	27.72	3.07	.083
Call for Risk taking*Risk Taking*Information about Past Performance	34.33	3.81	.054

This hypothesis was supported. As Table 6 demonstrates, the results of an ANOVA indicate a significant difference between the two groups of negotiators (M = 3.96; M = 2.60 respectively; $F_{(1,118)} = 5.83$; p = .017).

Hypotheses 5a and 5b relate to the differences in negotiators' risk taking between negotiators whose opponents take risks and negotiators whose opponents do not take risks. Hypothesis 5a predicts that negotiators reveal their BATNA significantly more frequently when their opponents take risks (i.e. make high demands, reveal information about BATNA, and reveal payoffs) as opposed to when their opponents do not take risks. This hypothesis was supported. As Table 7 indicates, the results of an ANOVA indicated that negotiators in the opponent risk taking condition revealed their BATNA

significantly more frequently than the negotiators in the no opponent risk taking condition (M=1.50, M=0.55 respectively; $F_{(1,118)}$=21.09; p<.001).

Table 6: ANOVA results for the relationship between manipulated variables and the dependent variable: **negotiators' total risk taking**.

Independent Variable	MS	F	P
Call for Risk Taking	271.74	44.93	.000
Risk Taking	520.70	86.10	.000
Information about past performance	35.27	5.83	.017
Risk Taking*Call for Risk Taking	63.41	10.49	.002
Risk Taking*Info. about Past Performance	30.16	4.99	.028
Call for Risk Taking*Info. about Past Performance	40.55	6.70	.011
Call for Risk taking*Risk Taking*Information about Past Performance	33.53	5.54	.020

Hypothesis 5b predicts that negotiators reveal their payoffs significantly more frequently when their opponents take risks as opposed to when their opponents do not take risks. This hypothesis was supported. As Table 8 indicates, the analysis indicated that negotiators in the "opponent risk taking" condition revealed their payoffs significantly more frequently than negotiators in the "no opponent risk taking" condition (M=3.90, M=0.61 respectively; $F_{(1,118)}$=64.00; p<.001).

Table 7: ANOVA results for the relationship between manipulated variables and the dependent variable**: negotiators' revealing BATNA**.

Independent Variable	MS	F	P
Call for Risk Taking	26.23	21.79	.000
Risk Taking	25.39	21.09	.000
Information about past performance	2.26	1.88	.174
Risk Taking*Call for Risk Taking	10.34	8.59	.004
Risk Taking*Info. about Past Performance	3.41	2.84	.095
Call for Risk Taking*Info. about Past Performance	3.47	2.88	.092
Call for Risk taking*Risk Taking*Information about Past Performance	5.97	4.96	.028

Table 8: ANOVA results for the relationship between manipulated variables and the dependent variable: **negotiators' revealing payoffs**.

Independent Variable	MS	F	P
Call for Risk Taking	125.01	25.83	.000
Risk Taking	309.70	64.00	.000
Information about past performance	21.33	4.407	.038
Risk Taking*Call for Risk Taking	24.23	5.02	.027
Risk Taking*Info. about Past Performance	11.98	2.47	.118
Call for Risk Taking*Info. about Past Performance	18.68	3.86	.052
Call for Risk taking*Risk Taking*Information about Past Performance	12.46	2.57	.111

Hypothesis 6a predicts that negotiators will reveal their BATNA more frequently when their opponents call for risk taking (i.e. ask them to reveal information about payoffs and BATNA) as compared to when their opponents do not call for risk taking. This hypothesis was supported. As Table 7 demonstrates, the results of an ANOVA indicate that negotiators in the call for risk taking condition revealed their BATNA more frequently than their counterparts in the no call for risk taking condition (M = 1.55, M = 0.55 respectively; $F_{(1,118)} = 21.79$; $p<.001$).

Hypothesis 6b predicts that negotiators reveal their payoffs significantly more frequently when their opponents call for risk taking (i.e. ask them to reveal information about payoffs and BATNA) as compared to when their opponents do not call for risk taking. This hypothesis was supported. As Table 8 demonstrates, the results of an ANOVA indicate that indeed negotiators in the call for risk taking condition revealed their payoffs more frequently than their counterparts in the no call for risk taking condition (M = 3.33, M=1.23 respectively; $F_{(1,118)} = 25.83$; $p<.001$).

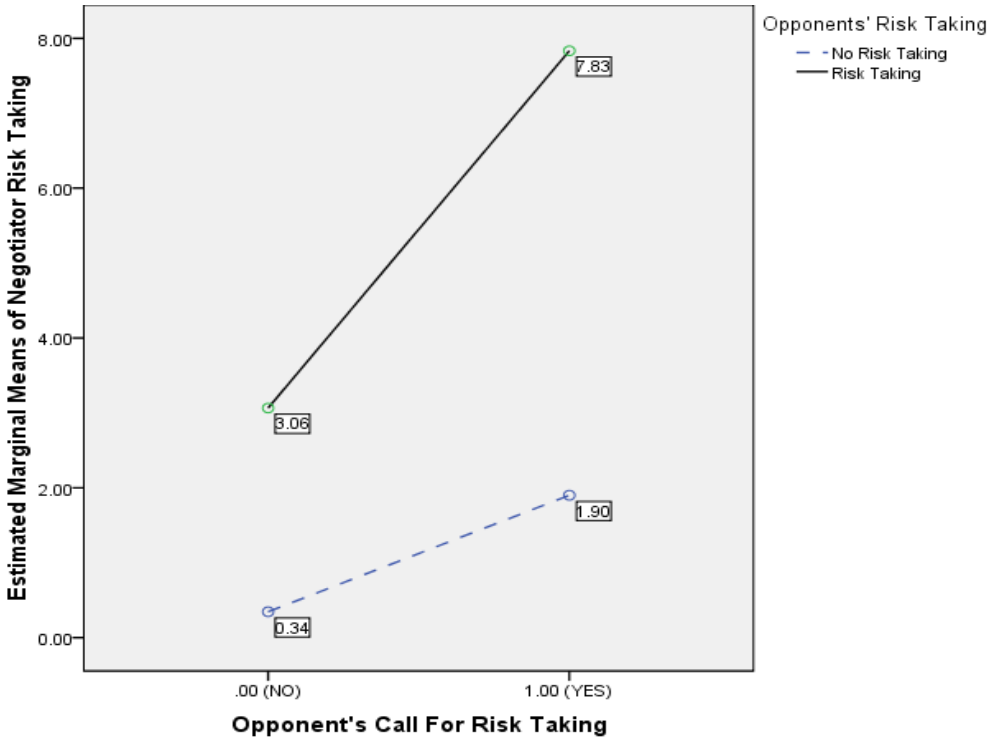
Hypothesis 7 predicts an interaction effect between the independent variables *opponent call for risk taking* and *opponent risk taking*, according to which the relationship between opponent call for risk taking and negotiator risk taking will be stronger when opponents both call for risk taking and engage in risk taking. This hypothesis was supported. As demonstrated in figure 1, the analysis indicated that the interaction term was significant ($F_{(1,116)}=11.04$, $p<.001$) - the increase in negotiator risk taking from no call for risk taking to call for risk taking is higher in the opponent risk taking condition than in the no opponent risk taking condition.

3. Additional Results

To this point, I reported the results directly relevant to my hypotheses. However, during the analyses three additional sets of results emerged that are worth mention. First, after finding that learning-approach goal orientation was not a positive predictor of risk taking, I tested the relationship between the other goal orientations and risk taking.

As predicted originally with regard to the learning goal orientation, I expected that the performance-approach goal orientation would be a predictor of risk taking while performance-avoid would not. To test this, I regressed risk taking on performance-approach, and regressed risk taking on performance-avoid.

Figure 1: Interaction effect between "Risk Taking" and "Call for Risk Taking



Indeed, as Table 3 demonstrates, the performance-approach goal orientation is significantly correlated with risk taking ($r=.201$; $r^2=.040$; $p\leq.014$), while performance-avoid is not ($r=.131$; $p=.154$).

Second, during the experiment, several confederates notified me that, on occasion, subjects had given them incorrect information about their outside options and about their payoffs. Confederates were able to detect these "lies" because I have shared with them the correct information in training them to perform their role. Thus, I decided to investigate the phenomenon of subjects sharing false information.

I found that 33 subjects shared false information with their counterpart during the negotiations, some of them doing so several times during the negotiation. A stepwise regression analysis indicated that among the independent variables included in this study, cognitive style is the only significant predictor of giving false information ($r=.227$; $r^2=.052$; $p\leq.05$). More specifically, the analysis indicates that individuals with a more intuitive cognitive style provide false information more often than individuals with an analytical style do.

Third, examining the results relevant to the manipulated variables: call for risk taking, risk taking, and information about past information, it appeared that the mean of the dependent variable risk taking was significantly higher in the call for risk taking by risk taking by information about high and low information about past performance compared to means in any of the other cells (see Table 4). To explore this phenomenon, I conducted an ANOVA to investigate the possibility of a three way interaction between the independent variables: call for risk taking, risk taking, and information about past performance and the dependent variables: revealing of BATNA, revealing of payoffs, and total risk taking. The results indicated that there was a significant three way interaction among the three independent variables and revealing of BATNA ($F_{(1,116)}=4.96$, $p\leq.05$)(see Table 7), and total risk taking ($F_{(1,116)}=5.54$, $p\leq.05$)(see Table 6).

CHAPTER 5
DISCUSSION

In this chapter, I discuss the results reported in chapter 4, including their contribution to our knowledge base in the field of negation, their implications for negotiators, and their implications for future research. I also discuss the shortcomings of this study.

The purpose of this study was to investigate the determinants of risk taking behaviors in negotiations. So far, research has examined risk taking mainly in the context of decision making, and has revealed that risk plays a central role in that arena. This research has focused mainly on risk propensity, a personality trait that refers to individuals' natural inclination to be either risk averse or risk seeking, as an independent variable affecting risk taking behavior. Research has also applied prospect theory using risk aversion as a dependent variable affected by the way problems are framed (as gains versus as losses). However, currently there is no research on determinants of specific risky behaviors in the context of negotiation. The current study was designed to address this deficiency.

1. Summary of Results and Contributions

This study has several major findings and contributions. I will first discuss findings relevant to the manipulated variables: opponent's risk taking, opponent's call for risk taking, and information about negotiators' past performance. Subsequently, I will discuss the results regarding the measured variables: negotiation self-efficacy, cognitive style, and goal orientation.

1.1 Opponent's Call for Risk Taking and Opponent's Risk Taking

The results of this study indicate that one party's risk taking behaviors are affected by what the opponent does and asks to be done (Hypotheses 5 through 7). I found that risk taking behaviors are reciprocated in negotiations just as other behaviors, such as: concessions, threats, low offers, strategic delays in offers, are.

Specifically, I found that negotiators revealed information about their outside options and about their payoffs more often when their opponents revealed their own outside options or their payoffs. Moreover, negotiators revealed more information about payoffs and outside options when their counterparts asked them to do so. Finally, I found that negotiators engage in substantially more risk taking when their counterparts both asked them to engage in risk taking and engaged in risk taking themselves (an interaction effect).

These findings contribute to our understanding of the norm of reciprocity, which is a social norm that directs individuals to reciprocate others' actions. As a social norm, reciprocity happens rather automatically. People reciprocate their counterpart's behavior almost instinctively, as they thank a stranger who opens the door for them on the way out from a post office building.

Past research indicates that reciprocation occurs across human interactions and applies to positive gestures as well as negative ones. For example, in negotiation, research demonstrates that parties reciprocate concessions made by their counterparts. However, parties also reciprocate threats and low offers that may lead to negative conflict spirals (Brett et al., 1998).

The current findings extend this literature by suggesting that negotiators not only reciprocate but also rely on others to act according the norm of reciprocity. Perhaps

negotiators reveal information when they are asked to do so, because they expect their counterpart to reciprocate that behavior by revealing information as well. Support for this idea comes from the fact that there was less risk taking when opponents called for it but did not reciprocate as opposed to when they actually did reciprocate.

1.2 Information about Negotiators' Past Performance

I found that merely giving people information about other negotiators' performance in similar past negotiations affects negotiators' aspirations and amount of risk taking (Hypotheses 4a, 4b). Specifically, negotiators who were told that negotiators who negotiated a similar issue in the past did either very well or very poorly, had higher aspirations, and engaged in more risk taking than did negotiators who were told that negotiators in the past achieved a moderate outcome in a similar case. This suggests that negotiators, rather than compute an average and aspire to it, focus on top performers and aspire to perform as well as they did.

This finding is consistent with past research that indicates individuals compare themselves to others when they evaluate their own abilities (Festinger, 1954). Typically individuals prefer to compare themselves to individuals who perform well rather than to individuals who do not, because they need to obtain a positive self-evaluation, self-enhancement, and closure (Kruglanski & Mayseless, 1990; Suls, Martin, & Wheeler, 2002).

These past findings all apply to situations where individuals compare themselves to other specific individuals. The current findings add to our knowledge about social comparison theory in that they suggest that information about others in general - without any evidence or details about specific individuals - also triggers the comparison process. The results suggest that negotiators compare themselves to unknown others who

allegedly did very well in similar past negotiations; they develop higher aspirations; and they engage in more risk taking than those who receive information about moderate past performance, in which case the comparison group is less attractive.

1.3 Self-Efficacy

The results indicate that negotiation self-efficacy is a significant predictor of risk taking behaviors in negotiations (Hypothesis 1). However, contrary to the hypothesis, I found that individuals with *low* negotiation self-efficacy tend to engage in more risk taking than do individuals with high negotiation self-efficacy.

The rationale for the initial hypothesis was based on previous research indicating that individuals with high task specific self-efficacy tend to report they would engage in risk taking more than individuals with lower task specific self-efficacy (Zhao, Seibert, & Hills, 2005), and have actually engaged in more risk taking than individuals with low self-efficacy (Krueger & Dickson, 1994; Dulebohn, 2002; and Cho & Lee, 2006).

The results of the current study encourage further thought about this rationale. It is possible that in negotiations, self-efficacy has a different effect on risky behavior compared to other contexts. Perhaps the effect stems from a fundamental difference between making a risky decision independently and making risky moves in a negotiation with another person.

Negotiation is a social interaction between at least two parties. In negotiations, each party seeks to achieve the best possible result for him/herself. This competitive nature may increase people's need to confirm their self-worth. So when people negotiate while feeling they are not very good at negotiating (i.e. when their negotiation self

efficacy is low) they would be inclined to take risks to preserve their self worth and in order to seem competent in the eyes of the other party.

On the other hand, when individuals face a problem that does not involve negotiating with another party, they may have less motivation to prove themselves. Perhaps in such contexts individuals with low task specific self-efficacy would take fewer risks than would individuals with high self-efficacy (as my original rationale indicates).

Alternatively, perhaps individuals with low self-efficacy take more risks because they feel that is the only way they can achieve a positive result. In other words, individuals with low self-efficacy may not perceive the negative prospect as significant because they perceive a low probability of positive outcomes to begin with, due to their perceptions of low self-efficacy. Individuals with high self-efficacy, on the other hand, perceive they can achieve a high outcome using their normal techniques and would not feel they need to take risks.

Even though this issue requires further investigation, the current findings have practical implications. Individuals who have high confidence in their negotiating skills in general or pertaining to a specific negotiation may benefit from being aware that high self efficacy may lead them to "play it safe" in a negotiation, which might not be the ideal situation for them. In other words, sometimes questioning one's prospects of success and taking a risk to achieve a better solution may benefit negotiators.

1.4 Cognitive Style

Contrary to Hypothesis 2, the results indicated that cognitive style is not related to risk taking. However, I did find that cognitive style is a significant predictor of deceit.

Specifically, the data indicate that people with a more intuitive cognitive style mislead their counterpart by presenting incorrect information about their outside options and about the values of their payoffs, more often than did people with an analytical cognitive style.

Although not originally a dependent variable in this study, deceit can be considered a risky behavior. Like a bluffing poker player, a person who lies or "bluffs" in a negotiation runs the risk of being exposed and suffering negative consequences, such as loss of credibility, loss of cooperation from the other party, and retaliation from the other party.

So why is an intuitive cognitive style related to misleading? While further research is needed to answer this question, one possible explanation may lie within cognitive dissonance theory. According to cognitive dissonance theory, individuals who perceive dissonance (e.g. saying something they do not believe is true), are motivated to resolve it somehow. Perceiving dissonance requires awareness. Recall, analytical individuals are more aware of the information they consider when they make decisions than intuitive people are. Thus, perhaps when deciding what information to communicate to another party in a negotiation, intuitive people will not be as likely to perceive a cognitive dissonance compared to analytical individuals. In turn, analytical individuals are more hesitant to communicate incorrect information compared to intuitive individuals.

1.5 Goal Orientation

With regard to goal orientation, I found that the performance-approach goal orientation, which is a general tendency to be proactive and persistent in challenging

tasks due to a will to outperform another person, is a significant predictor of negotiators' risk taking behavior (Hypotheses 3a, 3b). Negotiators who were high on the performance-approach goal orientation engaged in more risk taking than negotiators who were low on this goal orientation. The learning-approach goal orientation, which is a general tendency to be proactive and persistent in challenging tasks due to a desire to learn and develop, was not a predictor of risk taking.

These findings contribute to our understanding of risk taking. If individuals are more likely to take risks when they are primarily motivated to outperform their counterpart as opposed to when they are motivated to learn and develop, then perhaps most people view outperforming others as more important than learning and developing their negotiation skills. However, if negotiators wish to become better at negotiating they may question their preference for outperforming their opponent over honing their negotiating skills, which should result in better performance in the long run.

More probably, these findings may indicate that negotiators have a more short-term view of negotiations, at least in one-time negotiations as simulated in this study. This is because learning or improving skills is a goal that serves the long term-it enables one to become a better negotiator in the future. A performance goal, on the other hand, is more helpful in the short term-it is geared towards outperforming one's opponent in a particular negotiation.

This short-term view of negotiation and, in turn, the amount of risk taking may be different in ongoing relationships or when either the relationship or the topic is very important to the negotiator. To illustrate, perhaps the results would be different in a scenario that involves a relationship between a married couple, which is ongoing and

important to the parties involved. Perhaps in this case, parties who are high on learning goals would take more risks because they would value growth and development more than outperforming their spouse.

1.6 Other Factors that May Affect Risk Taking

In addition to the independent variables chosen for this study, several other factors may affect risk taking. These factors are: time pressures and deadlines, and the personality traits need for achievement and locus of control. Below, I discuss each one of these factors.

Time pressures and deadlines as independent variables. There is considerable research about the role of time pressures in negotiations. Researchers have operationalized time pressures as revealing a deadline and as having some other time pressure (e.g. high cost of a delay in a negotiation). In general, research indicates that there is a negative relationship between having a time pressure and achieving a favorable agreement in a negotiation. In other words, negotiators who are under less time pressure achieve more favorable agreements that those who are not under time pressure (Komorita & Barnes, 1969; Stuhlmacher, Gillespie, & Champagne, 1998). Moreover, negotiators who have time pressures adopt more cooperative bargaining strategies compared to negotiators who do not have time pressures (Stuhlmacher, Gillespie, & Champagne, 1998).

Given these findings it seems worthwhile to examine whether negotiators who perceive a time pressure would also be more willing to take risks in a negotiation.

Need for achievement as an independent variable. Need for achievement refers to an individual's desire to seek challenges, to perform well, and to receive recognition for such performance (McClelland, 1965). Research indicates that those with low need for

achievement deal with failure by choosing very easy tasks, in order to minimize risk of failure, or by chosing very difficult tasks in which failure would not be considered as unusual. Moreover, research indicates that need for achievement is essential for entrepreneurial activity (McClelland, Koescner, & Weinberger, 1989), which is often risky.

The previous research discussed above suggests that there may be a relationship between need for achievement and risk taking in negotiations. Similarly to starting a new venture, the negotiation process is challenging, complex, and involves uncertainty. Thus, individuals with a high need for achievement may engage in more risk taking in negotiations in order to fulfill their motivation to achieve a favorable outcome in such a challenging task. Future research is needed to examine this idea.

Locus of control as an independent variable. Locus of control deals with peoples' beliefs about control over the outcomes of their behaviors (Lefcourt, 1966). The literature distinguishes between individuals with internal locus of control, who believe their behavior controls their outcomes, and individuals with external locus of control, who believe their outcomes are determined by external forces (Lefcourt, 1966). Relatively few studies have examined the role that locus of control plays in negotiation, and there is no research about the relationship between locus of control and risk taking. What research exists does indicate that locus of control affects the level of cooperativeness of negotiators and settlement rates. On average, negotiators who have an internal locus of control are more cooperative and achieve higher settlement rates.

One's locus of control may also affect risk taking behavior because the decision to take a risk may depend on whether one believes taking a risk may influence the outcome. Assuming rationality, it would not be a rational choice to take a risk when one

believes this would not affect the outcome. Stated differently, if one believes that the outcome of a negotiation would be affected by some external factor (e.g. the other party, a third party, etc.) rather than by his behavior, it would not be rational to take a risk. On the other hand, it would be more reasonable that individuals with an internal locus of control would take risks.

2. Limitations

Like all studies, this one is not perfect. As for its limitations, the study employed an experimental design that involved randomly assigning subjects to the different treatment conditions. This design controls for the possible threats for internal validity (Campbell & Stanly, 1963). However, the generalizability of the effects of the treatments on individuals in non-experimental settings may be limited. This is due to the mechanisms employed in the laboratory setting such as using confederates to manipulate experimental conditions, applying an artificial scenario and limiting subjects to the facts in the scenario, and limiting the experiment in duration (30 minute in this study). Moreover, training confederates and asking them to follow a script may limit the generalization of the results to a "natural" setting. However, this procedure was necessary in order to study the relationships among the variables of interest.

A more serious limitation of this particular experiment stems from having undergraduate students as subjects. Negotiation is a fairly complex process and most undergraduate students have very limited experience with negotiations due to limited work or business experience. This may pose an alternative explanation to Hypotheses 6a and 6b that predict a relationship between opponent *call* for risk taking and negotiator risk taking based on the norm of reciprocity.

The possible alternative explanation is that inexperienced negotiators, such as most of the participants in the current study, engage in more risk taking when they are asked to do so simply because the call for risk taking guides the negotiators in an uncertain situation.

Even if this alternative explanation is valid, the results of this study may still generalize to other populations of inexperienced negotiators, such as: students, young professional, and others who have little to no negotiation experience.

Finally, the study may be limited because of the use of self-report to obtain subjects' negotiation self-efficacy, cognitive style, and goal orientation. Such measures are usually prone to social desirability-subjects may sway their responses to fit their perceptions of what is socially desirable. To minimize the influence of social desirability in this study, I assured subjects that their names will be kept confidential and will never be attached to any information they provide.

3. Future Research

In this study, risk taking was treated as a dependent variable. Future research should examine the outcomes of risk taking. One important outcome could be the actual settlement amounts that parties achieve in the negotiation. The research question here is whether negotiators' risk taking affects the amounts actually settled for in the negotiation. Assuming that most individuals want to maximize their outcomes, the benefit of this variable is quite evident.

A second outcome is party satisfaction from the negotiation. Here, the research question is whether risk taking affects negotiators' satisfaction from the negotiation process. While negotiator satisfaction is probably highly correlated to the actual

outcome, it may be affected independently by risk taking. Party satisfaction from the outcome of the negotiation may actually be more important than the actual outcome, especially when parties have an ongoing relationship. In those cases, satisfaction from the negotiation may have a significant impact on the relationship between the parties and on future negotiation between the parties.

A second avenue for future research is the impact of risk taking on negotiations between parties who have an ongoing relationship. In this study, I simulated a one-time interaction between two parties. This is similar to an interaction between a buyer and a seller of a used car, or an interaction between a buyer and a seller of a house. However, many negotiations occur between parties who have an ongoing relationship and perhaps multiple negotiations, either related to each other or completely independent. Past research has demonstrated that a negotiation between parties who have an ongoing relationship (whether in the context of business or in any other context) may affect the relationship and, in turn, may affect future negotiations. For example, research has demonstrated that parties who are satisfied with the outcome of their negotiation will benefit from a more productive business relationship and will adopt a more collaborative negotiation style in future negotiations (Atkin & Rinehart, 2006). Likewise, parties who have ongoing relationships and ongoing negotiations may learn from their past experiences and change their negotiation tactics in an attempt to reach a better outcome (Bereby-Meyer, Moran, & Unger-Aviram, 2004). Therefore, future studies should examine the predictors of risk taking behavior in ongoing relationships.

It would also be productive to address the counter-intuitive finding in which there is a *negative* relationship between negotiation self-efficacy and amount of negotiator

risk taking. Perhaps a starting point for such research is to study the relationship between overconfidence, which is high negotiation self-efficacy, and negotiation behaviors. Past research has found that overconfidence may hinder negotiators' performance. More specifically, negotiators who are overconfident about their positions or chances to achieve a good outcome in a negotiation typically adopt a more aggressive stance when they should not, and in turn, achieve worse outcomes than individuals who are more realistic about their prospects in a given negotiation (Neale & Bazerman, 1985).

Alternatively, perhaps individuals with high negotiation self-efficacy are less likely to engage in risk taking, because they perceive it unnecessary. In other words, if one is confident in achieving a high outcome, why should one take risks? On the other hand, perhaps individuals with low self-efficacy take risks because they do not wish to fail or to appear incompetent. This remains for future investigation.

Another avenue for future research is related to the role of deceit in negotiations. There is a significant amount of research about the role of deception in social interactions in general, and in negotiation in specific. Prior research indicates that negotiations inherently present individuals with many opportunities to engage in deceit because negotiations involve the exchange of information (Schweitzer, Brodt, & Croson, 2002). Some negotiators communicate true information in order to achieve the best overall outcome, while others try to deceive their counterpart in an attempt to maximize their own outcome (Schweitzer, Brodt, & Croson, 2002).

Research also demonstrates that trust is a very important element of negotiations (Schweitzer, Hershey, & Bradlow, 2006). The importance of trust for negotiations stems from the fact that it is an essential part of cooperation. Individuals are more likely to

cooperate with each other in a negotiation when they trust each other as opposed to when they do not trust each other. Prior research also indicates that trust is violated frequently by parties who use deception to maximize their outcomes, and that trust broken by deception may not be fully restored (Lewicki & Bunker, 1996; Schweitzer, Hershey & Bradlow, 2006). Moreover, research indicates that parties who lie in negotiations may experience negative emotions (e.g. distress) and would try to minimize these emotions by using neutralizing cognitive maneuvers, such as: redefining norms, and redefining one's understanding of one's behavior (Aquino & Becker, 2005).

In summary, past research indicates that trust is important for successful negotiations, especially for integrative ones, and that deceit, which can damage trust, is quite common. However, there is not much research about the determinants of deceit and its outcomes. The finding of this study, according to which negotiators with an intuitive cognitive style use more deceit, is merely an initial glance into this issue that requires further investigation.

Finally, future research is needed for examining the relationships among the different possible risk taking behaviors. In this study, I operationalized risk taking as revealing payoffs, revealing BATNA, and making high demands. Conceptually, it seems that revealing payoffs and revealing BATNA are similar while making high demands is a bit different in nature. Perhaps there is a contradiction between revealing information about BATNA and payoffs and making high demands because revealing one's options limits one's ability to make high demands. Future research on this issue would contribute to our understanding of risk taking behaviors.

4. Conclusion

While risk is an integral part of our lives, little is known about the factors that affect risk taking in negotiations. This study addresses this deficiency and in so doing contributes to our knowledge of theory and practice relevant to negotiators' risk taking behaviors in the context of negotiations. It has been demonstrated that risk taking is influenced by negotiator's individual differences such as: self-efficacy, cognitive style, and goal orientation. Also, I found that risk taking is influenced by external factors such as: information given to negotiators about performance of other negotiators in past negotiations, and opponents' behavior. This study also gives direction for future research in this field that would help individuals better understand what influences their risk taking and make better decisions regarding when to take risks in negotiations.

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Appendix A

A List of Risk taking behaviors in negotiation

1. Making very high or very low offers

2. Strategic delays of offers or of concessions

3. Revealing strategic information prematurely (e.g. BATNA, Interests, time constraints, logrolling, etc.)

4. Not sharing information

5. Making premature commitments

6. Avoiding committing to a solution

7. Making ultimatums

8. Making threats (e.g. of going to court, of not negotiating)

9. Making personal attacks on the other party, Blaming the other party

10. Pursuing goals with very low probability

11. Coming to the negotiation unprepared (e.g. not setting any goals or not having a strategy for the negotiation)

12. Employing inflexible/rigid behavior

13. Employing too flexible and accommodating behaviors

14. Using deceit

Appendix B1

Negotiation instructions for student employees

In this exercise you will participate in a negotiation exercise with another student designed to examine peoples' negotiation behaviors. The negotiation scenario involves a student manager at a campus student run entertainment company called "On Campus Entertainment" (OCE). OCE is primarily run by students and it sponsors a wide variety of events throughout the academic year including concerts, comedy shows, dances, and movies. Students involved in OCE have the opportunity for hands-on experience in television production, concert booking, movie scheduling, publicity, and more.

In this scenario you were randomly assigned to assume the role of a student, seeking employment at OCE. Your opponent was randomly assigned to assume the role of a manager in OCE. Your opponent and you will have **30 minutes** to negotiate **three issues. The first issue** is the rate of raises in salary. **The second issue** is task rotation (getting a chance to perform different jobs). **The third issue** is benefits (discounts to events organized by OCE). You must negotiate over all three issues.

Attached to these instructions, please find a table that specifies the possible outcomes on all three different issues. Notice that each possible outcome has a dollar value. If you reach an agreement with your opponent you will receive from us the amount relevant to the option you agreed upon. For example if you agreed with your opponent that raises will be given once a month, that task rotation will occur twice a week, and that you will get access to free events, you will receive from us a total of $13.5.

For your information, we have conducted this role play last year. Students who performed the same role as you will perform in the fall 2006 semester achieved an

excellent outcome of $11 or more. On the other hand, students who performed the exact same scenario in the winter 2007 semester have achieved low outcomes of $3 or less. So people tend to either do very well in this or quite poorly.

Also we would like you to assume that **you have already received a job offer** in a similar organization that will give you the outcomes in bold on your issue chart: a raise each 12 months, task rotations every 5 weeks, and 50% discount on all events. The value of this offer for you is $5.

The negotiation will end upon agreeing on all three topics or when 30 minutes have passed. Upon concluding the negotiation please fill out with your opponent an agreement form that is attached to this form. Your opponent and you may sign one form even though we have given each one of you a blank form. This form will allow you to state the agreement you have reached with the opponent. You are asked to check the box next to the option you both agreed upon. Then please turn the form in to the researcher. Please be sure to see the researcher before you leave to fill out a post negotiation questionnaire and to be debriefed.

Appendix B2

Negotiation instructions for student employees

In this exercise you will participate in a negotiation exercise with another student designed to examine peoples' negotiation behaviors. The negotiation scenario involves a student manager at a campus student run entertainment company called "On Campus Entertainment" (OCE). OCE is primarily run by students and it sponsors a wide variety of events throughout the academic year including concerts, comedy shows, dances, and movies. Students involved in OCE have the opportunity for hands-on experience in television production, concert booking, movie scheduling, publicity, and more.

In this scenario **you were randomly assigned to assume the role of a student, seeking employment at OCE**. **Your opponent was randomly assigned to assume the role of a manager** in OCE. Your opponent and you will have **30 minutes** to negotiate **three issues. The first issue** is the rate of raises in salary. **The second issue** is task rotation (getting a chance to perform different jobs). **The third issue** is benefits (discounts to events organized by OCE). You must negotiate over all three issues.

Attached to these instructions, please find a table that specifies the possible outcomes on all three different issues. Notice that each possible outcome has a dollar value. If you reach an agreement with your opponent you will receive from us the amount relevant to the option you agreed upon. For example if you agreed with your opponent that raises will be given once a month, that task rotation will occur twice a week, and that you will get access to free events, you will receive from us a total of $13.5.

For your information, we have conducted this role-play last year. Students who performed the same role as you will in the 2006-2007 academic year achieved an outcome of $6, which is an average outcome.

Also we would like you to assume that **you have already received a job offer** in a similar organization that will give you the outcomes in bold on your issue chart: a raise each 12 months, task rotations every 5 weeks, and 50% discount on all events. The value of this offer for you is $5.

The negotiation will end upon agreeing on all three topics or when 30 minutes have passed. Upon concluding the negotiation please fill out with your opponent an agreement form that is attached to this form. Your opponent and you may sign one form even though we have given each one of you a blank form. This form will allow you to state the agreement you have reached with the opponent. You are asked to check the box next to the option you both agreed upon. Then please turn the form in to the researcher. Please be sure to see the researcher before you leave to fill out a post negotiation questionnaire and to be debriefed.

Appendix C – **Issue Chart for Employees**

Issue 1: Raises

Option	Value
1 Month	$6
2 Months	$5
4 Months	$4.5
6 Months	$4
8 Months	$3.5
10 Months	$3
12 Months	$2
14 Months ***You were offered**	**$1** **this elsewhere***
60 Months	$0

Issue 2: Task Rotation

Option	Value
Twice a week	$4
Weekly	$3.5
Every 2 weeks	$3
Every 3 weeks	$2.5
Monthly	$2
Every 5 weeks ***You were offered**	**$1.5** **this elsewhere***
Every 6 weeks	$1
Every 7 weeks	$0.5
No task rotation	$0

Issue 3: Benefits

Option	Value
Free events	$3.5
15 free events	$3
10 free events	$2.5
5 free events	$2
50% discount on all events	$1.5
50% discount on 15 events	$1
50% discount on 10 events	$0.75
50% discount on 5 events ***You were offered**	**$0.50** **this elsewhere***
No discount	$0

Appendix D

Agreement Form

AT THE END OF THE NEGOTIATION PLEASE CHECK THE BOXES NEXT TO ANY AGREED UPON OPTION IN EACH TOPIC.

Issue 1: Raises	Issue 2: Task Rotation	Issue 3: Benefits
1 month ☐	Twice a week ☐	Free events ☐
2 months ☐	Weekly ☐	15 free events ☐
4 months ☐	2 weeks ☐	10 free events ☐
6 months ☐	3 weeks ☐	5 free events ☐
8 months ☐	Monthly ☐	50% discount on all events ☐
10 months ☐	5 weeks ☐	50% discount on 15 events ☐
12 months ☐	6 weeks ☐	50% discount on 10 events ☐
14 months ☐	7 weeks ☐	50% discount on 5 events ☐
16 months ☐	No task rotation ☐	No discount ☐

_____ Employee

_____ Employer

Appendix E

Consent to Participate in Research

I (Please print name _____), consent to participate in this research project and by my signature show that I understand the following:

PROJECT PURPOSE: The purpose of this study is to examine peoples' behaviors in negotiation.

VOLUNTARY: The participation is entirely voluntary. If you agree to participate in this role play you should expect it to last approximately 1 hour. You may refuse to answer any question or choose to withdraw from participation at any time without any penalty.

BENEFITS: Your participation will help in understanding peoples' behavior in common negotiation scenarios.

RISKS: This project does not involve any risks greater than those encountered in everyday life.

CONFIDENTIALITY: Your confidentiality will be maintained in that no individual information will be reported. If you have questions regarding your rights as a participant in research, please feel free to contact the University of Missouri-Columbia Campus Institutional Review Board at (573) 882-9585.

EMAIL: In order for us to send the follow up communications to you, please list your email address or phone number.

(Please print)

_____

By signing this form I state that I understand the above.

_____ _____

Signature Date

Thank you in advance for participating in this study. If you have any questions, feel free to contact:

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Appendix F

Risky Behaviors

In case you have little experience with negotiations it may be helpful to know that sometimes negotiators may engage in several risky behaviors. Below are three risky behaviors that are common in negotiation. Under each risky behavior we have included a brief description of that behavior.

Risky behavior: telling the other party about a low BATNA

"In the negotiation you can tell your opponent about the job offer you already have. The risk of doing that is that the other party can take advantage of this information."

Risky behavior: high demands

"You can make high demands or very low offers. The risk of doing that is that the opponent can respond with a high demand or low offer, or take its outside option."

Risky behavior: giving information about payoffs.

"You can tell the other party what your outcome preferences are. The risk in doing this is that the opponent can use this information against you."

Appendix G: **Issue Chart for Confederates**

Issue 1: Raises

Option	Value
1 Month	$0
2 Months ***You were offered**	**$1** **this elsewhere***
4 Months	$2
6 Months	$3
8 Months	$3.5
10 Months	$4
12 Months	$4.5
14 Months	$5
60 Months	$6

Issue 2: Task Rotation

Option	Value
Twice a week	$0
Weekly	$0.5
Every 2 weeks	$1
Every 3 weeks	$1.5
Monthly	$2
Every 5 weeks ***You were offered**	**$2.5** **this elsewhere***
Every 6 weeks	$3
Every 7 weeks	$3.5
No task rotation	$4

Issue 3: Benefits

Option	Value
Free events	$0
15 free events ***You were offered**	**$0.5** **this elsewhere***
10 free events	$0.75
5 free events	$1
50% discount on all events	$1.5
50% discount on 15 events	$2
50% discount on 10 events	$2.5
50% discount on 5 events	$3
No discount	$3.5

Appendix H

Confederate Record Form

Round	Confederate Behavior	Other party behavior
1	**high demand** ☐	
2	**revealing BATNA** ☐ **Call for BATNA** ☐	
3	**giving information about payoffs** ☐ **Call for information about payoffs** ☐	
4	**high demand** ☐	
5	**revealing BATNA** ☐ **Call for BATNA** ☐	
6	**giving information about payoffs** ☐ **Call for information about payoffs** ☐	
7	**high demand** ☐	

8	**revealing BATNA** ☐ **Call for BATNA** ☐	
9	**giving information about payoffs** ☐ **Call for information about payoffs** ☐	
10	**high demand** ☐	
11	**revealing BATNA** ☐ **Call for BATNA** ☐	

Appendix I

In our day-to-day interactions we all find we negotiate with others (e.g. over which TV show to what, where to go eat, over a price of a product, etc.). After reading each item rate how true each statement is about your negotiation ability (0 = not true, 100 = absolutely true) in these kinds of negotiations.

Confidence

(0 - 100)

_____ Negotiating seems to be well within the scope of my abilities

_____ I do not anticipate any major problems when I negotiate with others

_____ I feel that my negotiation skills are equal or better than those of most other people

_____ When I negotiate I am able to establish a high level of rapport with the other party

_____ When I negotiate I am able to find solutions that would appeal to both parties

_____ I am able to exchange offers and concessions with the other party

_____ I am able to look for an agreement that maximizes both parties' interests

_____ I am able to convince the other party to agree with me

_____ I am able to prevent the other party from exploiting my weaknesses

_____ I am able to gain the upper hand against the other party

_____ I am able to persuade the other negotiator to make adequate concessions

Appendix J

Indicate your answer by completely filling in the appropriate oval opposite the statement:

T True	**?** Uncertain	**F** False

		T	**?**	**F**
1.	In my experience, rational thought is the only realistic basis for making decisions.	0	0	0
2.	To solve a problem, I have to study each part of it in detail.	0	0	0
3.	I am most effective when my work involves a clear sequence of tasks to be performed.	0	0	0
4.	I have difficulty working with people who 'dive in at the deep end' without considering the finer aspects of the problem.	0	0	0
5.	I am careful to follow rules and regulations at work.	0	0	0
6.	I avoid taking a course of action if the odds are against its success.	0	0	0
7.	I am inclined to scan through reports rather than read them in detail.	0	0	0
8.	My understanding of a problem tends to come more from thorough analysis than flashes of insight.	0	0	0
9.	I try to keep to a regular routine in my work.	0	0	0
10.	The kind of work I like best is that which requires a logical, step-by-step approach.	0	0	0
11.	I rarely make 'off the top of the head' decisions.	0	0	0
12.	I prefer chaotic action to orderly inaction.	0	0	0
13.	Given enough time, I would consider every situation from all angles.	0	0	0
14.	To be successful in my work, I find that it is important to avoid hurting other people's feelings.	0	0	0
15.	The best way for me to understand a problem is to break it down into its constituent parts.	0	0	0
16.	I find that to adopt a careful, analytical approach to making decisions takes too long.	0	0	0

17.	I make most progress when I take calculated risks.	0	0	0
18.	I find that it is possible to be too organised when performing certain kinds of task.	0	0	0
19.	I always pay attention to detail before I reach a conclusion.	0	0	0
20.	I make many of my decisions on the basis of intuition.	0	0	0
21.	My philosophy is that it is better to be safe than risk being sorry.	0	0	0
22.	When making a decision, I take my time and thoroughly consider all relevant factors.	0	0	0
23.	I get on best with quiet, thoughtful people.	0	0	0
24.	I would rather that my life was unpredictable than that it followed a regular pattern.	0	0	0
25.	Most people regard me as a logical thinker.	0	0	0
26.	To fully understand the facts I need a good theory.	0	0	0
27.	I work best with people who are spontaneous.	0	0	0
28.	I find detailed, methodical work satisfying.	0	0	0
29.	My approach to solving a problem is to focus on one part at a time.	0	0	0
30.	I am constantly on the lookout for new experiences.	0	0	0
31.	In meetings, I have more to say than most.	0	0	0
32.	My 'gut feeling' is just as good a basis for decision making as careful analysis.	0	0	0
33.	I am the kind of person who casts caution to the wind.	0	0	0
34.	I make decisions and get on with things rather than analyse every last detail.	0	0	0
35.	I am always prepared to take a gamble.	0	0	0
36.	Formal plans are more of a hindrance than a help in my work.	0	0	0
37.	I am more at home with ideas rather than facts and figures.	0	0	0
38.	I find that 'too much analysis results in paralysis'.	0	0	0

Appendix K

Please circle the number that shows how much you agree or disagree with each statement. Use the scale provided below to make your ratings.

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1.	It is important for me to do better than the other party in this negotiation	1	2	3	4	5
2.	It is important for me to do well compared to the other party in this negotiation	1	2	3	4	5
3.	My goal in a negotiation is to achieve a better outcome than the other party	1	2	3	4	5
4.	I worry that I may not get better at negotiating with others	1	2	3	4	5
5.	Sometimes I'm afraid that I may not understand the negotiation process as thoroughly as I'd like	1	2	3	4	5
6.	I am often concerned that I may not learn all that I can about the negotiation process	1	2	3	4	5
7.	I want to learn as much as possible from the negotiation Process	1	2	3	4	5
8.	It is important for me to understand as thoroughly as possible how to negotiate a business matter effectively	1	2	3	4	5
9.	I desire to completely master the negotiation process	1	2	3	4	5
10.	I just want to avoid losing in negotiations	1	2	3	4	5
11.	My goal in a negotiation is to avoid being worse of than I was before the negotiation	1	2	3	4	5
12.	My fear of not achieving my goals in a negotiation is what motivates me	1	2	3	4	5

Appendix L

Pre-Negotiation Questionnaire

1. In this negotiation what is your role?

2. How many issues are you about to negotiate with your opponent?

3. What are those issues?

4. How much time do you have to negotiate?

5. What do you do when you end the negotiation?

6. Each issue has several settlement options. Next to each settlement option there is a dollar amount in parentheses. What does that amount mean?

7. What total dollar amounts have people achieved in past similar negotiations?

8. What is your alternative to negotiating with your opponent (your outside option)?

9. What is the total dollar amount you are trying to achieve in this negotiation (all issues combined)?

10. Name several risky behaviors in negotiation.

Appendix M

Post –Negotiation questionnaire

1. In this negotiation my goal was to achieve a score of about: (circle the amount that most applies to you):

a. 0-$3

b. $4-$6

c. $7-$10

d. $11-$13.5

2. In this negotiation I wanted to achieve a very high outcome | Totally Disagree | 1 2 3 4 5 6 7 | Totally agree |

3. In this negotiation I felt that the expectations from me were low in regards to the outcome because others have performed poorly in this role play in the past | Totally Disagree | 1 2 3 4 5 6 7 | Totally agree |

4. In this negotiation I felt that there was an expectation from me to achieve an average outcome because others have achieved average outcomes in this scenario. | Totally Disagree | 1 2 3 4 5 6 7 | Totally agree |

5. How often did your opponent: reveal his/her dollar values for different settlement options, reveal his/her alternatives to negotiating this matter with you, or make a very high demand or a very low offer? | Not at all | 1 2 3 4 5 6 7 | All the time |

6. How often did your opponent ask you to: reveal your dollar values for different settlement options or reveal your alternatives to negotiating this matter? | Not at all | 1 2 3 4 5 6 7 | All the time |

7. How often did your opponent engage in risky behaviors in this negotiation? | Not at all | 1 2 3 4 5 6 7 | All the time |

8. How often did your opponent ask you to engage in risky behavior?

| Not at all | 1 2 3 4 5 6 7 | All the time |

VITA

Tal Zarankin was born and reared in Israel. After completing a three year mandatory military service, Tal enrolled at the College of Management Law School and graduated with his law degree (L.L.B.) in 1995. Upon completing his law degree Tal began practicing law in his father's law firm in Tel Aviv. In 2000 Tal earned a masters degree in commercial law (LL.M) from Bar-Ilan University's school of law. In 2002, he enrolled at the LL.M program on Dispute Resolution at the University of Missouri School of Law from which he graduated in 2003. After fulfilling all degree requirements, Tal is expected to earn his Ph.D. in business administration from the University of Missouri in May 2009.