THE SITUATIONAL ACTIVATION OF PERSONALITY TRAITS AND ITS EFFECT ON ADAPTABILITY: A THEORY FOR NEGOTIATION ADAPTABILITY

By

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To the Faculty of Washington State University:

The members of the committee appointed to examine the dissertation of EMAN LOTFY ELSHENAWY find it satisfactory and recommend that it be accepted.

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This dissertation is to crown long years of hard-work and dedication for inspiration of new knowledge inspired by a great person who likes to be invisible. You have proved you are worthy of success and able to rise over the hardest. It is time to recognize your effort. Thank you.

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Abstract

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This study applies the-trait-activation theory to the field of national and international dual-business negotiations. The theory provides that each type of situations holds distinguished situational factors; each activates specific personality trait to shape the person's behavior-pattern within a given situation. Negotiations of all types hold two common situational factors: the negotiation type (zero-sum or variable-sum), and the counterpart's style (competitive or cooperative). Researchers recommend that negotiators should adapt their styles to match these situational factors to achieve the highest possible outcome across situations. High adaptability requires careful planning of an attainable negotiation goal for each negotiation type, accurate estimate of the counterpart's style. Then the negotiator should apply the appropriate competitive or cooperative style. It is evident that not all negotiators can be adaptable, which reflects the role of personality traits in shaping adaptability. It is not known which traits are triggered by the common situational factors in a manner that enables negotiators to be adaptable.

I argue that the two major situational factors activate two traits: dispositional goal-orientation, and reciprocity orientation. The rational for these traits is explained in the adaptability theory.

I followed the proposed plan for the empirical part and delivered most of the expected results. Most hypotheses are significant, which supports of the adaptability theory. The main effects of mastery and reciprocity orientation are significant. The moderating effects for these two traits were significant. Mastery oriented negotiators adapt better in variable-sum situations. Reciprocity oriented negotiators adapt better in front of cooperative counterparts. I developed an instrument for negotiation adaptability.

For such an exploratory study with many limitations, the results are a break through start on the road of investigating effects of personality traits on negotiation adaptability. It paved the road for a rich future research agenda to build a more comprehensive theory of negotiation adaptability and a complete personality profile of the adaptable negotiator.

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DEDICATION

All my work and life is dedicated to those who made my life better providing their continuous support, especially my family members.

I humbly dedicate this dissertation to the souls of my father, my older brother, and sister. They were the light of my days and the inspiration of my life.

I also dedicate my work to my mother and my younger brother whose help and words inspired me to go through the darkest days with a gleaming illuminating spirit, forgiving heart and continuous hope for the best; that is always “yet to come” with every shred of daylights that I’m in…

“alive.”

Eman

CHAPTER ONE
INTRODUCTION

Imagine yourself as a CEO of a global Fortune-500 firm. You consider a certain executive a skillful negotiator. This executive closed a difficult deal by crushing the international supplier's negotiator. The supplier was not happy and decided to stop dealing with your firm for your negotiators' harsh style. The news spreads fast in the well-connected global business environment and your firm earns a bad reputation. Later, the same executive fails to renew a multi-million dollar contract with a significant international client. Would not you wish that you were able to know if your executives can fit into each negotiation situation effectively before hand? To be able to identify negotiators who can adapt their behavior to all negotiation situations. Those negotiators can make the difference between maintaining or losing valuable organizational resources and capabilities (Susskind, 2004). However, negotiation research does not provide a psychometric valid tool to evaluate negotiator's styles before hand or a theory to build this tool.

Adaptability is the way to reach effectiveness. International business-negotiation researchers advocate that negotiators reach effectiveness at every negotiation when they compete and cooperate appropriately (Chen & Li, 2005) to maximize individual outcome when distributing resources, and maximize mutual outcome when sharing resources (Thompson, 2004). Consistent high performance across situations is the most accepted perspective of effectiveness in the managerial and organizational behavioral literatures (DeShon & Gillespie, 2005). This effectiveness requires the ability to switch between the two major negotiation styles to fit into the situation, i.e. "negotiation adaptability."

Not all negotiators are able to adapt (Raiffa, Richardson, & Metcalfe, 2002). Negotiators of all cultures are competitive or cooperative within a negotiation situation (Pruitt, 1991). Some

cannot switch styles across situations even when they discover its mismatch to the situational factors (e. g. Diekmann, Tenbrunsel, & Galinsky, 2003; Pruitt & Syna, 1985). Even after receiving intensive negotiation training they still fail in negotiations (Susskind, 2004). However, few negotiators can switch styles appropriately (Tinsley, O'Connor, & Sullivan, 2002). This variation in the ability to switch highlights that negotiators respond differently to the situational factors across negotiations.

The "trait-activation theory" popular in psychology, indicates that human behavior within and across situation is shaped by an interaction between certain situational factors and relevant personality traits (Lievens, Chasteen, Day, & Christiansen, 2006). Each situation holds unique factors that each triggers a relevant trait to shape a person's behavior within a situation (Funder, 2001). This process represents the interaction between the situational factors and the relevant personality traits; this interaction shapes the adaptive behavior of a person across situations that share the same common situational factors (Mischel, 2004). This means that the potential adaptive-behavior of a person who holds certain levels of the relevant traits could be predicted accurately across situations that share common factors (Mischel & Shoda, 1995; Shoda & LeeTiernan, 2002). This should be true for international and national dual-business negotiation.

Business negotiations are uncertain economic interactions (Ghosh, 1994) that involve allocation of resources and require joint-decision making under different levels of uncertainty, time pressure, and lack of information (Bottom, 1998; Church & Zhang, 1999). In such uncertain resources-allocation situations, humans tend to hold to resources, have biased judgments, and make poor decisions to favor certain rather than uncertain outcomes (Langholtz, Gettys, & Foote, 1993; Sawyer, 1990). These situations require decisional and behavioral (Sawyer, 1990) adaptation to the resource allocation situation; this adaptability is shaped by the interaction

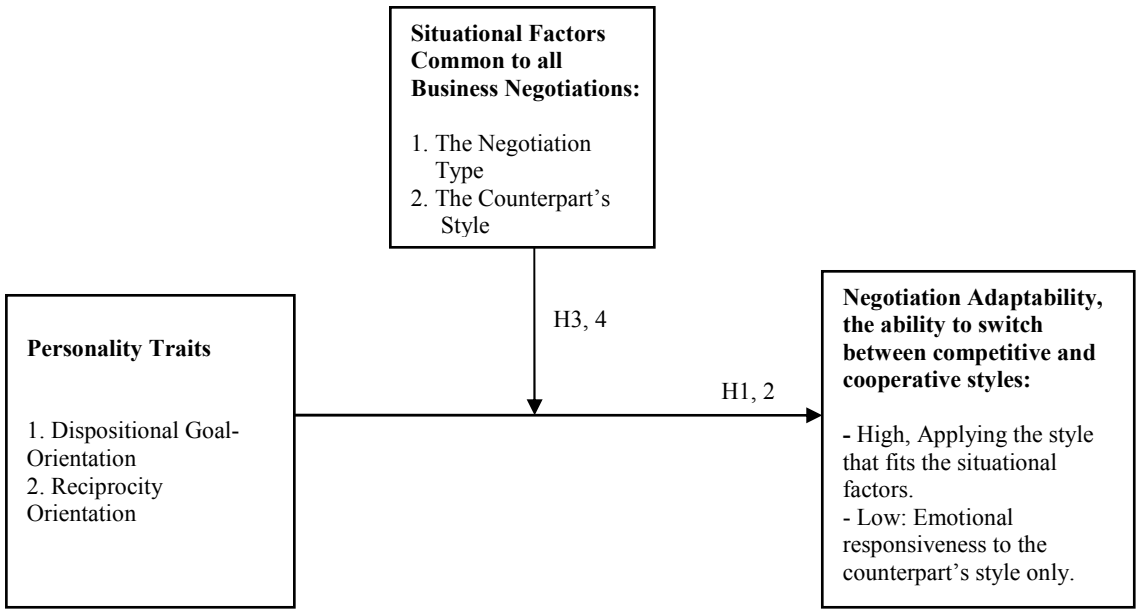
between the common situational factors and the relevant personality traits (Payne, Bettman, & Johnson, 1993).

Albeit being recognized and highlighted in previous negotiation research, the interaction between the situational factors and traits of negotiators, and its effect on adaptability within and across negotiation situations has not been fully investigated yet (Bazerman, Curhan, Moore, & Valley, 2000; De Dreu & Carnevale, 2005). I suggest applying the trait-activation theory to the field of negotiation to build a comprehensive theory of negotiation adaptability. I propose testing this premise: some traits have main effect on adaptability; that is moderated by the major situational factors common to every negotiation as indicated from figure (1). My aim is to examine how the interaction between the common situational factors and the relevant traits shapes adaptability through answering this research question: *How will personality traits be triggered by the major situational factors to produce adaptability across negotiation situations?*

My study provides a needed theory for international and national negotiation. *Negotiation theories have one implicit, but not integrated, view of adaptability* as the appropriate fit to the situation that leads to maximizing outcome, but they differ on the ways to accomplish this fit (Bazerman et al., 2000; Zartman, 1978). Theories of international and national negotiations are divided into three major schools: economic, psychological, and process (Zartman, 1978). *The economic school* and its theories assume complete rationality of negotiators who, with a simple utility function, can make rational decisions and reach optimal outcomes of every situation without falling for the decision-making biases (Zartman, 1978). Adding bounded rationality to the perspective later, the school theories advocate that negotiators fall for cognitive biases (Thompson, Nadler, & Kim, 1999). Repeated results show that some negotiators cannot avoid

falling in such biases even when realizing that they are not behaving appropriately (e.g. Diekmann et al., 2003), or after receiving negotiation training (Thompson, Gentner, & Lowenstein, 2000).

Figure 1
The Theory of Negotiation Adaptability
The interaction between traits and situational factors that shapes adaptability



The *psychological school* assumes that business negotiation is a psychological interaction between the two negotiators that is largely determined by their personality's traits and variables (Spector, 1977). This school did not reach consistent results across four decades of research, and could not link negotiators' behavior to personality variables in a meaningful manner at the small-trait or the big-five levels of analysis (Bazerman et al., 2000). It deemphasized the situational factors effect on negotiators' adaptability (Zartman, 1978). *The process school* focuses on analyzing behaviors and moves that take place during process of negotiating among parties; the

quality of this interaction determines outcome of negotiation (Valley, Neale, & Mannix, 1995). The school overemphasizes the situational interactions between parties but highlights the effect of the counterpart's style on behavior and outcome of the negotiator.

Taken together, negotiation theories reflect three major bases for negotiators' behavior: cognitive from the economic school, psychological from the psychology school, and situational from the process school. Collectively, negotiation theories explicitly signify that personality traits are the underlying psychological functions (De Dreu et al., 2005), who's interaction to the situational factors shapes the negotiators' style (Druckman, 2003; Zartman, 1978). However, negotiation empirical research oversimplified the interaction and focused on testing one variable at a time instead of investigating the interaction between multiple situational factors and traits (Bazerman et al., 2000; Zartman, 1978). Negotiations are so complex and affected by packages of variables that represent the nature of the situation and negotiators across situations (Druckman, 2003; Zartman, 1978).

For these reasons, no meaningful results were concluded from many studies that investigated the interaction between some factors and either the big-five (Barry & Friedman, 1998), or national cultures (Chen et al., 2005) with the underlying assumption that either personality or culture shape negotiators' behavior. Barry and Friedman (1998) investigate the effect of the big-three traits, combined from the big-five personality model, and cognitive abilities on negotiators' behavior and outcome. Results were unexpected. Conscientiousness and high cognitive abilities did not have association with high individual outcome. Extrovert and agreeable negotiators were more liable to anchoring effects and both did not do well in maximizing individual outcome, because they both care for reserving social relationships (Barry et al., 1998). Contrary to what the authors hypothesized, consciousness, extroversion, and

agreeableness did not have any effect on joint outcome. Cognitive ability was more predictive of high joint outcomes (Barry et al., 1998). Interestingly, dyads who were both high on cognitive ability were more able to achieve high joint outcomes than dyads who were both low, or those who had only one party who scored high in cognitive ability. This indicates that negotiators' cognitive appraisal of the situational factors, which is shaped by the small traits, is more predictive of negotiators' behavior and outcome than the big-five. An argument the trait-activation theory supports (Royce, 1983).

National cultures were not more predictive of negotiator's styles. Stereotyping collectivistic negotiators as being "cooperative" and individualistic negotiators as being "competitive" is not always true (Adler, 1989). American negotiators (individualistic) were cooperative while negotiators from Hong Kong (collectivistic) were competitive when negotiating with each other (Tinsley & Pillutla, 1998). More results indicate that Chinese negotiators (collectivistic) were more competitive than Australians (individualistic) dealing with outsiders, but more cooperative inside their groups (Chen et al., 2005). This indicates that small personality traits explain the variance in behavior of international negotiators more than the broad cultural differences (e.g. Chen et al., 2005; Graham, Mintu, & Rodgers, 1994; Nelson & Shavitt, 2002; Valenzuela, Srivastava, & Lee, 2005), which largely dismisses the systematic-generalizations about the effect of national cultures on negotiators' behavior.

Researchers suggest investigating the small traits (e.g. Graham et al., 1994; Valenzuela et al., 2005), to arrive at the set of relevant traits that interacts with the situational factors to shape the correct adaptation within and across situations of national and international negotiations (Kenrick & Funder, 1991; Royce, 1983). To date, the empirical research has not provided studies that investigated how this interaction shapes negotiators' adaptability within and across

situations, or provided a clear indication to what the situational factors and traits interact together during the negotiation process to shape negotiator's adaptability (Bazerman et al., 2000; De Dreu et al., 2005). This was for choosing personality traits that are irrelevant to the common situational factors (Druckman, 1993, 2003).

Relevance of traits is the main factor in concluding meaningful research results. When researchers investigated the small traits that are not relevant to the common situational factors of negotiation, they did not find meaningful results. For instance, no meaningful conclusion resulted from investigating how style was affected by authoritarianism (Herman & Kogan, 1977) because it was not relevant to negotiation situations. When researchers test relevant traits in specific situations, they could conclude meaningful results. For instance, locus of control partially shapes salesmen negotiation style and effectiveness within sales situations (Pullins, 1996). Trait-affect, when positive, makes negotiators more cooperative (Anderson & Thompson, 2004) and unrealistically optimistic (Kramer, Newton, & Pommerenke, 1993). Egocentric bias makes negotiators behave in a self-serving, overly competitive manner (Leung, Tong, & Ho, 2004).

However, previous studies focused on within rather than across situation effect of traits on negotiator's style. Their collective results are not enough to determine whether a certain negotiator is able to be cooperative or competitive in an adaptable fashion across negotiation situations. Moreover, previous studies either ignored or underestimated the effect of the interaction to many significant situational factors and tested one trait at a time (Druckman, 1993, 2003). Applying the trait activation theory to test this interaction overcomes this error through determining the common situational factors to negotiations and the relevant traits that each factor triggers.

Negotiation researchers tried to attract attention to test the variables that shape the interaction through offering theoretical frameworks. For instance, Neale and Northcraft (1991b) provide a sophisticated theoretical framework that portraits the interaction between many situational and personal factors. The framework, based on the game theory and the agency theory, assumes that negotiators always represent third parties who do not participate directly in the negotiation process. However, it was never tested empirically. It incorporates factors not common to all negotiations such as time pressure.

To the limit of my knowledge, the variables that I'll test in my study were not investigated before in the combination suggested in the theory. The negotiation adaptability theory, the study provides, investigates the hypothesized interaction in a prescriptive-descriptive manner. Negotiation research is descriptive in that it discovers negotiators' styles after negotiation lab simulations within situations and through general observations of negotiation experts and researchers (Thompson, 2004). Raiffa (1982) suggests that negotiation research should follow a prescriptive-descriptive approach to reach generalizable conclusions. My study results will open the road for many future investigations in the same prescriptive-descriptive approach, and participate in the incremental development of the negotiation paradigm significantly.

My study will eventually validate a psychometric instrument to measure adaptability within and across negotiation situations. This instrument is highly needed for the research and practice of national and international negotiation since it will provide an essential tool to estimate negotiators' ability to adapt beforehand at the inter-rather than intra-firm level. Interfirm negotiations are business negotiations that take place between firms to make business deals and partnership agreements in international and national settings (Appelman, Rouwette, & Qureshi,

2002). Intrafirm negotiations are the negotiations that take place among organizational actors/departments to make organizational decisions or to solve conflict (Morris, Larrick, & Su, 1999). Negotiation research provides three scales that do not measure adaptability or negotiation styles within and across interfirm-negotiation situations. It is necessary to provide a brief review of these three scales.

One of the common misperception in research is to use Rahim's (1986; 1995) conflict handling styles to measure negotiators' style, whereas it was designed to identify styles of handling interpersonal conflict among co-workers inside organizations. Interpersonal conflict may include avoiding contacts all together, whereas negotiation happens through communicative interaction (Rollof, Putnam, & Anatasious, 2003; Thompson, 1990b). Parties that are in conflict may not be interdependent, while in business negotiation parties must reach a mutual consent to reach a final decision or agreement (Rollof et al., 2003). Business negotiation is a goal-oriented interaction (Carnevale & De Dreu, 2006), whereas conflict handling is emotional and may hold no goals. Webster's New World Dictionary explains the meaning of "to negotiate" as "to conduct business." It is rooted back to the Latin term "Negotiari" and its definition is *"to confer, bargain, or discuss with a view to reaching agreement"* (Guralnik, 1980). The same dictionary identifies conflict as an "*emotional disturbance resulting from a clash of opposing impulses or from an inability to reconcile impulses with realistic or moral considerations;"* it *"emphasizes the process rather than the end*" (p. 298).

A popular scale to the sales' field is **Adaptive Selling** (Spiro & Weitz, 1990). It is based on the assumption that the personal selling presentation should be adapted to the customer needs as it *"consists of collecting information about a prospective customer, developing a sales strategy based on this information, transmitting messages to implement the strategy, evaluating*

the impact of these messages, and making adjustments based on this evaluation" (Spiro et al., 1990, p: 61). It measures the sales people's ability to adjust the marketing communication to fulfill the customer's needs and end the sales process successfully by closing a deal with the costumer (Spiro et al., 1990). The scale validity was assessed through testing its association to some personality traits that had high association with interpersonal flexibility such as empathy (Spiro et al., 1990).

The scale is designed for sales negotiations that focus on influencing and adapting to the customer needs rather than the situational factors. Some studies emphasized that the scale lacks psychometric validity and it is not unidimensional; others indicated that it overlaps with other scales such as task-specific performance that explained the variation in salesperson's performance more than adaptive selling (Comer, 1996). Moreover, inter-firm business negotiations include buying and selling situations with many outsiders and are not limited to the managerial level of salespeople.

Rubin and Brown (1975) developed the "Interpersonal Orientation (IO)" scale to measure how negotiators react to the behavior of their counterparts (p: 158). They suggest that negotiators with high IO relate changes in behavior to personality of counterparts rather than situational factors, and react in sensitive retaliatory manner. Negotiators low on IO, do not care about the counterparts' personality and concentrate on achieving the desired goals (Rubin et al., 1975). The scale is based on concern for self versus concern for others, which is more applicable to interpersonal interactions but not negotiation. Neither this scale nor the interpersonal orientation instrument developed later in Swap and Rubin (1983) was valuable for the empirical research of negotiation; both did not capturing the variables of interest (Greenhalgh & Gilkey, 1997).

Research on IO did not stand for long as it focuses on limited variables (Lewicki, Saunders, & Barry, 2006).

The three scales did not focus on the broad inter-firm business-negotiation at the national and international settings. They did not explain how or why individuals react to resource allocation involved in business negotiations; my study avoids that. The final instrument, my study will provide is not limited to certain situations of business negotiations as it includes fundamental factors that are common to all national and international negotiation situations. Moreover, they did not count for social desirability, which I am going to avoid in my study.

My study will contribute to the practice of negotiation substantially. In practice, unless managers go through international negotiations and gain a reputation as competitive or cooperative negotiators, there is no handy tool to validate their negotiation styles and adaptability. Such tool, when available, will save organizations the painful cost of negotiation failure. Adaptable negotiators can make the difference between keeping or losing multi-million-dollar deals with important clients, suppliers, and distributors; which contributes to maintaining and developing the organizational capabilities (Ertel, 1999).

My study will provide a needed instrument for negotiation education and training. It will eventually participate in saving the cost and time managers spend in negotiation training programs that do not fit their training needs. Firms lose high cost and managers lose their times in appropriate training program. For instance, a Fortune 500 firm invested $350,000 to train 150 senior managers in negotiation in a reputable program, but after the training these managers failed to renew a contract with a major client causing major financial losses (Susskind, 2004).

To avoid this loss, practitioners have called for a valid measure of personality traits that could help in designing training and education programs around the personal needs of negotiation training of each trainee. This was reflected in many e-mail discussions on academic lists in which I am a member. Researchers also recommend using psychometric instruments to evaluate trainees' need before the negotiation training and design training and education programs around these needs (e.g. Fortgang, 2000; Mastenbroek, 1991). Using the resulted instrument will save effort of negotiation trainers and trainees and redirect them to training programs that best fit the trainee's needs of the appropriate negotiation training.

CHAPTER TWO
LITERATURE REVIEW AND THEORY DEVELOPMENT

Negotiation adaptability is not new to the negotiation literature. Negotiation adaptability can be identified from the many descriptions of the adaptable negotiator provided by negotiation experts and researchers in the practical books of negotiation. They used different terms to refer to many aspects of negotiation adaptability such as the negotiator's sophistication (Raiffa et al., 2002), skillfulness (Thompson, 2004), and strategic thinking/behaving (Lewicki, Hiam, & Olander, 1996). These terms do not represent a clear identification of what the adaptable negotiator can do rather than should do. For instance, Raiffa, Richardson, and Metcalfe (2002) describe what an adaptable negotiator should do, using the term sophisticated, in the following statement:

> "…can switch between the different perspectives to probe the complexities of the different negotiations from different angles and with different purposes in mind…can move back and forth between individual, interactive, and joint decision-making perspective, synthesizing insights along the way to arrive at well-informed decisions. Experimental evidence shows that, when it is left to our own advices, we are not much good at negotiating optimal deals. Analytical perspective can help. But to achieve the best solution that you can, you will need to strike a balance between your analytical endeavors and your cognitive abilities" (p: 85).

The authors focus on the decision-making part of adaptability and leave it up to the negotiator's cognition to distinguish what is a good adaptation to the numerous contextual factors in the actual process. Thompson (2004) argues that there is no handy guide of appropriate behavior that researchers could provide to negotiators to reach effectiveness at every negotiation situation. In general the literature provides a description and an advice of what an adaptable negotiator should do and highlights two parts of negotiation adaptability, decisional and behavioral.

The *decisional part* refers to the utility maximization actions that lead to optimal goal planning before the negotiation process, which in turn leads to maximizing outcomes after the negotiation process; this is emphasized by the economic school advocacy for the effect of negotiator's cognition (Neale & Bazerman, 1992; Vairam & William, 1995). The *behavioral part* refers to the negotiator's ability to behave in a manner that leads to achieving the planned goal of every negotiation effectively, as advocated by the behavioral-decision and psychological school theories (Weingart, Hyder, & Prietula, 1996). This behavior should be wisely maneuvered and accommodated around the counterpart's moves and actions without falling for any reciprocal unplanned moves that lead to fatal behavioral biases and errors, as advocated by the process theory (Valley et al., 1995). Negotiators' behavior during the negotiation process is the vehicle for maximizing outcome within and across situations (Lewicki et al., 2006; Olekalns, Smith, & Walsh, 1996). This is reflected in the experts' description and prescription of the hypothetical behavior of adaptable negotiators.

How the adaptable negotiators should adjust their decision-making and behavior to the situational factors, is described in the theoretical literature of negotiation. This negotiator should be able to understand the negotiation type and plans goals around this type (Raiffa et al., 2002) deal with complex problems and solve them correctly, perceive the counterpart accurately, (Hopmann & Wallcott, 1977), and behave in the required manner, competitive or cooperative to arrive at the highest outcome (Brett, Shapiro, & Lytle, 1998; Morris, Larrick, & Su, 1999), with the minimum loses on the short and long term (Thompson, 2004). The adaptable should judge the situational factors and understands his/her counterpart's style and then decides which style

would be productive and employ the right amount of cooperation or competition necessary for each negotiation (Williams, 1993).

The concept of adaptability is rooted in Lewin's (1935) person-environment fit that was developed to the person-situation interaction theory (Mischel et al., 1995) and later to the trait-activation theory (Lievens et al., 2006). Adaptation in general is the meaningful fitting to specific factors in a specific situation such as the survival of the fit in natural environments, should lead to good consequences (Anderson, 1990). But the complexity and uncertainty inherited in negotiation situations makes investigating and operationalizing adaptability difficult (Carroll, Bazerman, & Maury, 1988). For this negotiation researchers did not investigate the situational effects on negotiators' behavior.

Business negotiations include numerous factors such as deadlines, time frames, the nature of the negotiated issues, the relative power of parties, pressures from constituencies, and the counterpart's style (Pullins, 1996). This complexity increases for international business negotiations that incorporate higher layers of variables such as the different legal systems and business environments of, at the least, two countries that represent the national culture of the two negotiators (Dupont, 1991). This level of complexity reflects numerous interactions that were impossible to investigate accurately in negotiation studies. However, with a careful analysis of the situational factors and elements of each negotiation, the interaction can be simplified and analyzed.

Negotiation analysis: all negotiations consist of three major layers of variables: personal, situational, and environmental (Morris et al., 1999; Rubin, 1991). At the heart of these are the personal variables, whose interaction to the situational variables can predict negotiators' adaptability across situation (Dupont, 1991; Funder, 2006). I'm not going to analyze the

environmental variables because the personal factors were more predictive, than cultural differences of negotiators' behavior as I explained in the introduction (e.g. Graham et al., 1994; Nelson et al., 2002; Valenzuela et al., 2005). How this could be possible? The trait activation theory provides the answer.

The Trait Activation Theory

Certain situational factors provoke only related personality traits to produce certain behaviors across situations (Lievens et al., 2006). Each situation has a distinguished group of factors, each factor activates a relevant trait which level determines behavior across similar situations (Lievens et al., 2006; Tett & Guterman, 2000). The relevant trait determines the person's "cognitive appraisal" of the situational factor (Beshop, 1998), as a threat to avoid or a challenge to pursue, and therefore shapes the person's behavior (Almagor, 1983). For instance, individuals high on aggression were calm in religious services and family picnics because these situations hold rare or no cues to trigger aggressive behavior (Kenrick et al., 1991). The same participants were anxious in threatening situations that held aggression cues (Kenrick et al., 1991).

The theory highlights the interactionist approach of psychology, which major assumption is that a person's behavior across situations of the same type is a pattern of the interaction between some common situational factors and relevant traits (Funder, 2001; Mischel, 2004; Mischel et al., 1995). The approach is based on Lewin's (1935) classical formula "behavior = person x environment." This formula was developed later into the premise that: knowing any two elements of this equation "Behavior" = "Traits" x "Situational Factors," can predict the third as evident from personality research (Funder, 2001, 2006). Such that when some common situational factors are identified, and the way they activate specific traits are known then a stable

pattern of "*if... then"* interaction can be identified; once this pattern is established, the adaptive behavior of a person who holds the activated traits can be predicted through situations that hold the same situational factors (Funder, 2001; Mischel, 2004; Mischel et al., 1995; Royce, 1983). To conclude, each situation has a distinctive profile and each person has a unique way to behave in such a situation and across situations that hold that same profile (Royce, 1983).

For this, a trait is identified as differential respond tendency to a certain situational factor (Tett et al., 2000). The trait has to be relevant to the situational factor, which must be strong enough to trigger the trait (Tett et al., 2000). For instance, individuals high on speech anxiety get more anxious in situations that trigger this anxiety such as public speeches, compared to individuals who are low on this trait (Kenrick et al., 1991).

Fitting to a certain situation happens when a person has the relevant levels of the related traits (Royce, 1983). This relevance ranges from a complete matching or mismatching between the level of traits and certain situational factors (Royce, 1983). In the sense that strong situational factors' effect on behavior overrides the traits effects while weak factors permit traits to affect behavior more across situations (Brandstatter & Konigstein, 2001; Kenrick et al., 1991; Pullins, 1996; Pullins, Haugtvedt, Dickson, Fine, & Lewicki, 2000; Terry & Hynes, 1998). The interaction is between a situational factor that is strong enough to trigger a related trait, and the triggered trait which level determines the resulted behavior (Mischel, 2004). To sum, human behavior in a given situation is a result of the interaction between strength level of the situational factors and strength level of traits a person possesses. By the same sense, the common situational factors of business negotiations can trigger some relevant traits that produce certain behaviors across negotiation situations.

Predicting adaptability to the negotiation context requires identifying the common situational factors that trigger related traits; those traits are the mechanism that determines the negotiators' appraisal of the situational factors and thus style during the negotiation process. Each of the common situational factors and related traits needs identification. I'm going to explain each in the following sections through which I'll provide a deeper analysis of adaptability to explain how I'll develop the theory of negotiation adaptability.

The Common Situational Factors to all Negotiations are reflected in the following definition. Interfirm dual-business-negotiation is a joint behavioral decision-making process in which two persons communicate, to allocate rare resource/s and produce joint payoffs to reach a mutually accepted agreement that organizes resource/s, distribution, sharing and/or future collaboration between parties (Lewicki et al., 2006; Neale & Bazerman, 1991a; Raiffa et al., 2002; Rollof et al., 2003; Thompson, 2004; Thompson & Hastie, 1990). This widely accepted definition of national and international negotiation reflects that business negotiation is a goal-oriented human interaction (Carnevale et al., 2006) to allocate resources to the parties involved in negotiation (Neale et al., 1991a). This definition incorporates three common factors: the negotiation type, the counterpart's style, and the comparative power of the counterpart, that shapes the possible future cooperation between the parties represented in the negotiation[1].

Empirical research of negotiation supports this conclusion. The possible outcome of a negotiation depends on the interaction between the negotiator's style and two major situational factors: the available resources and the counterpart's style (e.g. Mannix, Tinsley, & Bazerman,

[1] In this study, I focus on the first two common factors only leaving future cooperation to consequent studies.

1995; Thompson, 2004; Valley et al., 1995; Williams, 1993). Negotiator's style is partially shaped by personality traits, according to the psychological theories of negotiation (Spector, 1977, 1978). The available resources and their nature shape the negotiation type and possible outcomes, as provided by the economic theories of negotiation (Neale et al., 1991a). The counterpart's style is an important factor that the negotiator should interact to well to be able to attain possible outcomes as indicated by the process theory (Zartman, 1978).

The Negotiation Type. The literature divides negotiations into two major types, integrative and distributive (Walton & McKersie, 1965). Each type is shaped by the nature of the negotiated resource/s gives each negotiation its integrative or distributive type that hold different ranges of agreements (Neale et al., 1991a; Raiffa, 1982).

An *integrative negotiation* is a situation in which available are resources that permits mutual gains and the two parties' outcome sums up to a positive-variable amount whatever the agreement they reach (Raiffa, 1982; Walton et al., 1965). For that reason it is called *Variable-sum* (Raiffa, 1982; Tripp & Sondak, 1992). *A variable-sum* negotiation is a situation that provides mutual gains for each party (Raiffa, 1982). The goals/interests of the two parties are not conflicting or completely opposing to each other and hence a large agreement zone exists (Walton et al., 1965). An agreement-zone represents the interval between the resistance points[2] of each party that represents the number of possible agreements they can reach (Raiffa, 1982). In

[2] A *resistance point* is the limit beyond which an impasse is better for the negotiator (Walton et al, 1965). For instance, the resistance point for a seller is the very minimum price that he/she can settle for without incurring substantial losses, and for a buyer is the highest price that he/she can afford (Raiffa, 1982). Resistance points are sometimes referred to as *BATNA:* the "Best Alternative to a Negotiated Agreement" that represents a baseline against which all offered agreements are compared (Raiffa, 1982).

a variable-sum negotiation, the agreement zone is large for the many possible available agreements that could be reached; and hence, negotiators have more chances to reach agreements and both parties can maximize their outcomes until they reach the Pareto-optimality (Tripp et al., 1992). For this both parties can reach a satisfying outcome without having to sacrifice gains largely.

The variable-sum negotiation nature requires reciprocating cooperation not competition, because resources are of nature that permits sharing rather than distribution (Walton et al., 1965). The concern for relationships in this negotiation should never be ignored (Kray, Thompson, & Lind, 2005). However, negotiators should focus on achieving their negotiation target[3] in the same time (Thompson, 2004).

A distributive negotiation is a situation that permits a constant amount of outcome since the available resource/s are limited and not sharable (Walton et al., 1965). The total of the two negotiators' outcomes sums up to zero no matter what agreement is chosen, because the goals of the two parties are opposing; for this reason it is called a zero-sum negotiation (Brams, 1990; Raiffa, 1982). If both negotiators try to maximize their outcome beyond the fixed amount they both lose (Walton et al., 1965). A pure *zero-sum* negotiation provides only one resource/issue that by nature cannot be shared between negotiators, and thus distribution, of the outcome must take place (Raiffa, 1982). For instance, if two academic departments are aiming at hiring two new professors, and if the university budget permits hiring one professor, only one department could have its new hiring. When more than one resource or issue is available the number of

[3] The *target point* is the preferred goal/agreement that the negotiator is after; this goal may be inside or outside the agreement zone as it may be higher than the resistance point of the other party (Lewicki et al., 2006; Walton et al., 1965).

possible agreements increases (Tripp et al., 1992). However, the total of the two parties' outcome still sums up to zero for the undividable nature of resources and the opposing goals of parties (Neale et al., 1991a). Because goals are opposing and outcomes sum up to zero, the bargaining zone of a zero-sum negotiation is thin compared to that of the variable-sum (Tripp et al., 1992); therefore, it is harder to reach an agreement in a zero-sum negotiation. In such a situation distribution, not sharing, of resources must take place and the negotiator must aim at maximizing individual outcome (Raiffa, 1982).

The Counterpart's Style is the second most effective situational factor in shaping the negotiator adaptability. Business negotiation involves interdependence of parties, and willingness to reach a mutually accepted agreement (Huber & Neale, 1987; Hyder, Prietula, & Weingart, 2000). Therefore, the counterpart's negotiation style during the process, affects the negotiator's style and the negotiation's outcome (Valley et al., 1995). Many empirical studies validate this assumption within but not across situation (e.g. Pruitt et al., 1985; Tinsley et al., 2002). *A negotiation style* is the behavior of a person during the negotiation process that aims at achieving a certain outcome and is based on a pre- and during-process decisions; it includes verbal and nonverbal communications, languages, vocal tones, and timing and manner of exchanging information, offers, and demands (Benoliel, 2005; Putnam & Roloff, 1992, p: 3; Thompson, 2004).

In general researchers agree that within a given situation national and international negotiators and counterparts have one of two styles: competitive or cooperative (Pruitt, 1991; Walton et al., 1965). *A competitive style* employs influential, deceiving, and sometimes coercive behaviors to maximize individual outcome regardless of the counterpart's satisfaction (Lewicki,

Barry, Saunders, & Minton, 2003). *A cooperative* style is based on problem-solving and aims at maximizing mutual gains to satisfy both parties (Hyder et al., 2000). In an idealistic world, a competitive style reflects the understanding that the negotiation is zero-sum and a cooperative style reflects the understanding that the negotiation is a variable-sum (Huber et al., 1987). However, this is not always true, some counterparts do not consider the negotiation type when they compete (Williams, 1993) or cooperate (Parks & Komorita, 1998) in a given situation because they have only one style that they apply to all negotiations.

The Situational Judgment to Match or Mismatch. The general view of adaptation as the right fitting into a certain environment means that adaptability is shaped by the individual capacity and abilities to categorize, process, and analyze information and alternatives provided in a certain situation in order to reach meaningful conclusions and behave accordingly (Anderson, 1990). This fact is also reflected in the psychological view of personality traits. Traits or dispositions are identified as cognitive categories that shape prototypical behaviors of a certain person across time in light of certain situational factors (Gosling, John, Craik, & Robins, 1998; Tett et al., 2000). Negotiators' cognition is the underlying mechanism through which negotiators cognitive appraisal of the situational factors and traits shapes adaptability (Anderson, 1990). I am not going to investigate cognition per se in my study; I will focus on negotiators judgment of the situational factors. The level of traits a person possesses will determine his/her cognition and therefore ability to adapt.

Negotiators abilities to adapt vary for differences in their personality traits. It has been consistently validated that negotiators judge the same situational factors differently (Thompson et al., 1990). Some negotiators do not match their styles to the major situational factors (Pruitt et

al., 1985; Schneider, 2002; Williams, 1993). This mismatch results in numerous negotiation errors and biases that make achieving the outcome difficult and sometime impossible (e.g. Lewicki, 1997; Neale & Bazerman, 1985b; Thompson, Nadler, & Kim, 1999). The situational factors bias judgment (Todorov & Bargh, 2002) of some negotiators to make them compete or cooperate consistently (Bazerman, Magliozzi, & Neale, 1985). Few negotiators were able to judge the situational factors, and make decisions and behave accordingly to fit some situational factors within and across situations (Mannix et al., 1995).

Not everyone has the same level of adaptability. Empirical results show that the majority of negotiators from all cultures have one stable style that is competitive or cooperative (Olekalns et al., 1996) that they cannot change even after realizing its mismatching to the situational factors (Tinsley et al., 2002; Williams, 1993). Moreover, some negotiators are emotional and oversensitive to the counterpart's style; they respond to the counterpart's style by escalating-competition or cooperation (Komorita, Parks, & Hulbert, 1992; Ostrom, 1998), causing negative spirals of emotions and eventually negotiation failure (Brett, Shapiro, & Lytle, 1998; Tyler, Feldman, & Reichert, 2006). This reflects two ends of negotiation adaptability: high when the negotiator is able to make the right/positive switch to fit into the situation; and low when the negotiator makes wrong/negative switches to react emotionally to the counterpart's behaviors and moves.

The Activated Personality Traits

I define adaptability as the ability to correctly match own negotiation style to the negotiation type and the counterpart's style and achieve the highest possible outcome of every negotiation situation. *This level of adaptability happens through (1) careful pre-negotiation planning of goals* to determine whether the situation is zero-sum or variable-sum and align the negotiator's goals around these types (Mumpower, 2000; Raiffa et al., 2002). *(2) Figuring out the counterpart's style* (Thompson & DeHarpport, 1994) at the first moments, and dealing with difficult people with high self-control (McRae, 1997). (3) *Applying the appropriate competitive or cooperative style* to each situation without involving emotionally; i.e. keeping a "cool head" during the negotiation process (Barry, Fulmer, & Goates, 2006).

Adaptability requires correct reaction to the situational factors that is shaped by certain personality traits. These traits should be identified in terms of their relevance to negotiation as a goal-oriented interaction to allocate resource/s (Carnevale et al., 2006; Perugini, Gallucci, Presaghi, & Ercolani, 2003). Previous research of psychology provides the traits related to such situations. Because it vividly identifies differences in behavioral reactions in resource distribution situations compared to daily behaviors (Eisenberger, Cotterell, & Marvel, 1987). So, it is logical to argue that only certain traits will be activated by the common factors of negotiations. These traits should shape each negotiator's cognition of the common situational factors.

I argue that two traits take part in shaping the negotiator's cognition of the situational factors: dispositional goal orientation and reciprocity orientation. Dispositional goal orientation partially shapes the negotiator's goals before and during the negotiation process and therefore determines his/her cognitive appraisal of the negotiation type. Reciprocity orientation determines

to which level the negotiator will accurately judge the counterpart and his/her style. It hence, shapes the negotiator's behavior, moves, and emotional responses to the counterpart's style. More details follow.

Goals of Negotiators. Negotiators usually have goals that determine their target and resistance points, these goals shape their demands at each negotiation situation (Carnevale et al., 2006). Negotiators' goals shape the agreement zone and limits of goals that negotiators can achieve as I explained earlier (Carnevale et al., 2006; Raiffa, 1982). The economic school's rational view of negotiations assumes that a simple utility function is enough to estimate accurately their and the counterparts' goals; and based on this accurate estimate, they behave rationally to maximize their outcomes of all negotiations (Carroll et al., 1988). However, not all negotiators are capable of reaching that level of accuracy and rationality. Their cognitive appraisal of the negotiation situation as zero-sum or variable-sum motivates them to compete or cooperate across negotiation situations as evident from previous research (e.g. Van Boven & Thompson, 2003). The truth that business negotiation is a motivated-goal-oriented interaction, which is shaped by negotiators motivation that shape their goals (Carnevale et al., 2006), signifies the argument that dispositional goal orientation is the precursor that shapes the negotiators' cognitive appraisal of the negotiation types.

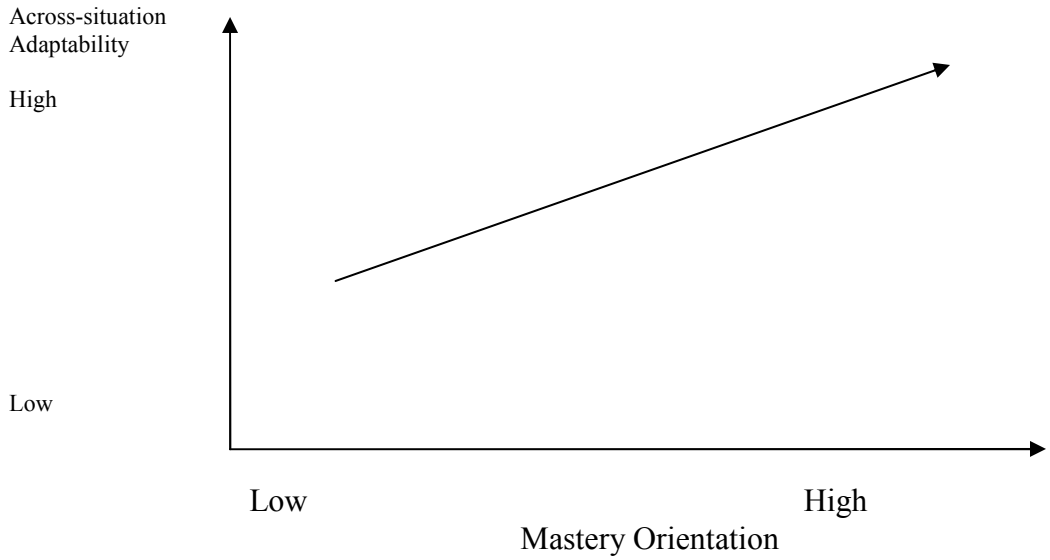
Dispositional Goal-orientation (GO) — is the trait that determines what goals and outcomes a negotiator seeks of every situation. It is defined as the "*staple pattern of cognition and action that results from the chronic pursuit of a mastery… or performance… goal in different situations overtime"* (DeShon et al., 2005, p: 1115). It has two dimensions: mastery and

performance. Mastery goal orientation is preferable because it means focusing on the process and outcome whereas performance means focusing on the outcome only (Franken & Brown, 1995). High levels of performance orientation lead to poor adaptation and low outcomes across resource-allocation situations; while high levels of mastery orientation lead to adaptive behavior and positive outcomes (DeShon et al., 2005). Individuals who focus on mastery do not chase winning regardless of the consequences, and have high ability to cope to the situational factors (Franken & Brown, 1996). This is because they have the right balance between focusing on outcome and on the processes that leads to outcome and therefore, they are adaptable (Franken et al., 1996).

In negotiation context, a person with mastery-orientation will be more able to analyze the information and alternatives of a situation and reach a conclusion to focus on the process and outcome of negotiations together. The negotiator will focus on the given resources of any situation without having a pre-established goal, and decides to compete if resources are scares and undividable or cooperate if resources are plenty and dividable. As Raiffa (1982) and other scholars suggest this action leads to reaching optimal agreements of all negotiations. To conclude, adaptable negotiators are expected to focus on achieving the right outcome and fit their plans and decisions to the negotiation type in order to master the negotiation process and achieve the right outcome as indicated in graph (1). Therefore, I argue that:

H1a. Mastery goal-orientation associates positively with negotiation adaptability.

Graph (1): The expected association between Mastery GO &Adaptability



Competitive individuals focus on maximizing their outcome as they are motivated by a desire to win at any situation and to achieve high results at any cost (Dru, 2003). Their high performance goal orientation makes them believe that resources are scarce and results are uncertain; compare their final results to others'; and think that if they do not compete they cannot achieve any outcome (Elliot & Harackiewicz, 1996; Franken et al., 1995). They do not care for others' opinions about them and feel that winning is what gives them value, which motivates them to care for maximizing performance rather than mastering the process and avoid any possible failure at any cost (DeShon et al., 2005; Elliot et al., 1996; Phillips & Gully, 1997). They are always under stress and vulnerable for anxiety and worry and they always worry about being exploited by others and think that it is better to exploit others before getting exploited (Cotterell, Eisenberger, & Speicher, 1992). This is why they focus on high performance and maximizing outcome and do not care for relations.

Negotiation research shows that some negotiators are always motivated by high achievement, and desire to compete and win instantly (Thompson et al., 1990), and achieve their high goals at any cost (Herman et al., 1977; Wall, 1981). Results of four lab studies show that highly competitive negotiators had high resistance points and counteroffers (Diekmann et al., 2003). They perceive each negotiation as a zero-sum situation in which they must maximize individual results and fail to recognize the integrative nature of variable-sum situation, a case known in literature as the "fixed pie bias" (Neale et al., 1991a; Thompson, 1995; Thompson et al., 1990). These negotiators are expected to have high performance goal-orientation.

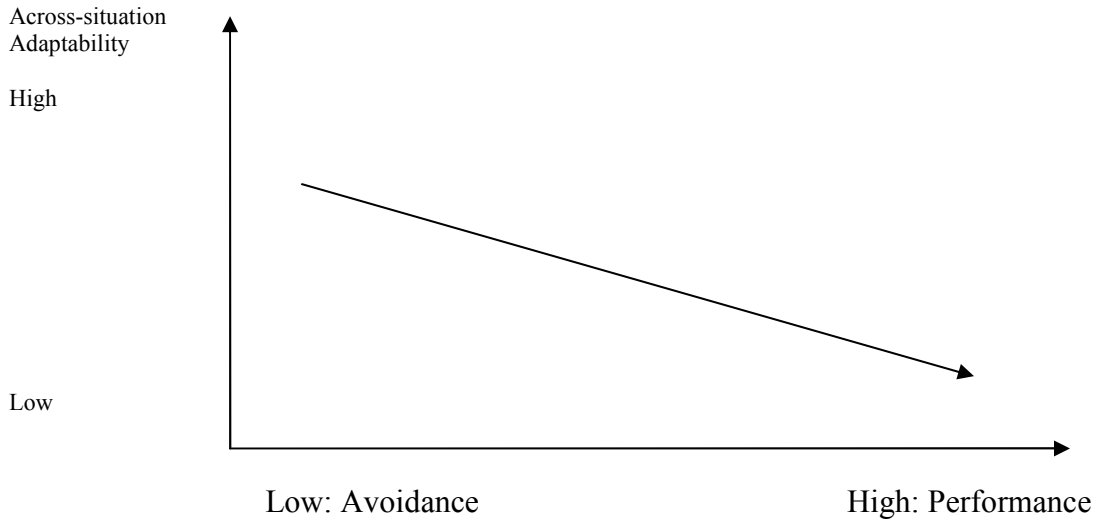
Cooperative individuals have performance-avoidance goals; because they focus on preserving relations and seek social support; they do not care for winning over others (Porath & Bateman, 2006); because they are motivated by social-values (DeShon et al., 2005). They seek social support and acceptance from others and therefore they care the less for defeating others to maximize own performance (Porath et al., 2006). They are relaxed, optimistic, harmony seekers, and always welling to reciprocate cooperation with others, that is why they think it is better to start negotiating by cooperating with no fear of exploitation for thinking others are cooperative too (Insko, Schopler, Hoyle, Dardis, & Graetz, 1990). They focus on the quality of the interaction rather than the outcome in order to keep social support across situations (Franken et al., 1995).

Negotiation research consistently shows that some negotiators are always cooperative and aim at building relationships even in zero-sum situations (Parks et al., 1998; Peterson & Lucas, 2001; Williams, 1993). Trying to be socially acceptable and trustworthy (Paese, Schreiber, & Taylor, 2003), they aim at maximizing joint outcomes and prefer less targets or accept impasse

to reserve relationships with others (Paese et al., 2003). A zero-sum situation requires distribution of resources or issues rather than cooperation, which does not increase the negotiator's outcome or share of resources (Olekalns & Smith, 2003; Thompson et al., 1999; Williams, 1993). Negotiators who have staple cooperative or competitive styles across situations are not able to adapt to the common situational factors of each negotiation. Therefore, I argue that a negotiator with a chronic cross-situation competitive style has high performance-orientation while a chronically cooperative negotiator has a performance-avoidance orientation. Performance orientation lowers negotiators ability to fit their styles to the situational factors as indicated in graph (2). Therefore,

H1b. Performance-goal orientation is negatively associated with negotiation adaptability.

Graph (2): The expected association between Per. GO and Adaptability



Goals of the counterpart— Estimating the counterpart's goals and style affects the negotiator's goals and style (Thompson et al., 1994). Lab results show that negotiators who

matched the counterparts' competitive style were successful at maximizing outcome when the negotiation type permitted that, and were not successful when the negotiation type did not permit to maximize individual outcome (Huber et al., 1987).

When negotiators make errors in estimating goals and styles of their opponents, they fail to realize that they have compatible interests to those of the opponents and fail to reach an agreement even in variable-sum situations (Thompson et al., 1990). However, results show that even when some negotiators were told the counterpart's goals and interests before negotiating, they focused on maximizing individual outcomes in variable-sum situations that permitted mutual outcomes (Thompson et al., 1994). Negotiators' estimation of the counterpart's style is shaped by their traits that shape their cognitive appraisal of the counterpart's style (Van Boven et al., 2003) emotionally or logically.

Negative Reciprocity Orientation (RO) — refers to over-reactivity and sensitivity to others' behaviors and emotions and the tendency to reciprocate these behaviors and emotions as they are positive or negative regardless of the material outcome, level of interdependency on others, or others' reactions (Perugini & Gallucci, 2001). *"Reciprocity is clearly differentiated from cooperation and hostility because it is conditional and it matches actions according to their valence: a positive action is reciprocated with positive actions; a negative action with negative ones"* (Perugini et al., 2001, p: S20).

High negative reciprocals strive to be always respected to protect their self- and public-image and thus they strive to achieve justice contingently during interpersonal interactions (Christensen, 1982; Martin, Marsh, & Debus, 2001). They overreact to interpersonal interactions that a regular person may not pay attention to, as they perceive these interactions as signs of

social rejection or acceptance (Aron & Aron, 1997; Smolewska, McCabe, & Woody, 2006). They misinterpret intentions of others and respond emotionally regardless of the appropriateness of their responses in the situation (Perugini et al., 2001). These individuals may retaliate from a person and be kind and return a favor to another person (Perugini et al., 2003). Even when the response involves sharing financial resources, those individuals gave more money to the nice others and did not give any to those who were harsh to them (Eisenberger et al., 1987). This indicates the relevant role of reciprocity orientation in shaping negotiators' estimation of their counterparts' styles.

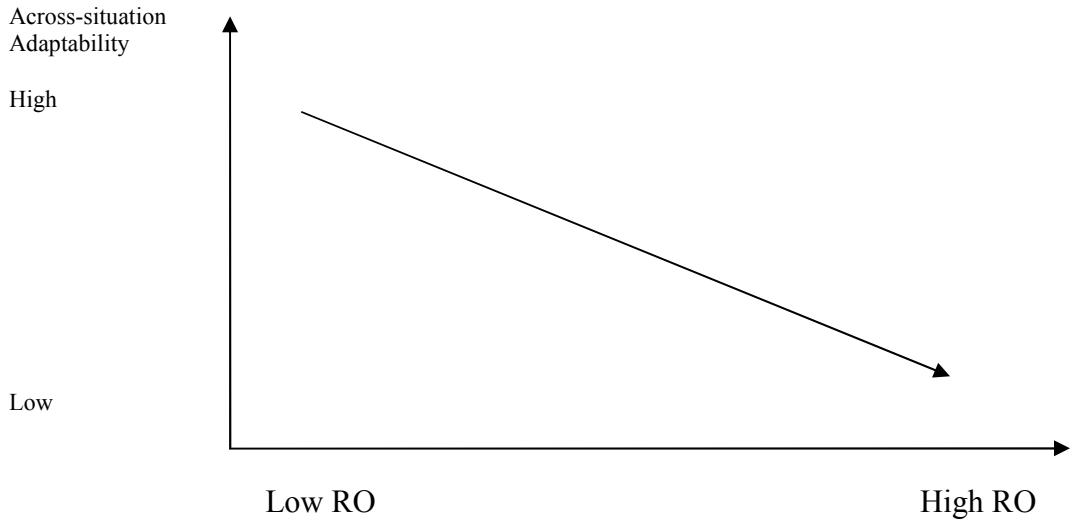
Negotiators from different cultures escalated cooperation with cooperative counterparts and tried to retaliate from competitive negotiators by being more competitive, which resulted in spirals of emotions (Brett et al., 1998; Butt, Choi, & Jaeger, 2005; Tyler et al., 2006). Escalatory responsive styles are not directed toward achieving the negotiation's target; rather are directed toward personal desire to compensate or punish the counterparts (Eisenberger, Lynch, Aselage, & Rohdieck, 2004; Komorita et al., 1992; Ostrom, 1998). These negotiators aim at getting even during the negotiation rather than achieving their negotiation goals, they consider retaliation the way to establish justice and fairness (Bies & Tripp, 2001; Pillutla & Murnighan, 1996; Tripp & Bies, 1997; Tripp, Bies, & Aquino, 2002).

They believe that counterparts are alike, reciprocate all types of behaviors and respond to negotiators with more competition or cooperation (Komorita et al., 1992; Ostrom, 1998). They may even switch between different wrong reciprocal styles during the negotiation process if the counterparts change their styles. This unplanned change of negotiation style during the negotiation process leads to mismatching the negotiation type and the counterpart's style and falling for the emotionality trap that leads to failure of negotiations (Hyder et al., 2000).

Negotiators who are high on RO are spontaneous, unstructured, and emotionally responsive to the counterparts' style, regardless of the other major factors (Van Kleef, De Dreu, & Manstead, 2004). Adaptable negotiators as indicated before are those who should not respond emotionally to the counterparts' style and estimate the competitiveness or cooperativeness of the counterpart as situational factors and respond with the appropriate style with no emotional escalation (Thompson, 2004). Therefore, I argue that:

H2: Reciprocity orientation negatively associates with adaptability.

Graph (3): The expected association between RO and Adaptability



The Moderating Effect of the Situational Factors

This moderating effect happens through the following sequence, when a situational factor is induced; the triggered level of a trait affects the negotiator's cognition of this factor and shapes an effective or ineffective responsive behavior (Chan, 2006; Payne et al., 1993). The situational factors could bias cognition, and behavior of participants depending on their level of the activated trait (Todorov et al., 2002). Such that, triggers of aggression biased some participants to make more aggressive judgments of others, without realizing that they were harming others (Todorov et al., 2002). When they were made aware of the situational triggers of biases, they tried to control their behaviors and have more realistic judgments in social situations (Todorov et al., 2002). In consistency, the major situational factors will direct negotiators' judgment of these factors to one direction or another based on their levels of the activated traits.

The moderating effect of the negotiation type. In the field of negotiation, seminal studies of Bazerman and his colleagues found substantial differences in negotiators' cognition of the same factors, such as the negotiation type (Bazerman & Sondak, 1988; Carroll et al., 1988; Neale & Bazerman, 1985a). Their studies measured behavior after negotiating within a situation, and did not investigate interaction to traits; nevertheless, they provided a landmark to direct negotiation research to identify the cognitive biases such as the fixed-pie bias: the believing that each negotiation situation is zero-sum (Neale et al., 1992). These cognitive biases are surely shaped by the negotiator's traits as evident from research on human cognition and brain sciences (e.g. Payne et al., 1993; Stanovich & West, 1998).

Zero- and variable-sum business negotiations have a level of resource distribution that is absolute in a zero-sum situation and partial for a variable-sum situation (Neale et al., 1991a).

Distribution of resources will misdirect some negotiators to concept each negotiation as a zero-sum because they care about getting a bigger individual share and do not care for others' outcomes (Neale et al., 1991a).

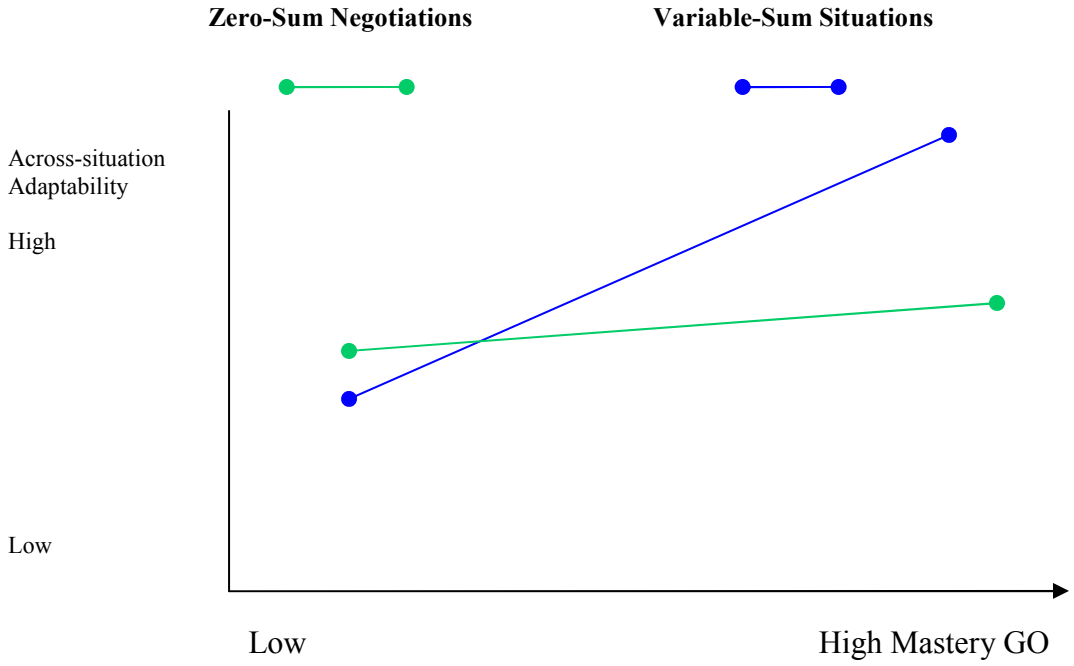
The distributiveness cue will trigger high levels of performance goal orientation to make negotiators compete. Negotiators who have high level of this trait will be blinded by their mental models from seeing the actual facts that determine the accurate type of a negotiation. They focus on the outcome more than the process (Phillips et al., 1997). On the contrary, individuals who have high performance avoidance orientation are susceptible to cues of sharing manifested in the situation and will try to find reasons to reach a compromising outcome. Those are not able to adapt to zero-sum situations as they are more concerned with the process than the outcome (Franken et al., 1996). Maximizing individual or mutual outcomes within and across situations requires careful focus on the pre-planning, process, and outcome of the negotiation to know the negotiation goal and the appropriate style (Peterson et al., 2001). Both of these individuals are not capable of matching their behavior to the situation type across variable-sum situations, and therefore, their adaptability to the situation type is low.

Negotiators who have high mastery orientation have the right balance between focusing on outcome and on the process that leads to outcome and therefore, they are adaptable by nature (Franken et al., 1996). These negotiators are highly adaptable to the negotiation type. Given that GO's positive dimension is mastery and negative dimension is performance, I argue that:

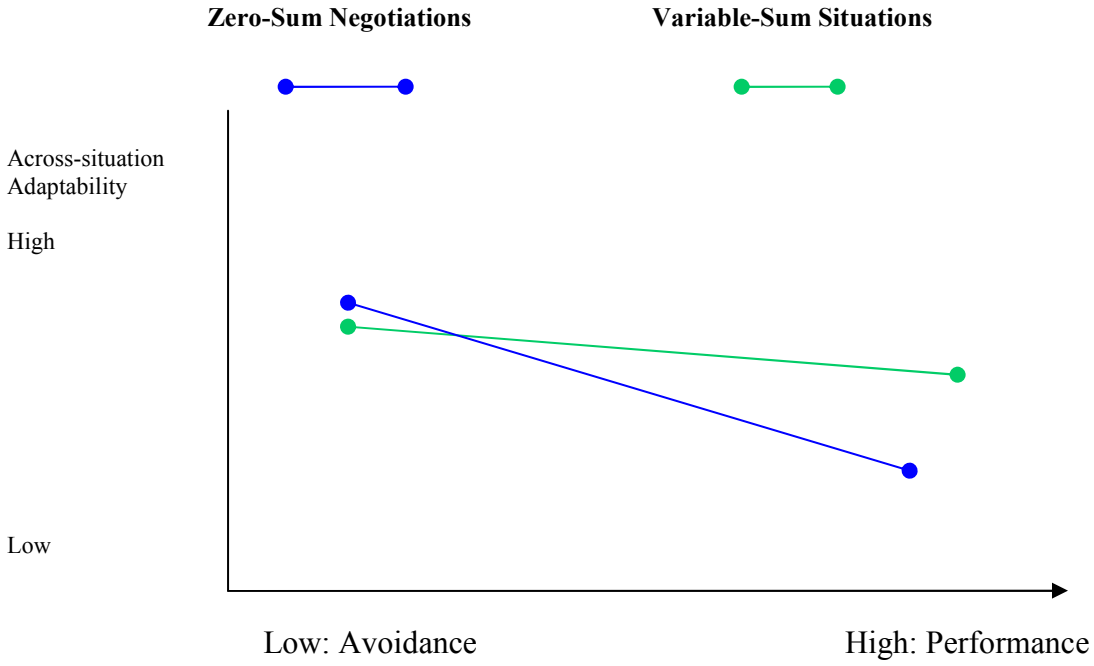
H3a: The positive association between mastery goal-orientation and negotiation adaptability will be stronger in variable-sum negotiations than in zero-sum negotiations.

H3b: The negative association between performance goal-orientation and negotiation adaptability will be stronger in zero-sum negotiations than in variable-sum negotiations.

Graph (4): The moderating effect of the Negotiation type on the Association between Mastery GO and Adaptability



Graph (5): The moderating effect of the Negotiation type on the Association between Performance GO and Adaptability



The moderating effect of the counterpart's style— Through the verbal and nonverbal communication cues, a negotiator could understand whether the counterpart is competitive or cooperative (Curham, Pentland, Caneel, Eagle, & Martin, 2005). Empirical evidence shows that verbal and non-verbal communications reflect the negotiator's style, specifically at the beginning of the negotiation (Simons, 1993). A competitive negotiator uses sentences that emphasize care for value rather than care for interpersonal relations, while a cooperative negotiator uses sentences that emphasize care for interpersonal relations (Simons, 1993). Deceptive negotiators are evasive, misleading, and/or use equivocate, manipulation of words to say something indirectly (Forgas & Cromer, 2004). The Counterpart's style as a moderator increases the responsiveness of negotiators who have high level of RO.

Thompson and Dehardport (1994) argue that perception of the counterparts' interests and behavior affects judgment accuracy and performance of the negotiator. They argue that when negotiators learn about their counterparts' interest they revise their judgment and behave better in subsequent situations. However, results show that even when some negotiators were told the counterpart's goals and interests before negotiating, they focused on maximizing individual outcomes in integrative situations that permitted mutual outcomes (Thompson et al., 1994). This highlights the effect of personality traits on judging the counterpart's style differently. The level of the negotiator's RO determines his/her judgment of the counterpart style. Because RO is a negative trait, a high level of it makes the negotiator overly sensitive to the competitive style of a negotiator. Instead of behaving accordingly, the negotiator considers the competitive style disrespectful, deceptive, and self-threatening and reacts with more negative behaviors and emotions for getting even or for teaching the counterpart a lesson at the personal level; as evident

from participants' reactions to counterparts in similar situations (Christensen, 1982; Martin et al., 2001).

High RO's elevate their positive or negative reactions to the counterparts. These negotiators will always perceive a competitive style as a personal insult and react negatively but perceives a cooperative style as a sign of respect and reacts positively to it (Perugini et al., 2001). Large body of research on negotiator's feelings shows consistent results. Some negotiators involved in spiral of emotional competition to respond to competitive counterparts (O'Connor & Arnold, 2001). Negotiators prefer to give friends or in-group members equal or larger share of the negotiated resources as indicated from lab experiments (Thompson, Valley, & Kramer, 1995).

These reactions are not adaptable, because an adaptable negotiator should not elevate emotional responses to the counterpart without regards of the negotiation type and the comparative power of the counterpart (Thompson, 2004; Thompson et al., 1999). However, not all negotiators fall for the emotional traps and focus on the counterpart's emotions as their guidance for behaving as evident from experiments (Van Kleef et al., 2004). The adaptable negotiator may express negative emotions only if it is necessary to do so (Leach, 1999).

However, expression of emotions is not preferable in all negotiation situations (Thompson et al., 1999). The negotiator can estimate the negotiation type and the counterpart style first. Second, he/she can judge when expressing emotions would be more effective than hiding them, and in which situations negative emotions would be more effective than positive ones (Thompson et al., 1999).

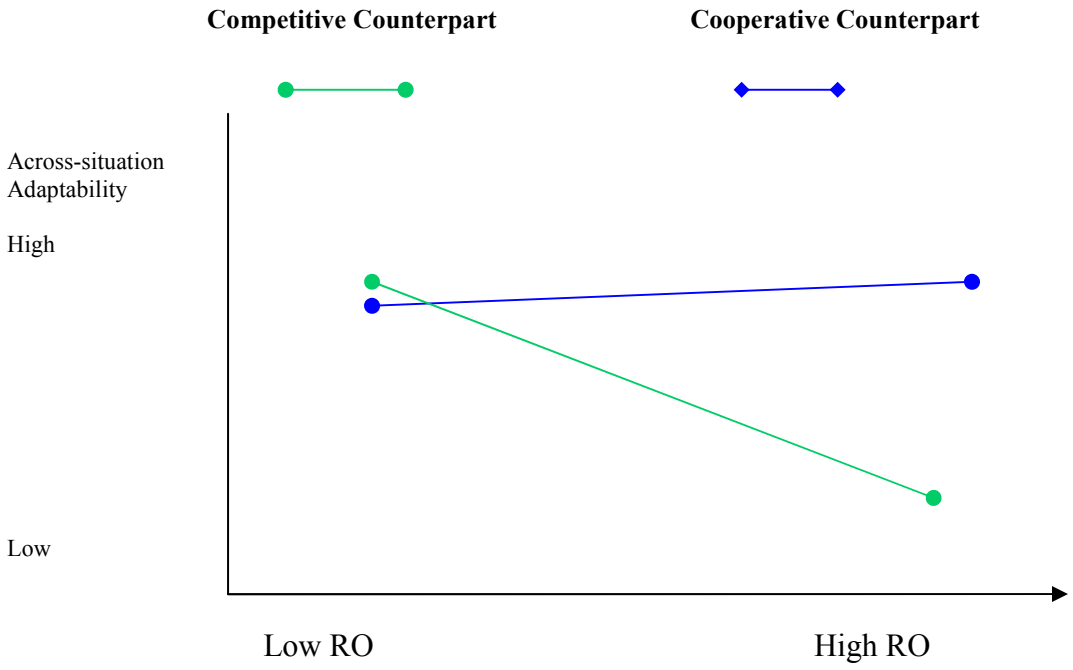
As explained before, competitive negotiators are manipulative and do not care for satisfying the counterparts and cooperative negotiators are nicer persons who care for satisfying the counterparts. Therefore, a competitive counterpart is harder to deal with and makes

adaptability difficult. Repeated evidence shows that emotions are contagious in negotiations; negotiators' reciprocated behaviors with both angry and happy counterparts at national and international negotiations (Barry et al., 2006; Butt et al., 2005). Some took a further step and escalated competition or cooperation with counterparts (Brett et al., 1998; Tyler et al., 2006).

This indicates that the counterpart's style diverge some negotiators to unplanned change of negotiation style during the negotiation process to mismatch the other situational factors and fall for emotional traps (Hyder et al., 2000). Consequently, the counterpart's style will have a moderating effect on the relationship between RO and adaptability such that, the more the competitiveness of the counterpart the higher the negative effect of RO on adaptability will be across situations and vise versa. Therefore, I argue that:

H4: The negative association between RO and negotiation adaptability will be stronger when the counterpart is competitive than cooperative

Graph (6): The moderating effect of the Counterpart's style on the Association between RO and Adaptability



Summary

Negotiators' adaptability is shaped by a continuum of effects such that traits are the precursors that shape the negotiator's cognitive appraisal of the common situational factors that in turn may skew that cognitive appraisal toward one end or another. Negotiators with high performance-goal orientation will seek to win through competition, focusing only on the final outcome. A negotiator with mastery-goal orientation will focus on the process and reach appropriate outcomes. Although there are two types of negotiation, distributive and zero sum, across time both types will be treated as zero-sum by the high performance negotiator, while there will be more of mix for the high mastery negotiator.

Negotiators high on reciprocity orientation approach the negotiation seeking personal respect rather than seeking to achieve the negotiation goal; they are not good adaptable negotiators. They will be overly sensitive to the counterpart's style. They have high tendency to retaliate against the competitive counterpart in an "Eye-for-Eye" fashion that results in two half blind negotiators engaging in emotional-escalatory interpersonal retaliation. They consider signs of cooperation from the counterpart as a cue of personal respect and highly appreciate it by escalating cooperation. Such an approach may be good in variable-sum situations. But the fact remains that negotiators high on reciprocity orientation do not aim at achieving the negotiation goals because they are focused on personal respect rather than the negotiation goals.

Traits are the mental lenses through which we perceive situational factors. Traits work exactly as eye glasses. On a cloudy day black glasses make things appear darker than they really are, while transparent glasses will make things look exactly as they are. However, on a clear

sunny day in the desert, when the clear glasses may still work, the black glasses are more needed to soften the sharpness of the sun light.

The taxonomy of needed levels of traits to adapt perfectly to the situational factors is dependent on the nature of these factors and the relevance of traits to these factors.

CHAPTER THREE
METHOD

The objective of this chapter is to test the hypothesized main and interaction effects between personality traits, the situational factors, and negotiation adaptability. The chapter details the process of data collection and analysis to fulfill the empirical requirement of this study. I conducted two lab experiments. The design and procedures of the two studies is one.

Design

The general study design of the two experiments is a pre-post 2x2 factorial analysis. There are two negotiation types (integrative and distributive) by two counterpart's styles (competitive, and cooperative). The moderating effect of these conditions on the main effect of personality traits on negotiation adaptability is measured. The following sections provide more details.

Variables

The Dependent Variable is negotiation adaptability that means the intentional ability to switch between applying a competitive and a cooperative style to fit appropriately the two major situational factors within a given negotiation situation. It is operationalized as making the correct choice of a negotiation style (cooperative or competitive) within each negotiation situation. Adaptability is a continuous variable that ranges between low and high.

The Independent Variables— there are four independent variables that represent two personality traits and two situational factors. The personality traits are dispositional goal orientation and reciprocity orientation. The situational moderators are perception of the

negotiation type and of the counterpart style. They denote the negotiator's cognitive appraisal of the negotiation type and the counterpart style. All the independent variables are continuous variables that I measured using scales. I converted them into categorical variables to fit the study design and data analysis technique.

The Control Variable. I controlled for social desirability's possible effect on self-response surveys; this is a standard procedure in behavioral and personality research (Tan & Hall, 2005). This helps t*o achieve discriminate validity* by differentiating adaptability to the negotiation situation from social fit that is motivated by a desire for social acceptance (Crowne & Marlowe, 1964).

Measures

To measure the *two personality traits* I used scales common to the research of psychology and have established high reliability. To measure *dispositional goal orientation* I used the goal-orientation scale developed by (Button et al., 1996). It is consists of sixteen 7-point items. It has a sufficient reliability; its Cronbach alpha is 0.76. Please find the items in Appendix (A). To measure *negative reciprocity,* I'm going to use a nine-item sub-scale of negative reciprocity developed by Perugini, Gallucci, Presaghi, and Ercolani (2003). Please find the scale in Appendix (B).

For all the scales, I used 7-point responses that range from "1, extremely uncharacteristic" to "7, extremely characteristic" of me, instead of the regular Likert-responses of "extremely disagree" to "extremely agree." This is to provide more accuracy in self-

expression (Friborg, Martinussen, & Rosenvinge, 2006), and more accurate results compared to the regular Likert-type responses (Strathman, Gleicher, Boninger, & Edwards, 1994).

To measure the situational moderators, I used responses to fours short scenarios and feedback to four long simulated deals. Each of the negotiation four short negotiation scenarios represents one situational factor in isolation of the others. I also used four negotiation deals that represent one negotiation factor as a condition. Two deals represent zero-sum situations and the other two deals represent variable-sum situations to provide the situational conditions of each negotiation type. All represent selling or buying situations. Negotiation researchers put these simulations together based on real-life negotiations. I shortened the lengthy ones to prevent participants' boredom. I used all with permission of the authors. An example of these simulations is in Appendix G.

To measure cognitive appraisal of each negotiation type and also counterpart style, I used some items from the feedback survey.

The after negotiation Feedback-survey — I put together a 7-point scale to obtain participants feedback after each negotiation. The survey consists of short items that I adapted from Bartos (1974), results of negotiation research, and recommendations of negotiation researchers. Participants responded to the feedback survey four times after negotiating each deal. The sub-scales items measure the moderators and the dependent variable. Please find the scale items in Appendix C. It differentiates between competitive, cooperative styles. It also differentiates perceptions of the negotiation types and counterpart styles in each given negotiation situation.

To measure a participant's perception of the counterpart's style, I used items number 13, 15, 16, and 20. High response on item number 13 means that the negotiator judged the

counterpart's style as competitive. High response on item number 14 means that the counterpart's style was perceived as cooperative, and on number 20 means that the counterpart was perceived as emotional. These items control for judging the counterpart's but may not in fact represent their true styles. The rationale for the scale items is provided in the literature review. I validated the scale by conducting a factor analysis and reliability check before using it to measure the moderators and the dependent variable.

I measured adaptability using sub-scales of the feedback survey to measure the negotiator's style within each negotiation. The 7-point sub-scales were for measuring negotiator's competitive or cooperative style within each negotiation situation. A style of negotiating is either competitive or cooperative within each situation as I explained in the literature review. High responses on the sub-scales items indicated the negotiator style (competitive or cooperative) within each situation.

The factor analysis validated items for each subscale. To measure adaptability within each situation I deducted the average of competitive style from cooperative style to know if the negotiator's style was more cooperative in a variable-sum situation and vice versa for the zero-sum situation. To measure cross-situations adaptability I averaged more cooperative styles for the two variable-sum situations and the two competitive styles for the zero-sum situations. To measure overall adaptability I totaled the averages of more-competitive and more-cooperative styles across the four negotiation situations. A detailed description of the factor and reliability analysis follows.

Details for Factor Analysis and Reliability Check

This section provides the results of the group of analyses I conducted to test hypotheses three and four. I started by conducting exploratory factor analysis followed by reliability

analysis to determine the validity of the sub-scales before using them to measure variables. Second, I conducted a Bivariate correlation to check association among the subscales and among them and the personality traits that I measured prior to the experiment.

The exploratory factor analysis

I conducted the factor analysis on the 26-item feedback survey I composed to measure negotiators' styles after negotiating. The negotiation-feedback survey items loaded on six factors. The item loadings resulting from the exploratory factor analysis are in Table 1. The factor loading indicates that all the 26-items loaded on the six factors; however, some of them loaded negatively on some factors and I canceled them. The next step to validate the subscales resulting from the factor analysis is to conduct a reliability check; this is a standard procedure in research of organizational behavior and psychology (Nunnally and Brenstien, 1999).

Reliability Check

The reliability check showed that some factors have low reliability. I deleted some items to increase reliability. Some of the items that loaded on factors 2-4 caused reliability to be low, around .60 and lower. Canceling these items increased reliability to around .70 for subscales 2-4. This is considered a reasonably strong indication of reliability for behavioral research; a reliability coefficient that ranges from .7 to .8 represents high reliability according to the psychometric theory (Nunnally and Brenstien, 1999).

I canceled subscale 5 because its reliability coefficient was less than .69 and it consists of two items that do not make sense being in one scale. Reliability statistics of the final subscales that had reliability around .7 are in Table 2.

I used these subscales to measure the dependent variable and two independent variables. I used the competitive and cooperative styles subscales to measure the negotiator's style within one situation. The other two factors represent perception of the negotiation type and perception of the counterpart style as competitive.

I calculated perceiving the negotiation type as zero-sum by deducting the item, "I collected data to understand the counterpart needs" from the item, "I collected information to defeat the counterpart." And vice versa, I calculated perceiving the negotiation type as variable-sum, by deducting the item for collecting data to defeat the counterpart from the other item. This resulted in two perceptions, perceiving the negotiation type as zero-sum that should be consistent with the negotiation type of deals one and three, and perceiving the negotiation type as variable-sum, which should be consistent with deals two and four. The two perceptions represent two independent variables that should vary across situations if the negotiator has an accurate perception of the negotiation type.

For the last factor, because reliability was so low, I had to cancel it. But, because the first item of that scale is the only item that measures the cooperative style of the counterpart, I used it to test whether the counterpart style was perceived as being more or less competitive. To do so, I deducted it from the sub-scale of the competitive style of the counterpart.

These two perceptions represent the measures of the two moderators included in the adaptability theory as I explained in the literature review part. The more accurate the perception is the more adaptable the negotiator should be across situations.

Table 1

Factor loading of the 26-item Feedback Survey

Feedback items for the first negotiation situation	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Enjoyed negotiating	**0.73**					
For me negotiation is to bargain and haggle to win a deal	**0.67**					
My outcome is due to my skills not chance	**0.66**					
Collected information to defeat the counterpart	**0.65**					
Collected information to understand the counterpart's needs	**0.60**					
Pre-planning before starting	**0.58**					
I like to maximize my profits at any cost	**0.57**					
The Planned action	**0.43**					
I said what I think to be right not what the counterpart expects to hear	**0.42**					
Counterpart was hard to communicate with most of the time		**0.66**				
It was impossible to understand the counterpart		**0.60**				
I was annoyed by the opponent negative comments		**0.59**				
The counterpart was uninteresting and listening to him/her was boring		**0.50**				
I walked away from the table when the counterpart refused my offer		**0.49**				
Profit fair for you		**-0.40**				
Negotiation was boring		**0.37**				
Did you think the counterpart had a planned action			**0.45**			
Think the outcome is fair for the counterpart			**0.38**			
Counterpart's action as you saw it			**0.38**			
I could convince the counterpart to share confidential information				**0.55**		
I shared my confidential information with the counterpart				**0.55**		
I never had the counterpart out of control and annoyed				**0.49**		
The counterpart rarely miscomprehended my words and behaviors					**0.60**	
It is essential to get the counterpart to respect me					**0.37**	
The counterpart was easy going person and did not resist my offer						**0.65**
Your tactic during the negotiation						**-0.30**

Table 2

Results of the reliability check for subscales with reliability around .7

Subscale (1): Competitive Style Chronbach's Alpha = .785

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
D1: For me negotiation is to bargain and haggle to win a deal	14.3057	12.745	.679	.501	.685
D1: Enjoyed negotiating	13.9689	12.884	.659	.496	.696
D1: My outcome is due to my skills not chance	14.3057	14.724	.544	.312	.755
D1: I like to maximize my profits at any cost	13.8912	15.212	.489	.263	.781

Subscale (2): Perceiving the Counterpart as Competitive Chronbach's Alpha = .695

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
D1: Counterpart was hard to communicate with most of the time	7.7173	13.162	.465	.230	.640
D1: It was impossible to understand the counterpart	8.0262	12.847	.527	.281	.615
D1: I was annoyed by the opponent negative comments	7.9686	12.336	.503	.257	.622
D1: I walked away from the table when the counterpart refused my offer	8.4503	14.344	.407	.182	.664
D1: The counterpart was uninteresting person and listening to him/her was boring	7.6702	13.064	.369	.145	.686

Subscale (3) Cooperative Style Chronbach's Alpha = .742

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
D1: I shared my confidential information with the counterpart	3.5361	3.504	.591	.350	.(a)
D1: I could convince the counterpart to share confidential information with me	2.9845	4.026	.591	.350	.(a)

Subscale (4): Perception of the Negotiation Type Chronbach's Alpha = .742

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
D1: Collected information to defeat the counterpart (Perceiving the negotiation as a Zero-sum situation)	4.0722	2.534	.582	.339	.(a)
D1: Collected information to understand the counterpart's needs (Perceiving the negotiation as a Variable-sum situation)	4.1598	2.498	.582	.339	.(a)

Correlations among the subscales

Before starting the analyses for testing the theory's hypotheses, I calculated cooperating and competing styles and each of the four independent variables for each deal. The subscales are significantly associated with each other across situations. Competitive style in the first negotiation situation (D1) is correlated significantly with competitive styles across the second (D2), third (D3), and fourth (D4) negotiation situations. The same is true for the cooperative negotiation style for the first negotiation situation; it significantly correlates with cooperative styles of the other three negotiation situations. This validates the sub-scales as measures of negotiation-styles within and across situations, which is an indication of adaptability if it matches the negotiation type. The same is true for perceptions of the situational factors. Please find the correlation matrix in Table 3.

Table 3

Correlations among subscales

		D1: Competitive style	D1: Cooperative style	D1: Perceiving Counterpart as Competitive	D1: Perceiving the situation as VS	D2: Competitive Style	D2: Cooperative Style	D2: Perceiving Counterpart as Competitive	D2: Perceiving the situation as VS
D1: Competitive style	**Pearson Correlation**	**1**	**.14 (.073)**	**.09 (.251)**	**-.16 (.040) ***	**.77 (.000)****	**.03 (.671)**	**.07 (.373)**	**-.003 (.966)**
	N		**167**	**167**	**167**	**164**	**163**	**158**	**163**
D1: Cooperative style	**Pearson Correlation**		**1**	**.32 (.000)****	**.11 (.182)**	**.14 (.082)**	**.62 (.000)****	**.14 (.075)**	**.084**
	N			**167**	**167**	**163**	**163**	**158**	**163**
D1: Perceiving Counterpart as Competitive	**Pearson Correlation**			**1**	**.21(.007)****	**.04 (.611)**	**.24 (.002)****	**.68 (.000)****	**.06 (.486)**
	N				**167**	**163**	**163**	**158**	**163**
D1: Perceiving the situation as VS	**Pearson Correlation**				**1**	**-.13 (.111)**	**.27 (.000) ****	**.13 (.120)**	**.38 (.000) ****
	N					**163**	**163**	**158**	**163**
D2: Competitive style	**Pearson Correlation**					**1**	**.04 (.614)**	**.03 (.754)**	**.05 (.534)**
	N						**163**	**158**	**163**
D2: Cooperative Style	**Pearson Correlation**						**1**	**.18 (.028)***	**.03 (.749)**
	N							**158**	**163**
D2: Perceiving Counterpart as Competitive	**Pearson Correlation**							**1**	**-.0 (.981)**
	N								**158**
D2: Perceiving the situation as VS	**Pearson Correlation**								**1**

Table 3 (Continued)

		D3: Competitive Style	D3: Cooperative Style	D3: Perceiving Counterpart as Competitive	D3: Perceiving the situation as VS	D4: Competitive Style	D4: Cooperative Style	D4: Perceiving Counterpart as Competitive	D4: Perceiving the situation as VS
D1: Competitive style	**Pearson Correlation**	**.77(.000)****	**.17(.028) ***	**.09(.267)**	**.06(.430)**	**.73 (.000)****	**.19(.018)***	**.04 (.585)**	**.01 (.923)**
	N	**165**	**164**	**164**	**163**	**159**	**158**	**158**	**156**
D1: Cooperative style	**Pearson Correlation**	**.06 (.469)**	**.50(.000)****	**.20 (.012)***	**.11 (.162)**	**.18 (.024)***	**.51(.000)****	**.27(.001)****	**.13 (.100)**
	N	**164**	**164**	**164**	**163**	**158**	**158**	**158**	**156**
D1: Perceiving Counterpart as Competitive	**Pearson Correlation**	**.11(.164)**	**.12 (.117)**	**.52 (.000)****	**-.01(.935)**	**.03 (.704)**	**.19 (.018)***	**.62(.000)****	**-.03 (.758)**
	N	**164**	**164**	**164**	**163**	**158**	**158**	**158**	**156**
D1: Perceiving the situation as VS	**Pearson Correlation**	**-.10 (.207)**	**.15(.063)**	**.10 (.225)**	**.19(.017)***	**-.17(.033)***	**.17(.036)***	**.22(.006)****	**.27(.001)****
	N	**164**	**164**	**164**	**163**	**158**	**158**	**158**	**156**
D2: Competitive style	**Pearson Correlation**	**.73(.000)****	**.22(.006)****	**.07 (.372)**	**.10 (.205)**	**.74 (.000)****	**.20(.015)***	**.03 (.739)**	**-.04 (.614)**
	N	**162**	**160**	**160**	**159**	**159**	**157**	**157**	**155**
D2: Cooperative Style	**Pearson Correlation**	**.01 (.900)**	**.50(.000)****	**.12 (.128)**	**.11 (.178)**	**.07 (.389)**	**.46(.000)****	**.26(.001)****	**.15 (.057)**
	N	**160**	**160**	**160**	**159**	**157**	**157**	**157**	**155**
D2: Perceiving Counterpart as Competitive	**Pearson Correlation**	**.12 (.140)**	**.01 (.892)**	**.45 (.000)****	**-.11 (.159)**	**.01 (.908)**	**.10 (.243)**	**.47(.000)****	**-.02 (.795)**
	N	**155**	**155**	**155**	**154**	**152**	**152**	**152**	**150**
D2: Perceiving the situation as VS	**Pearson Correlation**	**.00 (.979)**	**.10 (.224)**	**.11 (.171)**	**.24(.003)****	**-.03 (.753)**	**.05 (.543)**	**.09 (.245)**	**.18(.026)***
	N	**160**	**160**	**160**	**159**	**157**	**157**	**157**	**155**
D3: Competitive style	**Pearson Correlation**	**1**	**.15 (.050)***	**.02 (.776)**	**.07 (.393)**	**.81(.000)****	**.19(.017)***	**.02(.793)**	**-.08 (.325)**
	N		**165**	**165**	**164**	**161**	**159**	**159**	**157**
D3: Cooperative style	**Pearson Correlation**		**1**	**.23 (.004)****	**.14 (.084)**	**.16 (.041)***	**.72(.000)****	**.23(.003)****	**.08 (.296)**
	Sig. (2-tailed)								
	N			**165**	**164**	**159**	**159**	**159**	**157**
D3: Perceiving Counterpart as Competitive	**Pearson Correlation**			**1**	**.09 (.272)**	**-.11 (.175)**	**.16(.049)***	**.72(.000)****	**-.05 (.579)**
	Sig. (2-tailed)								

	N	164	159	159	159	157
D3: Perceiving the situation as VS	Pearson Correlation	1	.07 (.402)	-.04 (.617)	.05 (.500)	.29(.002)**
	N		158	158	158	157
D4: Competitive style	Pearson Correlation		1	.21(.007)**	-.09 (.283)	.02 (.844)
	N			159	159	157
D4: Cooperative style	Pearson Correlation			1	.29(.000)**	.09 (.279)
	N				159	157
D4: Perceiving the counterpart as competitive	Pearson Correlation				1	.01 (.935)
	N					157
D4: Perceiving the situation as VS	Pearson Correlation					1

* Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

To measure the control variable, social desirability, I used a short version of the Marlowe-Crowne (1964) scale, the standard scale to measure social desirability (Blake, Valdiserri, Neuendorf, & Nemeth, 2006). Because the original scale of Marlowe-Crowne is long and contains 33 items, Fisher and Fick (1993) tested the validity of eight shorter forms provided by Reynolds (1982), Ramanaiah et al. (1977), and Strahan and Gerbasi (1972). Their empirical testing validated that the 10-items short version provided by Straham and Gerbasi (1972) is the scale of choice as it scores high on reliability. In the original study by Strahan and Gerbasi (1972) the short 7 items version had sufficient reliability ranging from 0.6 to 0.8 for different samples. I used this version to reduce respondents' boredom. Please find the scale's items in Appendix D.

Materials

The short scenario for the distributive type, that I used is adopted from "acquiring the company," a classical simulation provided in Bazerman's classical work that has produced the same results consistently (Bazerman & Chugh, 2006). I modified the original version to a shorter one to fit the purposes of my study. Still the short scenario asked participants to offer a share price ranges from $0 - $100. This was to acquire the competitor's firm, which is facing troubles. The right option for this situation, as indicated by the authors, is zero, because it is a reversed item. The authors indicate that most executives fall for this trap repeatedly and choose a value close to hundred dollars, and only small percentages of real CEO's could make the right offer over the many years that this simulation was used. Therefore, it is a challenging scenario to test novel negotiators' perception of the zero-sum type. The scenario was included in the online survey.

For the integrative type, I used a short variable-sum situation with a possible mutual outcome. I designed the scenario with complete information about own and counterpart's options to overcome the information dilemma in negotiations (Murnighan, Babcock, Thompson, & Pillutla, 1999). This dilemma means that negotiators become more competitive in the case of absence of knowledge about the counterparts options (Murnighan, et al. 1999). In the case of availability of information inexperienced negotiators reach more integrative agreements in variable-sum situations. The responses to this situation determine how the negotiator will plan goals and demands around the many possible solutions for a variable-sum situation. It was included in the online survey.

To test participants' reaction and *adaptability to the counterpart style,* I used two short scenarios that represent episodes from two short negotiation situations. The first represents dealing with a competitive counterpart and the second represents dealing with a cooperative counterpart. I based these two scenarios on possible behaviors of cooperative versus competitive counterparts provided by negotiation experts such as Thompson (2004).

To test the interaction hypotheses I used four simulated deal that represent role-playing exercises. The first simulated deal represents a simple zero-sum one-issue selling situation it is called the Synertech-Dosagen, and is developed by Tinsley (2005). The second represents a variable-sum multi-issue partnership situation in which two companies seek to complete a joint venture agreement. It is a shorter version I adopted from Alpha-Beta negotiation developed by Gladwin (2003). I received this negotiation in class materials of a negotiation course I studied in

2003. It is a public domain exercise distributed by Dispute Resolution Research Center at Kellogg School of Business. I reused the simulation with permission from the instructor of that course, Thomas Tripp. The third represents a zero-sum three-issues selling situation. I developed based on the traditional three commodities game developed by Neu (1989) and Northcraft, Neale, and Early (1994). The fourth deal represents a multi-issue variable-sum situation called Medical-Equipment. That was developed by Tinsley (2007). She permitted using her simulations for my study. Each deal contained general information known for the negotiator and the counterpart, and also confidential information known for one side only.

The four deals had no differences in power between negotiators and counterparts, and I the randomly assigned participants to the roles of buyers and sellers. I instructed them to switch buyers and sellers roles every time they negotiated a new deal: that is to say, if they started as sellers in the first deal, they became buyers in the second deal, sellers again in the third deals, and buyers for the last one. The order of negotiating deals was the same for all negotiators. I also instructed them to change counterparts every time they changed roles and deals. In Table 4, there is a list of the materials and a summary of the procedures I provided for participants.

Manipulation

The manipulation for the pilot and experimental study was simple, because the long negotiation simulations lack manipulation for style of the counterpart. I induced a simple manipulation. I asked participants to be themselves. I also offered a promise of a $100 prize for the highest achiever to in terms of profits. This declaration happened at the beginning of each experiment and is listed in the participation details I handed out to each participant, in Table 4.

Table 4

Procedures and participation details for participants

1. to participate start by taking the online survey at **http://www.hostedsurvey.com/takesurvey.asp?c=Ca**

2. Then you may come to a meeting to participate in negotiation sessions. Negotiating the four deals last for an hour or more. Feel free to choose a time to meet.

3. During this meeting, you will play a role as a buyer or a seller in a negotiation game. You will have 5-15 minutes to read your role and prepare for the negotiation. You will have 10-30 minutes to negotiate each deal as if you were in a real selling or buying situation.

4. After negotiating, you will inform me of the results of the negotiation and your profits from the deal; you will then respond to a short feedback survey. I'll provide the feedback sheet.

5. At the end of the study, there will be one winner of a $100 prize. This winner will be the participant who achieves the highest profits.

6. When all participants finish their role-plays, they will receive a lecture. That lecture is to inform you the accurate solution and the optimal performance for each game and a briefing on effective negotiation techniques and strategies that work for each negotiation.

7. All participants who attend the briefing lecture will receive a certificate to declare their participation in a negotiation-training workshop.

8. All your information and performance scores are confidential and will be anonymous

Please feel free to ask any questions or discuss any concerns with me. You will discover some aspects of your personality and will come to know how you negotiate and how to improve your negotiation style.

Eman ElSheanwy
eman@cbe.wsu.edu

Sample and Procedures of the Pilot Study

The Participants were 20 students recruited from business classes at WSU. They volunteered to participate in the study for extra credit or for practicing negotiations.

Experimental procedures: I gave them the online survey link to answer at. The website provided the IRB approved invitation as the first web page. After a week, I invited them to the lab sessions that included negotiating the four simulated deals, the feedback survey, and discussions to evaluate materials. I assigned them randomly to roles of buyers or sellers. I handed them one simulated deal that included the confidential instructions for their roles before each negotiation round. After each negotiation they provided answers for the feedback survey in the lab. I asked them to provide their feedback on all the items directly to me. I instructed them at the end of the last negotiation round to maintain the confidentiality of the simulations. I provided them with Pizza and a small bit of cash as a "thank-you token."

After receiving the feedback, I adjusted the survey questions in matters pertaining to item order and wording as needed. The changes were done to be certain that the items and experimental procedures were clear and understandable for all participants.

Sample and Procedures of the Experimental Study

Participants— I originally planned to have a sample of 180 undergraduate students at Washington State University. However, I collected data from 199 undergraduate students who volunteered to participate in the study as an optional extra credit provided by their instructor. They all were students of Accounting 231 at the business school. Participants had close characteristics in terms, they all had no experience in negotiations, and they mostly had homogeneous characteristics. A description of participants' characteristics is in Table 5.

Table 5

Sample's Characteristics

Characteristics	Reported data
1. Age Average	20
2. Gender	
a. Male	109
b. Female	70
3. Origin/culture	
a. USA	169
b. India	1
c. Canada	1
d. China	2
e. Japan	2
f. Kenya	1
g. Dominican Republic	
h. Turkey	1
i. Russia	2
j. Indonesia	1
k. USA/Other	1
	3
4. Educational Level	
a. Undergraduate	
b. Graduate	190
	2
5. Major	
a. Business, including finance, IBUS .etc	183
b. Other	9

Procedures: Participants received the pre-surveys to answer them in home. The website started with the IRB approval and the following pages contained the pre-negotiation surveys.

After a week, they came to lab to negotiate the four deals. Before negotiating; I declared that a financial reward would be awarded. The rule for receiving this reward was achieving the

highest profits. Then I assigned participants to roles and dyads randomly and gave them printouts that contained confidential instructions for their roles one at a time before each negotiation. This was to guarantee that members of each dyad did not know each other previously

Each played the role of a buyer or a seller for each of the four deals orderly. I kept the order of the four deals the same for all participants. All participants started together and had no time pressure for reading or playing roles. Some finished all the negotiations in 180 minutes and some took longer. Time varied based on speed of reaching agreements. This was a good indication of participants' engagement in roles as if they were behaving in real negotiations.

After each simulation participants responded to the feedback survey that is included in Appendix C. Participants were instructed to deliver a statement of their final outcomes, and the feedback survey at the end of each deal. They repeated the same process for each deal. The same procedures were repeated on batches of 20 or more students at a time.

When the participants' number exceeded the planned sample size I stopped the experiment. I debriefed all participants from the two studies. I provided a short lectured on negotiation techniques that work for each situation. I also declared the goals of my study and emphasized that competing does not always work in real life situations. I emphasized the fact that cooperation is needed to build relations with counterparts in variable-sum situations. Declaring the goals at the end helped in keeping confidentially of the experiments.

Agenda for Future Research

The study is the first step in a rich agenda for future research. There is a wide array of situational factors and personality traits that can be added to enrich the theory and figure out a complete personality profile of each negotiator: adaptable, competitive, or cooperative. The

successor study to this one is to test the moderating effect of a significant situational factor. This factor is future likelihood of dealing with the same counterpart or its constituencies after the negotiation process. Investigating this situational factor requires investigating the personality trait that it activates which is consideration of future consequences, this trait will help to differentiate negotiators' long- versus short-term orientation (Strathman et al., 1994) and its effect on negotiators' adaptability. I collected data for this purpose during the data collection for this study.

It will be interesting to explore the interactions using more personality traits, and either the same or additional situational factors. These traits are: locus of control, risk-seeking-impulsivity, anxiety, open-mindedness, and emotion-based decision-making on negotiation adaptability. These traits were activated by behavioral decision-making situations that involve resource sharing and information processing as indicated from previous studies conducted in the decision-making and economic fields (e.g. Dickman & Meyer, 1988). Thus they are related to negotiation situations and I expect to find meaningful results when testing their interaction with some situational factors and negotiation adaptability. For instance, I expect that risk-seeking, impulsivity, emotion-based decision-making, and anxiety should have negative association with adaptability. Internal locus of control and open-mindedness should positively associate with adaptability. More situational factors may have meaningful moderating effects: deadlines, importance of the negotiated resources for the parties, previous relationships between parties, etc.

To build a database for future research investigation, it is wise to collect responses of more related traits during the data collection process. For this purpose, I asked participants to volunteer to respond to scales of the afore-mentioned traits adopted from the International

Personality Item Pool (IPIP). The IPIP is a valuable source of scales for such traits that has been validated cross-culturally by Goldberg and others (2006). A list of the scale items can be found at http://ipip.ori.org. The website is a collaborative research website for researchers in personality from different countries. The website provides scales free of charge for researchers. Please find the scales of the traits for future research in Appendix F. I will discuss and analyze the responses collected using the IPIP scales in a follow-up study.

CHAPTER FOUR

RESULTS

This chapter provides the study's results. The first section provides a brief description of the conclusion of the pilot study. The second section provides results for testing the main-effect hypotheses. The third section provides results of testing the interaction-effect hypotheses. I provided a summary for each section at its end to exhibit all the results.

Section 1

The pilot study

The pilot study went as planned. I gave 20 students the online survey. After at least a week, they came to the meeting hall to negotiate four deals with counterparts. I assigned each negotiator to a counterpart randomly.

To check for items comprehension, I asked them to evaluate different layouts of the questions and if they understood the items of each scale. I asked them to pay closer attention to the final feedback survey to test their understanding of the new items. Based on their comments, I modified the appearance and layout of the online and the feedback surveys.

Section 2

Results of testing the main effects of personality traits

To test the main effect hypotheses I used two methods. First, I used the four short scenarios provided in the online survey to measure how negotiators prepare goals and behaviors before negotiating. These items isolate the main effects of each situational factor on negotiation adaptability prior to the experiment. I checked for correlation before conducting ANOVA to test

the main effects. The correlation matrix for all the variables of the pre-experiment analysis is in Table 6.

Few correlations are significant. Social desirability is negatively associated with reciprocity orientation $r = -.276$, $p < .05$, $N = 171$. This highlights the controlling effect of social desirability. Also, reciprocity orientation is negatively associated with adaptation to counterparts' style, $r = -.179$, $p < .01$, $N = 174$. This supports the assumption that reciprocity orientation leads to lower adaptability to the counterpart styles.

Table 6

Correlations among personality traits and adaptability for each situational factor

		Cross-Type Adaptability	Cross-Counterparts Adaptability	Social Desirability	Mastery Orientation	Performance Orientation	Reciprocity Orientation
Cross-Type Adaptability	Pearson Correlation	1	-.01(.860)	-.08(.278)	.09(.389)	-.10(.362)	-.02(.810)
	N		174	171	89	84	174
Cross-Counterparts Adaptability	Pearson Correlation		1	.02 (.863)	-.14 (.198)	.13 (.234)	-.18 (.018)*
	N			171	89	84	174
Social Desirability	Pearson Correlation			1	.03 (.778)	.15 (.184)	-.27(.000)**
	N				87	83	171
Mastery Orientation	Pearson Correlation				1	.(a)	-.09(.382)
	Sig. (2-tailed)					.	
	N					0	89
Performance Orientation	Pearson Correlation					1	-.04(.715)
	N						84
Reciprocity Orientation	Pearson Correlation						1
	N						

* Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed)

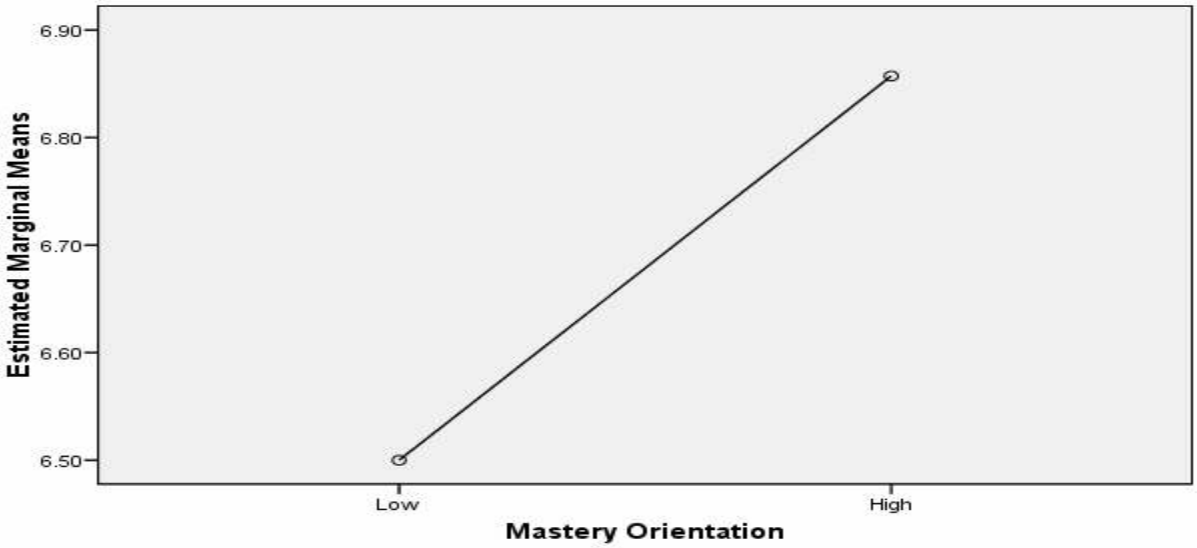
2. A. Results for testing hypothesis one-A

I conducted a number of ANOVA to test Hypothesis *1a. Mastery goal-orientation associates positively with negotiation adaptability.*

The pre-experiment short scenarios indicate self-reported adaptability. ANOVA results show that the main effect of mastery orientation on scores of adaptability for the pre-experiment two short scenarios $F(1, 87) = 2.410$, $p = .124$ is not significant at the .01 level. However, the hypothesis should not be disregarded because the F value is larger than 1 (Nunnally and Brenstien, 1999) and the probability is so close to the .01 level. Some researchers consider probability that is less than .20 significant as indicated from the statistics coach of SPSS (SPSS 15.0, 2007). It simply indicates the probability that the hypothesis is supported for 80% of the population. For the main effect of mastery, the probability is 87.6%, which is a reasonable probability for human research studies.

The effect of mastery on self-reported adaptability is in the predicted direction. High mastery leads to higher adaptability as indicated in graph (7). An aggregated score of six out of ten is a high score of self-reported adaptability, given that adaptable negotiators are rare. This means that mastery leads to high adaptability and individuals scoring higher on mastery orientation are better adaptable compared to those lower on mastery orientation based on self-reported short scenarios. The complete results for this part are in Appendix H.1.

Graph (7): The Effect of Mastery on Self-reported Adaptability



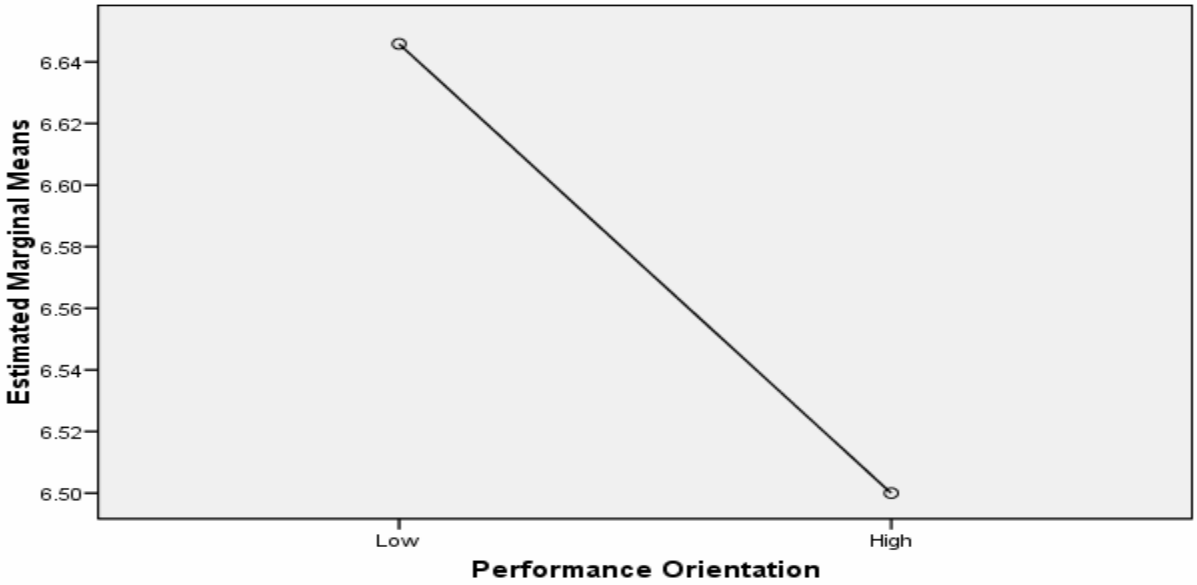
2. B. Results for testing hypothesis one-B

I repeated the same procedures to test hypothesis 1b: *Performance-goal orientation is negatively associated with negotiation adaptability.*

The results show that performance orientation does not have a significant main effect on perception of the situation type for the zero- or variable-sum scenarios. The effect of performance on the aggregated score of self-reported adaptability is not significant F (1, 80) = .347, p = .557.

Interestingly, graph (8) shows that negotiators scoring high on performance orientation are less adaptable compared to those low on performance orientation as assumed in the theory of negotiation adaptability. The complete results for this part are in Appendix H.2.

Graph (8): The Effect of Performance orienation on Self-reported adaptability



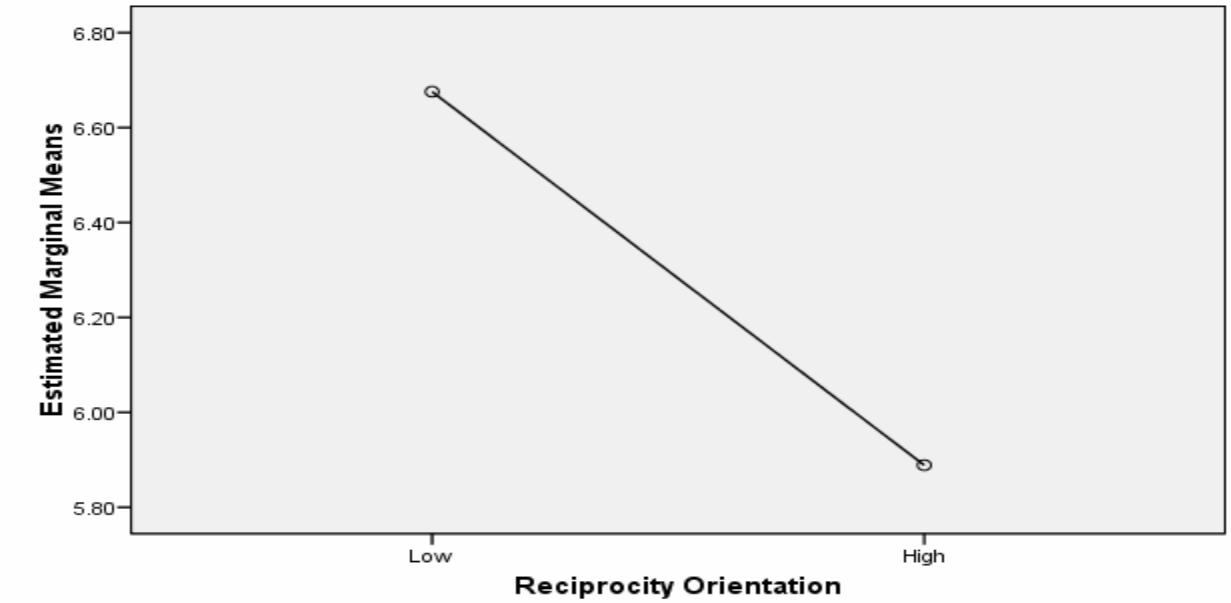
2. C. Results for testing hypothesis two

To test hypothesis 2: *Reciprocity orientation negatively associates with adaptability;* I conducted ANOVA to test the main effect of reciprocity orientation (RO) on self-reported adaptability from the short scenarios. This self-reported adaptability is the aggregated decisions participants made in responding to a cooperative and a competitive counterpart.

The results show that RO has significant main effect on self-reported negotiation adaptability $F(1, 172) = 5.686$, $p = .018$. This is considered a significant effect because p is $< .05$.

In agreement with the predicted direction, graph (9) shows that participants scoring high on RO were less adaptable compared to those low on RO. This supports hypothesis two and the theory of negotiation adaptability. The complete results for this part are in Appendix I.

Graph (9): The Effect of Reciprocity Orientation on self-reported Adaptability to Competitive and Cooperative Counterparts



Summary of Section 2

The results for testing the main effect hypotheses are mostly in the predicted direction as indicated from Table 7.

Table 7
Summary of the results of testing the main effect hypotheses

Hypothesis	DF	F-Value	P-Value	Direction
1.a. Mastery goal-orientation associates positively with negotiation adaptability.	1, 87	2.410	(.124)	As predicted
1.b. Performance-goal orientation is negatively associated with negotiation adaptability.	1, 80	0.347	(.557)	As predicted
2. Reciprocity orientation negatively associates with adaptability	1,172	5.686	(.018)	As predicted

Section 3

Results for testing the interaction Hypotheses

3. A. Testing Hypothesis three-A

The first interaction to test is expressed in H3a: *The positive association between mastery goal-orientation and negotiation adaptability will be stronger in variable-sum negotiations than in zero-sum negotiations.* To test this hypothesis I conduced a repeated measures ANOVA to contrast the interactions in zero-sum versus variable-sum negotiations.

Adaptability across zero-sum situations means competing more than cooperating. Adaptability across variable-sum situations means cooperating more than competing. To calculate the average of cross-situations adaptability, I calculated the average of competing more in the two zero-sum situations and the average of cooperating more in the two variable-sum situations. Using these scores, I conducted a repeated-measures ANOVA controlling for social desirability by adding it as a covariate. The complete results for this part are in Appendix J.

The results of the within-subject analysis show that the interaction between mastery and perceiving the situation type is significant for the first zero-sum negotiation $F(2, 60) = 4.221$, $p < .05$.

The interaction between type-perception of deal-four that represents the second variable-sum negotiation, and mastery is also significant $F(2, 60) = 2.484$, $p < .01$. Please find the results of the within-subject analysis in Table 8.

Table 8

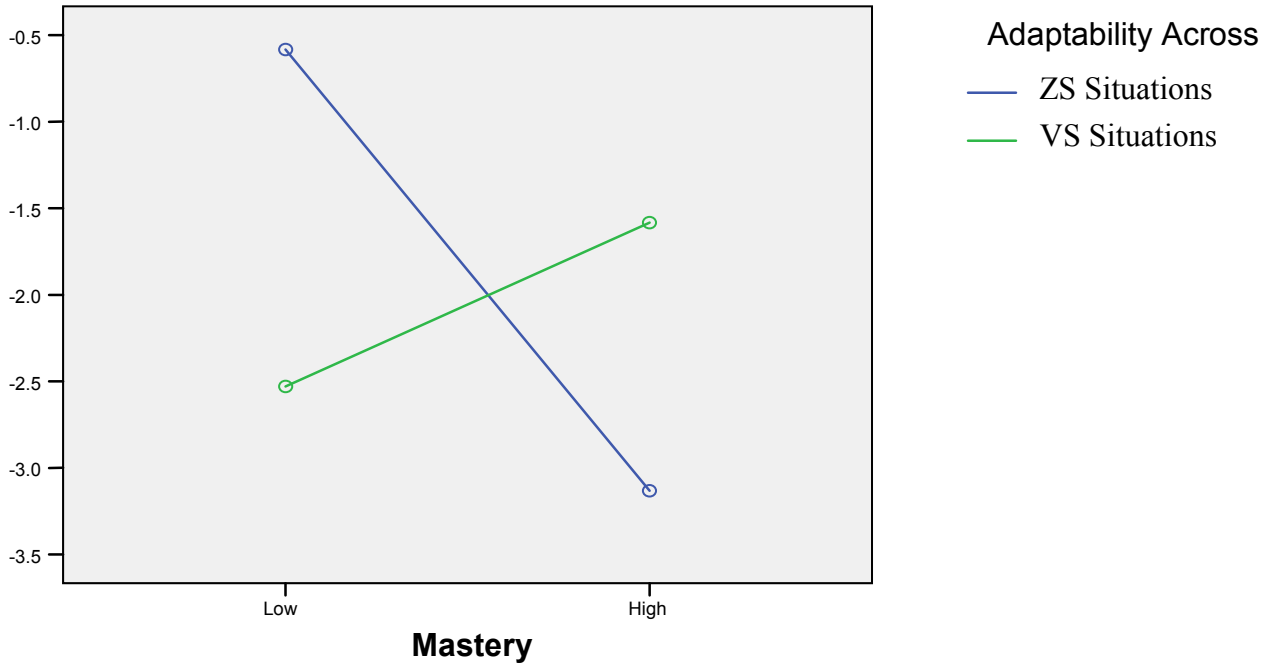
The within subject analysis of the interaction effects between mastery and perception of the negotiation type across zero-sum versus variable-sum negotiations

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type [a]	Greenhouse-Geisser	.464	1	.464	.018	(.894)
Type * Mastery	Greenhouse-Geisser	35.917	1	35.917	1.394	(.242)
Type * Mastery * SitPer1 [b]	Greenhouse-Geisser	217.490	2	108.745	4.221	(.019)
Type * Mastery * SitPer2 [C]	Greenhouse-Geisser	70.197	2	35.099	1.362	(.264)
Type * Mastery * SitPerc3 [d]	Greenhouse-Geisser	46.452	2	23.226	.901	(.411)
Type * Mastery * SitPer4 [e]	Greenhouse-Geisser	128.018	2	64.009	2.484	(.092)
Error(Type)	Greenhouse-Geisser	1545.953	60	25.766		

[a] Type represents the two conditions of the within-subject design, the first is the zero-sum type and the second is the variable-sum type.
[b] SitPer1 is the perception of the negotiation type for the deal-one that represents the first zero-sum negotiation.
[C] SitPer2 is the perception of the negotiation type for deal-two that represents the first variable-sum negotiation.
[d] SitPer3 is the perception of the negotiation type for deal-three that represents the second zero-sum negotiation.
[e] SitPer4 is the perception of the negotiation type for deal-four that represents the second variable-sum negotiation.

Students with high mastery orientation were more cooperative in variable-sum situation compared to participants with low mastery orientation that were more adaptable across zero-sum situation as indicated from graph (10). This supports hypothesis Three (a): mastery-oriented negotiators are more able to adapt their negotiation styles across variable-sum situations than to zero-sum situations.

Graph (10): The moderating effect of perception of the situation type on the relationship between mastery and adaptability across-situations



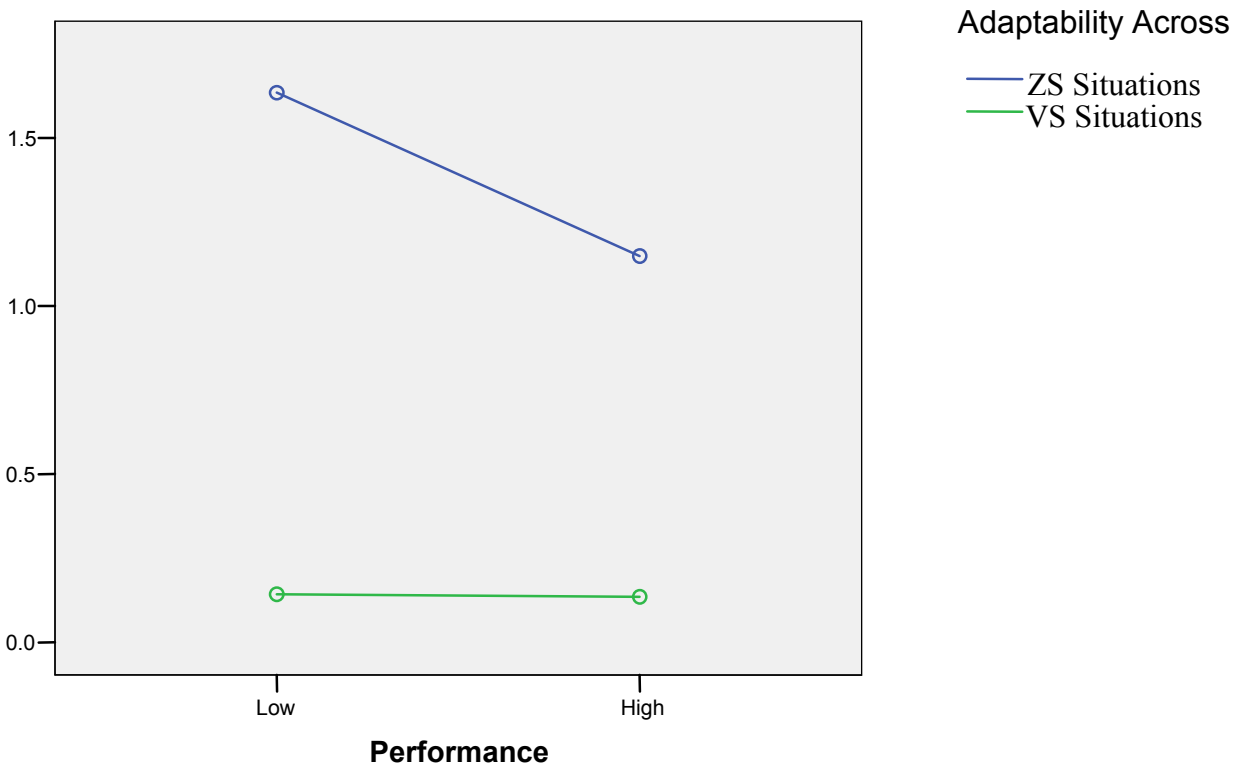
3. B. Results of testing hypothesis three-B

I conducted a series of analyses to test hypothesis three-B: *The negative association between performance goal-orientation and negotiation adaptability will be stronger in zero-sum negotiations than in variable-sum negotiations.*

Results of the repeated measures ANOVA show that the interaction between performance orientation and perception of the negotiation type has a significant effect on cross-situations adaptability for the third negotiation situation only $F(1, 46) = 3.319$, $p < .01$. The other interactions had close to significant results, for instance the interaction between performance and type perception for the first negotiation situation is equal $F(1, 46) = 1.1831$, $p = .183$. The same interaction for the second negotiation situation is equal $F(1, 46) = 1.724$, $p = 196$. There were not enough degrees of freedom to find significance or appropriately calculate all the interactions involved.

When I calculated the interactions included in the hypothesis only without the three-way interactions or the main effects I did not find any significant results to support the hypothesis. Therefore, it is better to ignore the results for this hypothesis for this study and repeat it in future studies with enough sample size. However, the effects are in the predicted direction. Graph (11) shows that participants high on performance orientation are more adaptable across zero-sum situations. The complete results for this part are in Appendix K.

Graph (11): The moderating effect of perception of the situation type on the relationship between performance and adaptability



3. C. Results for testing hypothesis four

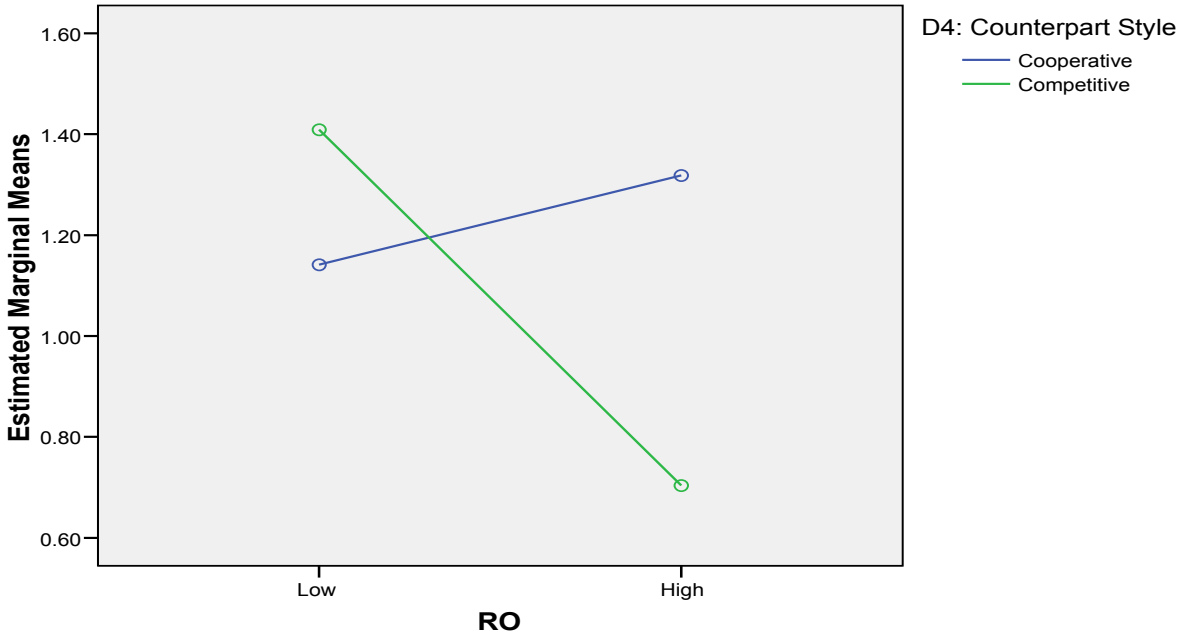
The fourth hypothesis is *the negative association between reciprocity orientation and negotiation adaptability will be stronger when the counterpart is competitive than cooperative.*

For this part, the counterpart style is measured as the negotiator's perception of the counterpart style, which is measured by the subscales explained when presenting the reliability check. The negotiator's perception of the counterpart style is what directs his/her reactions and styles during the negotiation process.

I conducted ANOVA analysis to test the effect of reciprocity orientation on overall adaptability across the four deals. I calculated the score of adaptability as indicated in the methods part. I used the counterpart style from the last deal. Participants' perception of the counterpart style at the last deal should be the most accurate one, because they have it after negotiating for three times already and they should have known what is competitive and what is cooperative.

ANOVA results show that the interaction between reciprocity orientation and perception of the counterpart's style has the only significant effect on adaptability $F(1, 131) = 2.767$, $p < .01$. The effect of the interaction between reciprocity orientation and counterpart's style on adaptability is clear in graph (12). It is easier for participants with high reciprocity orientation to adapt in front of cooperative counterparts. These results are in the predicted direction. The complete results are in Appendix L.

Graph (12): The moderating effect of perception of the counterpart style on the relationship between reciprocity orientation and adaptability



Summary of section 4 results

Results of testing the interaction hypotheses are aggregated in Table 9.

Table 9
Summary of testing the interaction hypotheses

HYPOTHESIS	DF	F-VALUE	P-VALUE	DIRECTION
3. a. The positive association between mastery goal-orientation and negotiation adaptability will be stronger in variable-sum negotiations than in zero-sum negotiations.	2, 60	1.362 to 4.221	(.019) to (.09)	As predicted
3. b. The negative association between performance goal-orientation and negotiation adaptability will be stronger in zero-sum negotiations than in variable-sum negotiations.	1, 46	1.7 to 3.319	(.075) to (.196)	Not assured
4. The negative association between reciprocity orientation and negotiation adaptability will be stronger when the counterpart is competitive than cooperative.	1, 131	2.767	0.01	As predicted

CHAPTER FIVE

DISCUSSION, LIMITATION, AND FUTURE RESEARCH

Negotiators' adaptability is shaped by a continuum interaction. Personality traits are the precursors that shape the negotiator's cognitive appraisal of the common situational factors that by turn may skew that cognitive appraisal toward one end or another. Such that a negotiator with mastery-goal orientation focuses on the process and reaches appropriate outcomes, whereas, a negotiator with high performance-goal orientation seeks winning through competition, focusing only on the outcome. A negotiator with high reciprocity orientation seeks personal respect and thus is highly sensitive to the competitive counterpart; it is easier for him or her to deal with a cooperative counterpart for perceiving its style as more respectful. These assumptions were largely true. Two of the three main effect hypotheses and two of the interaction effect hypotheses are accepted as indicated in Table 10.

The two personality traits affect negotiators' style across situations because they are activated differently by each common situational factor of the negotiation. This works through the following mechanism, dispositional goal orientation forms the negotiators' cognitive appraisal of the negation type to adapt their styles appropriately. High mastery-oriented negotiators have accurate cognitive appraisal and can perceive the negotiation type and adapt appropriately. But they are more able to adapt across variable-sum versus zero-sum negotiation situations, because variable-sum situations provide a larger space for agreements. Similarly, the main effect of reciprocity orientation was moderated by the counterpart style.

Table 10
Summary of decisions to accept or reject the main effect hypothesis

HYPOTHESIS	DECISION
1. a. Mastery goal-orientation associates positively with negotiation adaptability.	Accept
1. b. Performance-goal orientation is negatively associated with negotiation adaptability.	Reject
2. Reciprocity orientation negatively associates with adaptability	Accept
H3a: The positive association between mastery goal-orientation and negotiation adaptability will be stronger in variable-sum negotiations than in zero-sum negotiations.	Accept
3. b. The negative association between performance goal-orientation and negotiation adaptability will be stronger in zero-sum negotiations than in variable-sum negotiations.	Reject
4. The negative association between reciprocity orientation and negotiation adaptability will be stronger when the counterpart is competitive than cooperative.	Accept

The main effects

Mastery goal orientation has significant direct effect on adapting to the negotiation type in isolation of the other situational factors. Results of testing the main effect of mastery goal orientation on self-reported adaptability to the negotiation type, isolated from other variables, were significant. This means that based on the results of this study, mastery orientation has main effect on adaptability. Based on the results of the sample of this study I accept hypothesis One (a): mastery orientation has positive main effect on adaptability.

The main effect of performance orientation on adapting to the negotiation type is not significant. I should not support the fact that performance has main effect on perception of the

situation type. Even though the resulted graph shows that, the effect of performance on adaptability is in the predicted direction; high performance leads to lower adaptability across negotiation situations. Hypothesis One (b) is not validated based on the results of this study. This may be due to many reasons, first the sample size may have not been large enough to provide significance; this is supported by the graph that showed the effect in the predicted direction with no significance. Second, the moderating effects may have suppressed the main effects. Third, manipulation's interaction with traits may have caused the results to be insignificant. I have to reject hypothesis One (b) based on the results of this study.

The main effect of reciprocity orientation on adapting to the counterpart's style is significant. Negotiators high on reciprocity orientation were less adaptable compared to those low on reciprocity orientation. This supports the adaptability theory's second hypothesis. Negotiators who scored high on reciprocity orientation are less adaptable across situations. For this I accept hypothesis Two: reciprocity orientation has negative effect on adaptability.

To conclude the main effects mostly support the negotiation adaptability theory. There are main effects of personality traits on the ability to adapt own style appropriately to the negotiation type and the counterpart style. The two major common situational factors exist in all business negotiations within- and cross-culture. Personality traits shape negotiators' adaptability and it is appropriate to conclude that personality traits shape negotiators' style beyond cultural differences.

The moderating effects

Testing hypothesis Three (a) produced significant results, perception of the negotiation type moderates the main effect of mastery on cross-situation negotiation adaptability. The

within-subject results were significant for the first zero-sum situation and the second variable-sum situation. The semi-significant results for the second zero-sum and the second variable sum situations may have been caused by the limited degrees of freedom, or possibly by the carry over effect of perceptions of the previous deals in order. Testing the carryover effects was significant, perception of negotiation type of the first negotiation type affected participants' perception of type of the subsequent negotiations. Possibly, the time lag between the four deals was too short to prevent the carryover effect. The results are significant for such an exploratory study, and they support my assumption that the interaction between mastery orientation and perception of the situation type leads to better adaptation in variable-sum versus zero-sum situations. Based on these results I accept hypothesis Three (a).

Testing hypothesis Three (b) shows significant results for the second zero-sum situation only. The interaction between performance orientation and perception of the negotiation type is in the predicted direction. The graphs show that negotiators who scored high on performance orientation are less adaptable across variable-sum situations, and more adaptable across zero-sum situations. There were no other significant effects to support the hypothesis. For the circumstances of this study, it is not possible to validate the effect of the interaction between performance orientation and perception of the negotiation type on adaptability across situations. Based on the results of this study it is likely to reject hypothesis Three (b). However, I recommend retesting it with a larger sample size in future studies.

To sum, it is hard to reject the interaction effect between goal orientation and perception of the situation type on adaptability. The significant results for one dimension of goal orientation, mastery, support that the other dimension, performance, should produce results in the opposite direction. However, the limited sample size and the nature of this study may have caused the

insignificant results for the main and moderating effects hypotheses for performance orientation. The limitations inherited in this study may have caused this insignificance, but they should not limit the support for the negotiation adaptability theory.

Testing the interaction between reciprocity orientation and perception of the counterpart style produced significant results. Overall, the interaction between reciprocity and perception of the counterpart's style has significant moderating effect on adaptability across all zero- and variable-sum situations. Negotiators high on reciprocity orientation were more adaptable in front of cooperative counterparts and less adaptable in front of competitive counterparts. This supports the hypothesis that competitive counterparts make high reciprocity oriented negotiators emotional and less adaptable. Those negotiators are also emotionally driven to be more cooperative in front of cooperative counterparts. These results support hypothesis Four, and I accept it based on the results of this study.

The negotiation adaptability instrument

One more important result of my study is validating the instruments for negotiation adaptability. The two subscales of competitive and cooperative style, at Table 5, represent the two subscales of the negotiation adaptability instrument. It should be used to know whether negotiators are always competitive or cooperative. If the negotiator scores equally on the two scales, then he/she is an adaptable negotiator. If the negotiator scores higher on the competitive scale, then he or she is always competitive and unable to adapt in variable-sum negotiations. If the negotiator scores higher on the cooperative style subscale, then he or she is always cooperative and cannot adapt in zero-sum situations.

The instrument is a tool for estimating negotiation style of negotiators who did not go through any negotiations yet. It is more suitable for measuring negotiation styles of negotiators who have negotiated at least two deals, one is a zero-sum and one is a variable-sum situation.

This instrument has wide useful practical uses. For instance, it provides a tool to measure negotiation styles of executives to estimate their needs negotiation training and to design negotiation-training programs around these needs. If they are adaptable, they should need minimum level of training. It they are not adaptable, they should receive the appropriate training that may guide them to be more adaptable.

The instrument is a useful tool for selecting negotiators; it provides a mean to test the negotiators' style fit to the job requirements beforehand. It is a tool for top management to estimate negotiation styles of its executives before sending them to important negotiations especially those in different cultures. The instrument goes below cultural differences to measure negotiators' styles based on their individual differences rather than cultural differences, especially if accompanied by the two scales for mastery and reciprocity orientation that should indicate negotiators responses to negotiation types and counterparts. This should be helpful to recognize adaptability of negotiators who did not experience actual triggers of emotionality during the negotiation processes as well as novel negotiators. These were few examples of the many useful applications of the instrument.

The subscale for perception of the situation type, at Table 5, also represents a useful tool to test negotiators' cognitive appraisal of a negotiation's type. This happens through exposing the inexperienced negotiators to a zero-sum and a variable-sum deal that is being negotiated by an experienced negotiator. The inexperienced negotiators' responses to the subscale should determine whether they had firm appraisal of each negotiation as a zero-sum situation in which

they should compete, or, as a variable-sum situation in which they should cooperate. In the case, management can direct negotiators to situations they fit in before hand. If negotiators were able to perceive the negotiation type accurately, then they are able to adapt and can fit in the two types of negotiation situations.

Negotiation researchers can use the subscales of the instrument to estimate negotiators' styles within and across negotiation situations. It should be used with equal effectiveness in lab setting as well as in field surveys. It provides a measure that goes beyond the tradition to use negotiation outcome to determine cooperativeness or competitiveness of negotiators during the negotiation process. Negotiators can achieve high outcomes by crushing their counterparts though harsh competition in variable-sum situations. This destroys any possibilities for building relations with the counterpart and mostly results in building a bad reputation for the negotiator and his or her firm. The instrument is a tool to discover whether negotiators achieved their outcomes using the appropriate style within each situation. Knowing negotiators' style is an indication of their effectiveness in future negotiations.

Limitation of the Study

The interactions that take place during the negotiation process are numerous and each affect the negotiator's style and outcome. For this, there are many limitations of this study. Some, I induced to control for their possible effects. Others are normal due to the nature of the variables included in the study.

I limited the conditions included in the simulated negotiation deals to provide the accurate negotiation type. The type of these deals ranges between absolute zero-sum and absolute variable-sum situations to limit the effects of the variations in negotiation types. I did not use simulations of mixed nature. I also limited the simulated deals to those that have no power differences between negotiators and counterparts to control for the possible effect of power asymmetry on negotiators' style and outcome. During the pilot study I used an extra simulated deal with power asymmetry and participants were aware of these differences and altered their styles and demands. Even though they were inexperienced negotiators, they could figure out the effects of power asymmetry. For this, I limited the simulated deals to those that have no power differences.

I limited the sample to business undergraduate students to control for the effect of negotiation experience and training on negotiation adaptability. This was to measure the effect of personality traits and their interactions with the situational factors on negotiation adaptability without the nuisance expected from having previous negotiation-training or long term-experience in business negotiations. This limited the variation in the sample to limited level.

I did not control for cultural differences, because the negotiation adaptability theory focuses on the individual differences level, which goes under the cultural differences level as I explained in the introduction.

The limitations that the study variables imposed are the interactions level and the study scope.

The study scope required focusing on the first level two-way interactions only, to keep simplicity. However, some second order interactions are likely in such studies. For instance, I could capture some interaction effects of perception of the situation type of the first zero-sum situation and perception of the second deal that represents a variable-sum deal. Testing such effects requires a huge sample size and longitudinal design, which were not feasible for this study. Possibly, a second level interaction between the two personality traits may have been present in such a study, but it was hard to capture.

The study's nature did not permit to focus on negotiation outcome in relation to adaptability. The study left unanswered questions about whether adaptability leads to high outcome. However, the study redirects attention to focus on negotiator's style during the negotiation process as a measure of adaptability and effectiveness instead of counting on outcome only. Considering negotiation outcome as an exclusive indication of the negotiator's style and effectiveness lacks accuracy. Using style within and across situations as measure of adaptability sheds more light on negotiators' behavior during the process. Negotiators may reach outcomes applying the most wrong styles. If future research I recommend measuring the effect of negotiation adaptability on negotiators' outcome through using a composed measure of adaptability and outcome to indicate long term-effectiveness of negotiators, especially cross-cultural negotiators.

Future Research

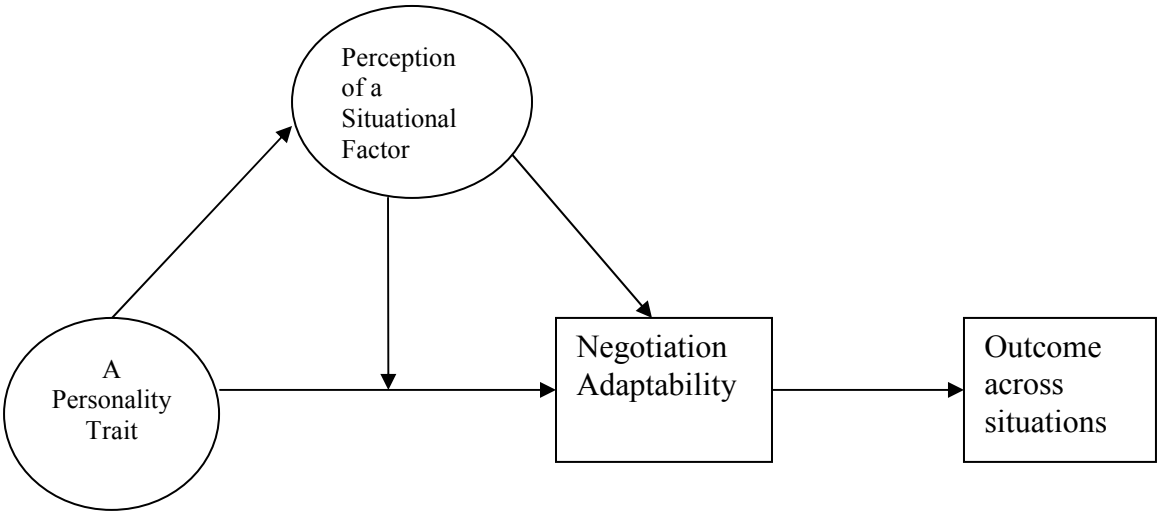
The study is a first step of a long series of research studies. The study's results open the door widely for negotiation research to reconsider investigating individual differences in light of their relativity to situational factors. It also provides a reason why previous research did not find meaningful links between individual differences and negotiators' styles. The situational factors and the manipulation most likely suppressed the main effects of individual differences. Future research should investigate the interaction effects between personality traits and their relative situational factors, besides testing the main effects of each. A new approach should also be adopted in future research, scholars should think of the situational factors of negotiations as both moderators and mediators of personality traits and negotiators' style.

Future investigation of adaptability should extend to include the effect of adaptability on negotiators' outcome. This study did not investigate the effect of adaptability on negotiators' outcome across situations and its effect on negotiators effectiveness. It was not feasible to test all the interactions in one study; however, this is a rich future research area for negotiation scholars.

To continue the search toward providing a personality profile of the adaptable negotiator, I collected some data as I planned to test the effect of other personality traits on negotiation adaptability. I collected data using IPIP scales for emotion-based decision-making, locus of control, anxiety, impulsivity, and open-mindedness. I will test what situational factors affect these traits. Moreover, I will test their association to the activated traits, goal orientation, and reciprocity. I will add more dimensions to complete the adaptability theory. First, I will consider the situational factors as moderators and mediators. Second, I will test the effect of

adaptability on negotiator's outcome. I will investigate the negotiation adaptability theory indicated in Figure 2.

Figure 2
Future development of the theory of negotiation adaptability



Another interesting area for future research is levels of adaptability, this study did not answer to which level negotiators are adaptable. Linking adaptability to burnout rate may answer this important research inquiry. When does adaptable negotiators burnout under stress of dealing with difficult negotiation situations and hard-to-deal-with counterparts. This may indicate when negotiators should get special training to lower burnout and increase their adaptability.

It will be highly beneficial and interesting to test the theory on a sample of true managers from different cultures that will have wide levels of negotiation experience and training. To do this, I plan to conduct a survey on a sample of managers from different cultures to test the same

theory and using the same survey of personality traits and the short situational items that I used in the experimental study.

These were examples of genuine studies that will be most likely publishable and interesting for researchers and practitioners of negotiation. Many more studies will be generated to add more details to form a new-interesting field of negotiation research, adaptability. The combined results of these studies together can build a more comprehensive theory for negotiation adaptability that count for the effects of personality traits versus the effects of negotiation experience and training on adaptability and measures the effect of negotiation adaptability on outcome within and across negotiation situations.

CONCLUSION

Mastery goal orientation and reciprocity orientation are precursors of negotiation adaptability and their interaction with perception of the negotiation type and the counterpart's style shape adaptability across negotiation situations. Each trait is activated through the cognitive appraisal of the situational factor in a manner shapes negotiation style to be competitive or cooperative across negotiation situations. The two main effect hypotheses and two interaction hypotheses for mastery and reciprocity are accepted. These results support that the negotiation situation elects some negotiators and does not elect others. Each negotiator is a fit for certain situations and should be assigned negotiation tasks that he/she fits in more. For this, research on individual differences in negotiations should not neglect the interaction effects across negotiation situations.

The main effect of performance orientation was not significant. Neither was the interaction effect between it and perception of the negotiation type. The two hypotheses for performance were rejected. The main effects of traits may have been suppressed by the strong interaction effects of the situational factors during the negotiation process. The many limitations of the study and the small sample size may have not been enough to support these two hypotheses.

The study delivers the negotiation adaptability instrument. It is useful for many research and practice applications. The instrument is a cultural-free instrument because it is based on individual rather than cultural difference, and hence can be used widely for the field of business negotiations.

Negotiation training should be directed toward fulfilling the training needs of negotiators. These needs should be estimated using the negotiation adaptability instrument. This saves time,

effort, and expenses of negotiation training programs that hold the same staple design for all kinds of negotiators, paying the least attention to their personality traits and what they impose of training needs.

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APPENDIX (A)
THE GOAL ORIENTATION SCALE

The Goal Orientation Scale[4]

Instructions: For each of the statements below, please indicate whether or not the statement is characteristic of you. If the statement is extremely uncharacteristic of you (not at all like you) please circle "1" of the numbers provided to the left of the statement; if the statement is extremely characteristic of you (very much like you) please circle "7" in the space provided. And, of course, use the numbers in the middle if you fall between the extremes.

1 Extremely Uncharacteristic	2 Moderately Uncharacteristic	3 Slightly Uncharacteristic	4 Uncertain	5 Slightly Characteristic	6 Moderately Characteristic	7 Extremely Characteristic

1.	I prefer to do things that I do well rather than things that I do poorly.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
2.	I'm happiest at work when I perform tasks on which I know that I won't make any errors.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
3.	The things I enjoy the most are the things I do the best.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.	The opinions others have about how well I can do certain things are important to me	**1**	**2**	**3**	**4**	**5**	**6**	**7**
5.	I feel smart when I do something without making any mistakes.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
6.	I like to be fairly confident that I can successfully perform a task before I attempt it.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
7.	I like to work on tasks that I have done well in the past.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
8.	I feel smart when I can do something better than most other people.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
9.	The opportunity to do challenging work is important to me.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
10.	When I fail to complete a difficult task, I plan to try harder the next time I work on it.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
11.	I prefer to work on tasks that force me to learn new things.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
12.	The opportunity to learn new things is important to me.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
13.	I do my best when I'm working on a fairly difficult task.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
14.	I try hard to improve on my past performance.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
15.	The opportunity to extend the range of my abilities is important to me.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
16.	When I have difficulty solving a problem, I enjoy trying several approaches to see which one will work.	**1**	**2**	**3**	**4**	**5**	**6**	**7**

[4] The source of this scale is (Button et al., 1996, p: 33).

APPENDIX (B)
Negative Reciprocity Scale

Negative Reciprocity Norm[5]

Instructions: For each of the statements below, please indicate whether or not the statement is characteristic of you. If the statement is extremely uncharacteristic of you (not at all like you) please circle "1" of the numbers provided to the left of the statement; if the statement is extremely characteristic of you (very much like you) please circle "7" in the space provided. And, of course, use the numbers in the middle if you fall between the extremes.

1 Extremely Uncharacteristic	2 Moderately Uncharacteristic	3 Slightly Uncharacteristic	4 Uncertain	5 Slightly Characteristic	6 Moderately Characteristic	7 Extremely Characteristic

1.	If I suffer serious wrong, I'll take my revenge as soon as possible, no matter what the costs.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
2.	I'm willing to invest time and effort to reciprocate an unfair action	**1**	**2**	**3**	**4**	**5**	**6**	**7**
3.	I'm kind and nice if others behave well with me, otherwise it is tit for tat	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.	If someone puts me in a difficult position, I will do the same to him/her	**1**	**2**	**3**	**4**	**5**	**6**	**7**
5.	If someone offends me, I'll offend him/her back.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
6.	If someone is unfair to me, I prefer to give him/her what s/he deserves instead of accepting his/her apologies.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
7.	I would not do a favor for somebody who behaved badly with me, even if it meant foregoing some personal gains.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
8.	If somebody is impolite to me, I become impolite	**1**	**2**	**3**	**4**	**5**	**6**	**7**
9.	The way I treat others depends much on how they treat me.	**1**	**2**	**3**	**4**	**5**	**6**	**7**

[5] The source is (Perugini et al., 2003, P; 277)

APPENDIX (C)
THE NEGOTIATION FEEDBACK SURVEY

Feedback on the Negotiation Process

Please recall your last negotiation/s, remember your impressions and feelings during and after negotiating and answer the following questions by checking a response at the right hand side or circling a number at the left hand side.

Not accurate at all – 1 2 3 4 5 6 7 – Absolutely accurate

Feedback	Deal 1	Deal 2
1. Did you have some planned action/behavior in mind when started your last negotiation?	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
2. If your answer was 4 or higher, please decide which of the following statements represents your planned action/behavior and circle it: 1. "Push the opponent to accept my target, until oriented" 2. "Prevent the opponent from achieving high outcome" 3. "Keep from a loss" 4. "Take the lead and go for the money" 5. "Compromise for the benefit of all" 6. "Agree to any offer from the opponent" 7. "Search for mutually acceptable agreement"	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
3. Do you think that your profit is a fair and just amount of money for you?	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
4. For me negotiation is to bargain and haggle to win a deal, I enjoyed doing so.	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
5. Did you think that the opponent had a kind of planned behavior or action?	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
6. If your answer was 4 or higher, please describe his/her style as you saw it, and circle it: 1. "Push the opponent to accept my target, until oriented" 2. "Prevent the opponent from achieving high outcome" 3. "Keep from a loss" 4. "Take the lead and go for the money" 5. "Compromise for the benefit of all" 6. "Agree to any offer from the opponent" **7.** "Search for mutually acceptable agreement"	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
7. Which of the following statements fits most what you did during your last negotiation, please circle the closest response to you: 1. Start with offering my highest offer and gradually cut it down until I reach my target. 2. Suggest an offer at random for each negotiated issue and hope to find one that the opponent will accept. 3. Start with my lowest offer, and gradually higher it to an acceptable one to the opponent. 4. Stick to one offer during the negotiation and never change it. 5. Endorse only the offer that will be accepted by the opponent. 6. Start the negotiation by acquainting with the opponent and try to know what offer is acceptable to him/her. **7.** Start with an offer higher than my target and lower it down gradually to a moderate offer that the opponent will accept.	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
8. I enjoyed negotiating.	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
9. The outcome I achieved is based on my negotiation skills not on chance.	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**

10. The negotiation was boring; too many details and communications to deal with	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
11. Do you think that the amount you reached is fair and just for the counterpart?	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
12. I tried to collect as much information as I could about the counterpart's target and resistance point to defeat him/her.	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
13. The counterpart was hard to communicate with most of the time.	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
14. The counterpart was an easy going person and did not resist my offers	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
15. It was impossible to understand the counterpart.	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
16. I was annoyed by the opponent's negative comments	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
17. I tried to collect as much information as I could about the counterpart's target and resistance point to understand his/her needs.	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
18. I said what I think to be right, not what the counterpart expect to hear	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
19. I like to maximize my profits at any cost	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
20. The counterpart was uninteresting person and listening to him/her was boring and dull.	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
21. It is essential to get the opponent to respect me in negotiations regardless of any differences	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
22. When the opponent refused my offer I walked away from the negotiation table	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
23. The opponent rarely miscomprehended my words and behaviors	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
24. I never had a situation where I got the opponent out of control and annoyed	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
25. I shared my confidential information with the opponent	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**
26. I could convince the opponent to share his/her confidential information with me	**1 2 3 4 5 6 7**	**1 2 3 4 5 6 7**

Please provide:
Your last name _____ **Opponent's name (#)**_____ (#)_____

Comments_____

_____

_____

Thank You

APPENDIX (D)
THE SOCIAL DESIRABILITY SCALE

The Marlowe-Crowne Social-Desirability Scale[6]

Instructions: Listed below are a number of statements concerning personal attitudes. Read each item and decide whether the statement truly represents you or not by stating whether you consider it True (T) or False (F).

1. ___I'm always willing to admit when I make a mistake.

2. ___I have never been irked when people express ideas very different from my own.

3. ___I have never deliberately said something that hurt someone feelings.

4. ___I like to gossip at times.

5. ___There have been occasions when I took advantage of someone.

6. ___I sometimes try to get even rather than forgive and forget.

7. ___At times I have really insisted on having things my own way

[6] Adapted from (Crowne et al., 1964, p: 23-24).

APPENDIX (E)
A Photocopy of WSU's IRB Approval

WASHINGTON STATE UNIVERSITY

Research Compliance Office

MEMORANDUM

TO: Eman L. ElShenawy
Management & Operations, WSU Pullman(4736)

FROM: Malathi Jandhyala (for) Kris Miller, Chair, WSU Institutional Review Board (3140)

DATE: 31 August 2006

SUBJECT: Approved Human Subjects Protocol - New Protocol

Your Human Subjects Review Summary Form and additional information provided for the proposal titled *"Identifying How Personality Traits and Situational Cues Shape Negotiation Adaptability: An Incorporated Theory of Negotiation Adaptability."* IRB File Number **9283**-a was reviewed for the protection of the subjects participating in the study. Based on the information received from you, the WSU-IRB **approved** your human subjects protocol on **31 August 2006**.

IRB approval indicates that the study protocol as presented in the Human Subjects Form by the investigator, is designed to adequately protect the subjects participating in the study. This approval does not relieve the investigator from the responsibility of providing continuing attention to ethical considerations involved in the utilization of human subjects participating in the study.

This approval expires on 30 August 2007. If any significant changes are made to the study protocol you must notify the IRB before implementation. Request for modification forms are available online at http://www.ogrd.wsu.edu/Forms.asp.

In accordance with federal regulations, this approval letter and a copy of the approved protocol must be kept with any copies of signed consent forms by the principal investigator for THREE years after completion of the project.

Washington State University is covered under Human Subjects Assurance Number FWA00002946 which is on file with the Office for Human Research Protections.

If you have questions, please contact the Institutional Review Board at (509) 335-9661. Any revised materials can be mailed to the Research Compliance Office (Campus Zip 3140), faxed to (509) 335-1676, or in some cases by electronic mail, to *irb@mail.wsu.edu*.

Review Type: NEW
Review Category: XMT
Date Received: 11 August 2006

OGRD No.: NF
Agency: NA

PO Box 643140, Pullman, WA 99164-3140 • 509-335-9661 • Fax: 509-335-1676
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APPENDIX (F)
IPIP SCALES

Optional Scales[7]

Part (1): Emotion-based decision-making

Instructions: For each of the statements below, please indicate whether or not the statement is an accurate indicative of you. If the statement is extremely inaccurate (not at all like you) please circle "1" of the numbers provided to the left of the statement; if the statement is extremely accurate (very much like you) please circle "5." And, of course, use the numbers in the middle if you fall between the extremes.

1 Extremely Inaccurate	2 Moderately Inaccurate	3 Uncertain	4 Moderately Accurate	5 Extremely Accurate

1.	I listen to my feelings when making important decisions	**1**	**2**	**3**	**4**	**5**
2.	I base my goals in life on inspiration, rather than logic	**1**	**2**	**3**	**4**	**5**
3.	I plan my life based on how I feel	**1**	**2**	**3**	**4**	**5**
4.	I believe emotions give direction to life	**1**	**2**	**3**	**4**	**5**
5.	I listen to my heart rather than my brain	**1**	**2**	**3**	**4**	**5**
6.	I plan my life logically (R)	**1**	**2**	**3**	**4**	**5**
7.	I believe important decisions should be based on logical reasoning (R)	**1**	**2**	**3**	**4**	**5**
9.	I listen to my brain rather than my heart (R)	**1**	**2**	**3**	**4**	**5**
10.	I make decisions based on facts rather than feelings (R)	**1**	**2**	**3**	**4**	**5**

Part (2): Locus of Control

Instructions: For each of the statements below, please indicate whether or not the statement is an accurate indicative of you. If the statement is extremely inaccurate (not at all like you) please circle "1" of the numbers provided to the left of the statement; if the statement is extremely accurate (very much like you) please circle "5." And, of course, use the numbers in the middle if you fall between the extremes.

1 Extremely Inaccurate	2 Moderately Inaccurate	3 Uncertain	4 Moderately Accurate	5 Extremely Accurate

1.	I believe that my success depends on ability rather than luck	**1**	**2**	**3**	**4**	**5**
2.	I believe that unfortunate events happen because of bad luck (R)	**1**	**2**	**3**	**4**	**5**
3.	I believe that the world is controlled by a few powerful people (R)	**1**	**2**	**3**	**4**	**5**
4.	I believe some people are born lucky (R)	**1**	**2**	**3**	**4**	**5**
5.	I believe in the power of fate	**1**	**2**	**3**	**4**	**5**

[7] The source is

Part (3): Anxiety

Instructions: For each of the statements below, please indicate whether or not the statement is an accurate indicative of you. If the statement is extremely inaccurate (not at all like you) please circle "1" of the numbers provided to the left of the statement; if the statement is extremely accurate (very much like you) please circle "5." And, of course, use the numbers in the middle if you fall between the extremes.

1 Extremely Inaccurate	2 Moderately Inaccurate	3 Uncertain	4 Moderately Accurate	5 Extremely Accurate

1.	I worry about what people think of me	**1 2 3 4 5**
2.	I am always worried about something	**1 2 3 4 5**
3.	I often worry about things that turn out to be unimportant	**1 2 3 4 5**
4.	I am afraid that I will do the wrong thing	**1 2 3 4 5**
5.	I am easily hurt	**1 2 3 4 5**
6.	I begin to panic when there is danger	**1 2 3 4 5**
7.	I become overwhelmed by events	**1 2 3 4 5**
8.	I get stressed out easily	**1 2 3 4 5**
9.	I rarely worry (R)	**1 2 3 4 5**
10.	I am not embarrassed easily (R)	**1 2 3 4 5**

Part (4): Open-mindedness

Instructions: For each of the statements below, please indicate whether or not the statement is an accurate indicative of you. If the statement is extremely inaccurate (not at all like you) please circle "1" of the numbers provided to the left of the statement; if the statement is extremely accurate (very much like you) please circle "5." And, of course, use the numbers in the middle if you fall between the extremes.

1 Extremely Inaccurate	2 Moderately Inaccurate	3 Uncertain	4 Moderately Accurate	5 Extremely Accurate

1.	I try to identify the reasons for my action	**1 2 3 4 5**
2.	I make decisions only after I have all of the other facts	**1 2 3 4 5**
3.	I am valued by others for my objectivity	**1 2 3 4 5**
4.	I am firm believer in thinking things through	**1 2 3 4 5**
5.	I weigh the pro's and con's	**1 2 3 4 5**
6.	I try to have good reasons for my important decisions	**1 2 3 4 5**
7.	I am valued by my friends for my good judgment	**1 2 3 4 5**
8.	I don't think about different possibilities when making decisions (R)	**1 2 3 4 5**
9.	I don't tend to think things through critically (R)	**1 2 3 4 5**
10.	I don't think about possibilities than the one I like first (R)	**1 2 3 4 5**

Part (5): Impulsivity

Instructions: For each of the statements below, please indicate whether or not the statement is an accurate indicative of you. If the statement is extremely inaccurate (not at all like you) please circle "1" of the numbers provided to the left of the statement; if the statement is extremely accurate (very much like you) please circle "5." And, of course, use the numbers in the middle if you fall between the extremes.

1	2	3	4	5
Extremely Inaccurate	Moderately Inaccurate	Uncertain	Moderately Accurate	Extremely Accurate

Impulsive control

1.	I keep my emotions under control	**1**	**2**	**3**	**4**	**5**
2.	I let others finish what they are saying	**1**	**2**	**3**	**4**	**5**
3.	I demand attention (R)	**1**	**2**	**3**	**4**	**5**
4.	I react intensely (R)	**1**	**2**	**3**	**4**	**5**
5.	I talk even when I know I shouldn't (R)	**1**	**2**	**3**	**4**	**5**
6.	I often make a fuss (R)	**1**	**2**	**3**	**4**	**5**
7.	I shoot my mouth off (R)	**1**	**2**	**3**	**4**	**5**
8.	I am easily excited (R)	**1**	**2**	**3**	**4**	**5**
9.	I blurt out whatever comes into my mind (R)	**1**	**2**	**3**	**4**	**5**
10.	I Barge in on conversations (R)	**1**	**2**	**3**	**4**	**5**
11.	I like to gossip (R)	**1**	**2**	**3**	**4**	**5**

Fun Seeking

1.	I like to behave spontaneously	**1**	**2**	**3**	**4**	**5**
2.	I have persuaded others to do something really adventurous or crazy	**1**	**2**	**3**	**4**	**5**
3.	I am willing to try anything once	**1**	**2**	**3**	**4**	**5**
4.	I like to act on a whim	**1**	**2**	**3**	**4**	**5**
5.	I prefer friends who are excitingly unpredictable	**1**	**2**	**3**	**4**	**5**
6.	I do crazy things	**1**	**2**	**3**	**4**	**5**
7.	I enjoy being reckless	**1**	**2**	**3**	**4**	**5**
8.	I would never go hang gliding or bungee jumping (R)	**1**	**2**	**3**	**4**	**5**
9.	I rarely enjoy behaving in a silly manner (R)	**1**	**2**	**3**	**4**	**5**
10.	I avoid dangerous situations (R)	**1**	**2**	**3**	**4**	**5**

Please provide your last name _____

Thank you

APPENDIX (G)
AN EXAMPLE OF THE SIMULATED NEGOTIATION DEALS: DEAL ONE

THE SYNERTECH-DOSAGEN NEGOTIATION[8]

Confidential Information for SYNERTECH (Buyer)

You are the CFO of Synertech, a global pharmaceutical company with annual sales of $700 million, and significant cash reserves. You need a new plant to manufacture a line of genetically-engineered compounds that are in the advanced stage of development. You cannot modify one of your existing plants, because of the peculiarities of manufacturing genetically-engineered compounds.

The total cost for building a new plant is $25 million. If everything were to go perfectly, you estimate it would be a year before the plant was fully operational complete with FDA approval. The product manager says that the market is ready for the compounds. Production will be ready to begin in three months. You have located a suitable construction site in a new industrial park ten miles from your corporate headquarters where the research and development group is located. You need to commit to buying that site very soon or risk losing it.

However, Dosagen, a pharmaceutical company with sales of $ 150 million, has for sale a plant that is suitable for manufacturing genetically-engineered compounds. The plant's location has one disadvantage. It is 70 miles away from Synertech headquarters and the R&D facility. On the other hand, Dosagen's plant is up and running and already has FDA approval. It also has a high quality, experienced work force which, if they could be retained, would reduce Synertech's start-up costs significantly.

You are about to meet with the CFO of Dosagen. You have full authority to buy the plant at whatever price you deem acceptable. The price must be in cash and the deal must close within 60 days. No other terms can be added to the negotiation.
Your bonus for this year is dependent on how good a deal you get for your company.

General Information

The Dosagen plant is located in an area with many start-up, biotechnology companies. There is an experienced, biotech work force in this area. Given the project nature of much of the work, this work force is fairly mobile between companies.
Dosagen purchased this plant from Biotech, a diversified chemical company, three years ago for $ 18 million. Biotech was at the time in bankruptcy and needed cash badly, so this purchase price may not be a good indicator of market value at that time.

Two years ago, the Dosagen plant was appraised at $ 19 million. The local real estate market has declined 5% since then. However, the Dosagen plant is a unique property and general real estate trends may not apply.

A plant similar to the Dosagen plant, although newer, sold for $26 million nine months ago.

The Agreement Form (Hypothetical)

The first and second parties agreed to sell Dosagen with the following terms:

Price $_____ to be paid in cash in _____ Days.
Your first offer was: Price $_____ Days_____

Name_____ Role _____ Signature _____

Name_____ Role _____ Signature _____

[8] Cathy Tinsley adapted this exercise from one developed by Professor Leonard Greenhalgh, Amos Tuck School of Business Administration, Dartmouth College. This exercise is a copyrighted material and should not be used without permission from the author. She could be reached at tinsleyc@georgetown.edu

THE SYNERTECH-DOSAGEN NEGOTIATION

Confidential Information for DOSAGEN (Seller)

You are the CFO of Dosagen, a pharmaceutical company with annual sales of
$ 150 million, and significant cash reserves. You would like to sell one of your plants that has been producing a line of genetically-engineered compounds. These compounds are rapidly becoming obsolete and Dosagen has decided to get out of this business within the next year. The plant is uniquely configured because of the peculiarities of manufacturing genetically-engineered compounds.

If you shut down the plant, strip it, and then sell the plant and equipment separately, you estimate you would net a minimum of $ 17 million and that it would take you three months to do so. Your preference is to sell the plant in its current configuration, and to a buyer who would keep the current high quality, biotech experienced work force.

Synertech, a pharmaceutical company with $ 700 million in annual sales, has expressed some interest in the plant. They have inspected the plant and determined that it is suitable for their purposes. They would also like to retain the work force. Their only expressed reservation is that the location is 70 miles away form their corporate headquarters and R&D facility.

You are about to meet with the CFO of Synertech. You have full authority to sell the plant for whatever you can get. The price must be in cash and the deal must close within 60 days. No other terms can be added to the negotiation.

You year-end bonus is dependent on how good a deal you get for your company.

General Information

The Dosagen plant is located in an area with many start-up, biotechnology companies. There is an experienced, biotech work force in this area. Given the project nature of much of the work, this work force is fairly mobile between companies.

Dosagen purchased this plant from Biotech, a diversified chemical company, three years ago for $ 18 million. Biotech was at the time in bankruptcy and needed cash badly, so this purchase price may not be a good indicator of market value at that time.

Two years ago, the Dosagen plant was appraised at $ 19 million. The local real estate market has declined 5% since then. However, the Dosagen plant is a unique property and general real estate trends may not apply.

A plant similar to the Dosagen plant, although newer, sold for $26 million nine months ago.

The Agreement Form (Hypothetical)

The first and second parties agreed to sell Dosagen with the following terms:

Price $_____ To be paid in cash in _____ Days.

Your first offer was: Price $_____ Days_____

Name_____ Role _____ Signature _____

Name_____ Role _____ Signature _____

APPENDIX (H)
RESULTS FOR TESTING THE MAIN EFFECTS OF MASTERY AND PERFORMANCE

H.1. Results for the main effect of mastery orientation

Between-Subjects Factors(a)

		Value Label	N
Mastery Orientation	1.00	Low	54
	2.00	High	35

Descriptive Statistics(a)

Dependent Variable: Cross-type Adaptability

Mastery Orientation	Mean	Std. Deviation	N
Low	6.5000	1.17762	54
High	6.8571	.84515	35
Total	6.6404	1.06864	89

Levene's Test of Equality of Error Variances(a,b)

Dependent Variable: Cross-type Adaptability

F	df1	df2	Sig.
4.728	1	87	.032

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a Design: Intercept+Mastery

Tests of Between-Subjects Effects

Dependent Variable: Cross-type Adaptability

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.709	1	2.709	2.410	.124
Intercept	3788.776	1	3788.776	3370.876	.000
Mastery	2.709	1	2.709	2.410	.124
Error	97.786	87	1.124		
Total	4025.000	89			
Corrected Total	100.494	88			

Parameter Estimates(b)

Dependent Variable: Cross-Type Adaptability

Parameter	B	Std. Error	t	Sig.	90% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	6.857	.179	38.265	.000	6.559	7.155
[Mastery=1.00]	-.357	.230	-1.552	.124	-.740	.025
[Mastery=2.00]	0(a)	.	.	.	.	.

a This parameter is set to zero because it is redundant.

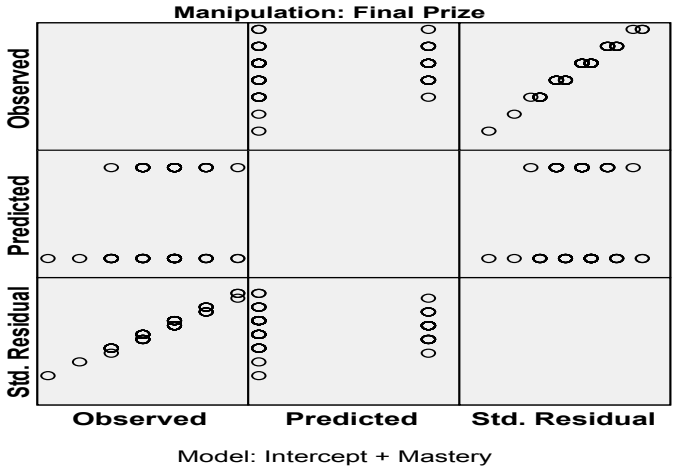
Estimated Marginal Means

Mastery Orientation

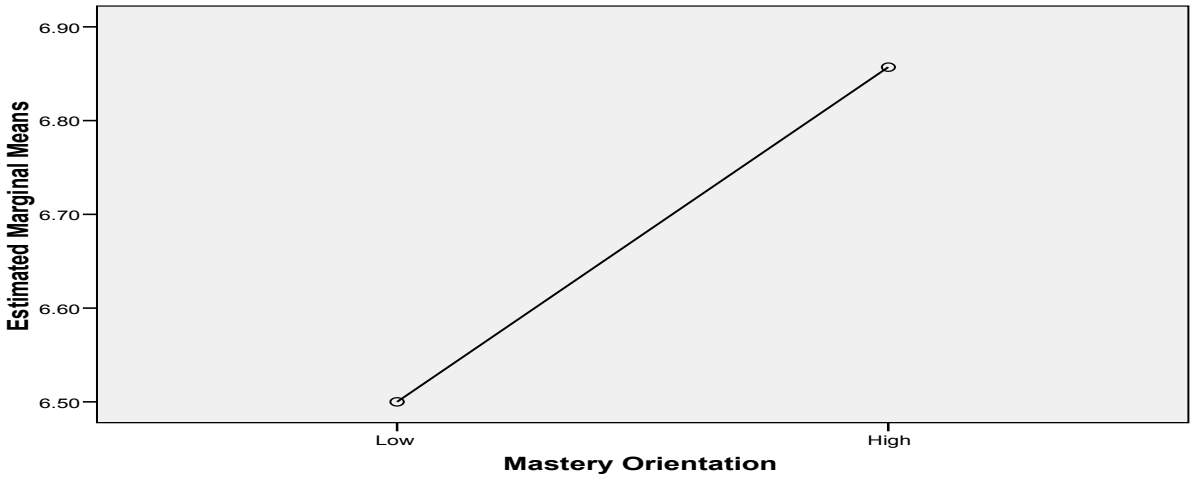
Dependent Variable: Cross-type Adaptability

Mastery Orientation	Mean	Std. Error	90% Confidence Interval	
			Lower Bound	Upper Bound
Low	6.500	.144	6.260	6.740
High	6.857	.179	6.559	7.155

Dependent Variable: Adapt_planning



Graph (7): The Effect of Mastery on Self-reported Adaptability



H.2. Results for the main effect of performance orientation

Between-Subjects Factors

		Value Label	N
Performance Orientation	1.00	Low	67
	2.00	High	46

Descriptive Statistics

Dependent Variable: Cross-Type Adaptability

Performance Orientation	Mean	Std. Deviation	N
Low	6.4305	3.50701	67
High	6.2500	3.93779	46
Total	6.3553	3.68156	113

Levene's Test of Equality of Error Variances(a)

Dependent Variable: Cross-Type Adaptability

F	df1	df2	Sig.
.555	1	111	.458

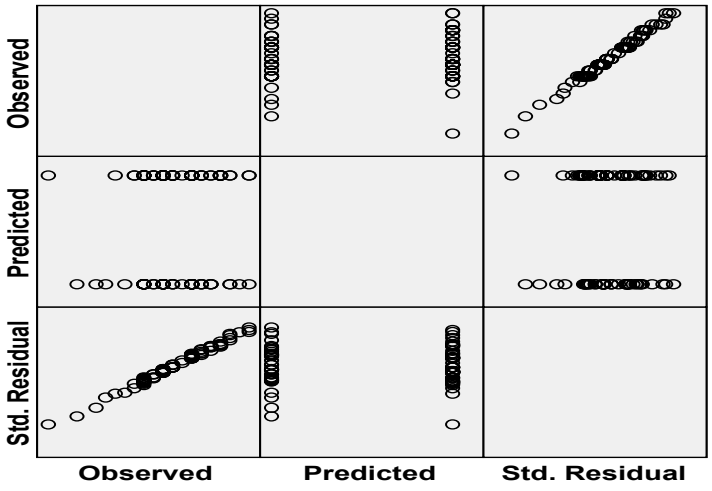
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a Design: Intercept+Performance

Tests of Between-Subjects Effects

Dependent Variable: Cross-Type Adaptability

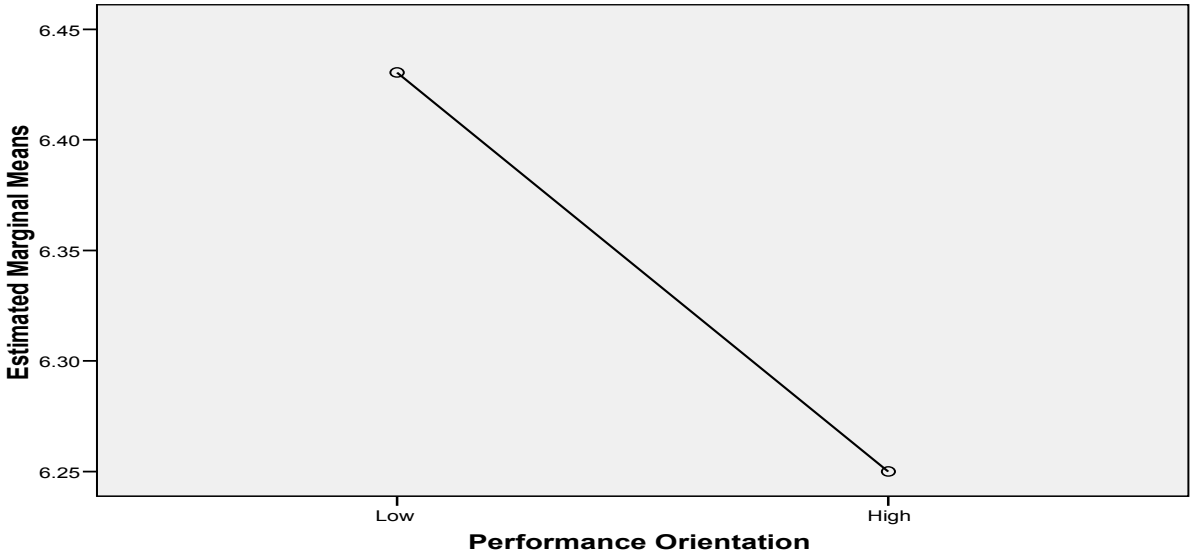
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8.516(a)	1	8.516	.626	.430
Intercept	42043.212	1	42043.212	3091.578	.000
Performance	8.516	1	8.516	.626	.430
Error	1509.519	111	13.599		
Total	44977.889	113			
Corrected Total	1518.035	112			

Dependent Variable: Cross_Type_Perception



Model: Intercept + Performance

Estimated Marginal Means of Cross_Type_Perception



APPENDIX (I)

RESULTS FOR TESTING THE MAIN EFFECT OF RECIPROCITY ORIENTATION (RO)

Between-Subjects Factors

		Value Label	N
Reciprocity Orientation	1.00	Low	111
	2.00	High	63

Descriptive Statistics

Dependent Variable: Cross_Counterparts Adaptability

Reciprocity Orientation	Mean	Std. Deviation	N
Low	6.6757	2.19571	111
High	5.8889	1.89321	63
Total	6.3908	2.11986	174

Levene's Test of Equality of Error Variances(a,b)

Dependent Variable: Cross_Counterparts_Decision

F	df1	df2	Sig.
2.348	1	172	.127

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a Design: Intercept+RO
b Manipulation = Final Prize

Tests of Between-Subjects Effects(b)

Dependent Variable: Cross_Counterparts_Decision

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	24.879(a)	1	24.879	5.686	.018
Intercept	6344.672	1	6344.672	1450.121	.000
RO	24.879	1	24.879	5.686	.018
Error	752.547	172	4.375		
Total	7884.000	174			
Corrected Total	777.425	173			

a R Squared = .032 (Adjusted R Squared = .026)
b Manipulation = Final Prize

Parameter Estimates(b)

Dependent Variable: Cross_Counterparts_Decision

Parameter	B	Std. Error	t	Sig.	90% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	5.889	.264	22.346	.000	5.453	6.325
[RO=1.00]	.787	.330	2.385	.018	.241	1.332
[RO=2.00]	0(a)	.	.	.	.	.

a This parameter is set to zero because it is redundant.
b Manipulation = Final Prize

Estimated Marginal Means

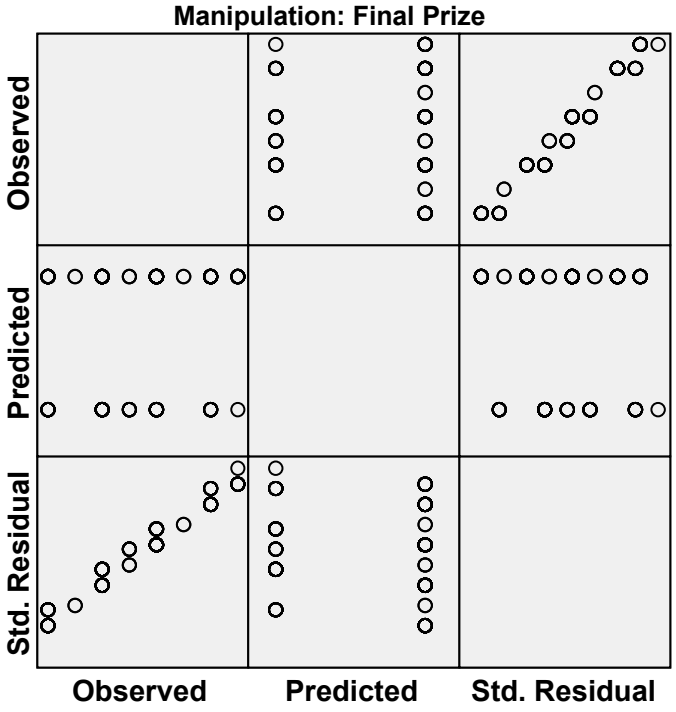
Reciprocity Orientation(a)

Dependent Variable: Cross_Counterparts_Decision

Reciprocity Orientation	Mean	Std. Error	90% Confidence Interval	
			Lower Bound	Upper Bound
Low	6.676	.199	6.347	7.004
High	5.889	.264	5.453	6.325

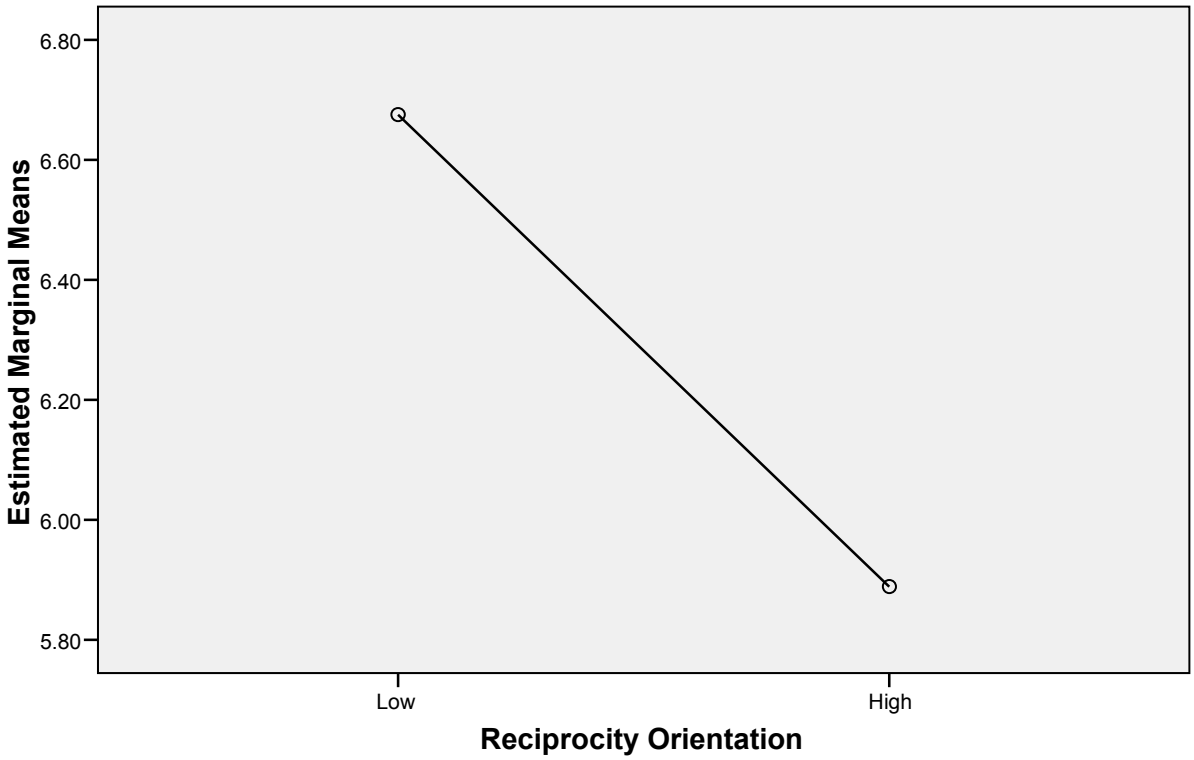
a Manipulation = Final Prize

Dependent Variable: Cross_Counterparts_Decision



Model: Intercept + RO

Graph (9): The Effect of Reciprocity Orientation on self-reported Adaptability to Competitive and Cooperative Counterparts



APPENDIX (J)

RESULTS FOR TESTING THE EFFECT OF THE INTERACTION BETWEEN MASTERY AND TYPE-PERCEPTION ON ADAPTABILITY ACROSS ZERO- AND VARIABLE-SUM SITUATIONS

Results of the repeated measure ANOVA

Within-Subjects Factors

Type	Dependent Variable
1	Adaptability across zero-sum situations Cross_Compet
2	Adaptability across variable-sum situations Cross_Coop

Between-Subjects Factors(a)

		Value Label	N
Mastery	1.00	Low	46
	2.00	High	24
D1: Perceiving the negotiation type	1.00	VS	15
	2.00	ZS	55
D2: Perceiving the situation	1.00	VS	54
	2.00	ZS	16
D3: Situational Perception	1.00	VS	12
	2.00	ZS	58
D4: Situational Perception	1.00	VS	51
	2.00	ZS	19

Box's Test of Equality of Covariance Matrices(a,b)

Box's M	6.606
F	.389
df1	12
df2	406.897
Sig.	.967

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.
a Design: Intercept+Mastery+Mastery * SitPer1+Mastery * SitPer2+Mastery * SitPerc3+Mastery * SitPer4Within Subjects Design: Type

Multivariate Tests(b,c)

Effect		Value	F	Hypothesis df	Error df	Sig.
Type	Pillai's Trace	.000	.018(a)	1.000	60.000	.894
	Wilks' Lambda	1.000	.018(a)	1.000	60.000	.894
	Hotelling's Trace	.000	.018(a)	1.000	60.000	.894
	Roy's Largest Root	.000	.018(a)	1.000	60.000	.894
Type * Mastery	Pillai's Trace	.023	1.394(a)	1.000	60.000	.242
	Wilks' Lambda	.977	1.394(a)	1.000	60.000	.242
	Hotelling's Trace	.023	1.394(a)	1.000	60.000	.242
	Roy's Largest Root	.023	1.394(a)	1.000	60.000	.242
Type * Mastery * SitPer1	Pillai's Trace	.123	4.221(a)	2.000	60.000	.019
	Wilks' Lambda	.877	4.221(a)	2.000	60.000	.019
	Hotelling's Trace	.141	4.221(a)	2.000	60.000	.019
	Roy's Largest Root	.141	4.221(a)	2.000	60.000	.019
Type * Mastery * SitPer2	Pillai's Trace	.043	1.362(a)	2.000	60.000	.264
	Wilks' Lambda	.957	1.362(a)	2.000	60.000	.264
	Hotelling's Trace	.045	1.362(a)	2.000	60.000	.264
	Roy's Largest Root	.045	1.362(a)	2.000	60.000	.264
Type * Mastery * SitPerc3	Pillai's Trace	.029	.901(a)	2.000	60.000	.411
	Wilks' Lambda	.971	.901(a)	2.000	60.000	.411
	Hotelling's Trace	.030	.901(a)	2.000	60.000	.411
	Roy's Largest Root	.030	.901(a)	2.000	60.000	.411
Type * Mastery * SitPer4	Pillai's Trace	.076	2.484(a)	2.000	60.000	.092
	Wilks' Lambda	.924	2.484(a)	2.000	60.000	.092
	Hotelling's Trace	.083	2.484(a)	2.000	60.000	.092
	Roy's Largest Root	.083	2.484(a)	2.000	60.000	.092

Tests of Within-Subjects Effects(a, b)		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	.464	1	.464	.018	.894
	Greenhouse-Geisser	.464	1.000	.464	.018	.894
	Huynh-Feldt	.464	1.000	.464	.018	.894
	Lower-bound	.464	1.000	.464	.018	.894
Type * Mastery	Sphericity Assumed	35.917	1	35.917	1.394	.242
	Greenhouse-Geisser	35.917	1.000	35.917	1.394	.242
	Huynh-Feldt	35.917	1.000	35.917	1.394	.242
	Lower-bound	35.917	1.000	35.917	1.394	.242
Type * Mastery * SitPer1	Sphericity Assumed	217.490	2	108.745	4.221	.019
	Greenhouse-Geisser	217.490	2.000	108.745	4.221	.019
	Huynh-Feldt	217.490	2.000	108.745	4.221	.019
	Lower-bound	217.490	2.000	108.745	4.221	.019
Type * Mastery * SitPer2	Sphericity Assumed	70.197	2	35.099	1.362	.264
	Greenhouse-Geisser	70.197	2.000	35.099	1.362	.264
	Huynh-Feldt	70.197	2.000	35.099	1.362	.264
	Lower-bound	70.197	2.000	35.099	1.362	.264
Type * Mastery * SitPerc3	Sphericity Assumed	46.452	2	23.226	.901	.411
	Greenhouse-Geisser	46.452	2.000	23.226	.901	.411
	Huynh-Feldt	46.452	2.000	23.226	.901	.411
	Lower-bound	46.452	2.000	23.226	.901	.411
Type * Mastery * SitPer4	Sphericity Assumed	128.018	2	64.009	2.484	.092
	Greenhouse-Geisser	128.018	2.000	64.009	2.484	.092
	Huynh-Feldt	128.018	2.000	64.009	2.484	.092
	Lower-bound	128.018	2.000	64.009	2.484	.092
Error(Type)	Sphericity Assumed	1545.953	60	25.766		
	Greenhouse-Geisser	1545.953	60.000	25.766		
	Huynh-Feldt	1545.953	60.000	25.766		
	Lower-bound	1545.953	60.000	25.766		

a Exact statistic
b Design: Intercept+Mastery+Mastery * SitPer1+Mastery * SitPer2+Mastery * SitPerc3+Mastery * SitPer4
c Within Subjects Design: Type

Tests of Within-Subjects Contrasts
Measure: MEASURE_1

Source	Type	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Type	Linear	.464	1	.464	.018	.894	.000
Type * Mastery	Linear	35.917	1	35.917	1.394	.242	.023
Type * Mastery * SitPer1	Linear	217.490	2	108.745	4.221	.019	.123
Type * Mastery * SitPer2	Linear	70.197	2	35.099	1.362	.264	.043
Type * Mastery * SitPerc3	Linear	46.452	2	23.226	.901	.411	.029
Type * Mastery * SitPer4	Linear	128.018	2	64.009	2.484	.092	.076
Error(Type)	Linear	1545.953	60	25.766			

Levene's Test of Equality of Error Variances(a)

	F	df1	df2	Sig.
Competing in Zero-sum Situations	1.104	19	50	.376
Cooperating in Variable-sum Situations	.961	19	50	.519

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a Design: Intercept+Mastery+Mastery * SitPer1+Mastery * SitPer2+Mastery * SitPerc3+Mastery * SitPer4
Within Subjects Design: Type

Tests of Between-Subjects Effects(a)

Measure: MEASURE_1
Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	180.208	1	180.208	31.471	.000
Mastery	7.550	1	7.550	1.318	.255
Mastery * SitPer1	16.446	2	8.223	1.436	.246
Mastery * SitPer2	10.881	2	5.441	.950	.392
Mastery * SitPerc3	2.417	2	1.208	.211	.810
Mastery * SitPer4	3.438	2	1.719	.300	.742
Error	343.574	60	5.726		

Type(a)

		Type : Row	Type : Column Linear
Hypothesis	Intercept	Linear	.464
	Mastery	Linear	35.917
	Mastery * SitPer1	Linear	217.490
	Mastery * SitPer2	Linear	70.197
	Mastery * SitPerc3	Linear	46.452
	Mastery * SitPer4	Linear	128.018
Error		Linear	1545.953

Based on Type III Sum of Squares

Between-Subjects SSCP Matrix(a)

			MEASURE_1
Hypothesis	Intercept	MEASURE_1	180.208
	Mastery	MEASURE_1	7.550
	Mastery * SitPer1	MEASURE_1	16.446
	Mastery * SitPer2	MEASURE_1	10.881
	Mastery * SitPerc3	MEASURE_1	2.417
	Mastery * SitPer4	MEASURE_1	3.438
Error		MEASURE_1	343.574

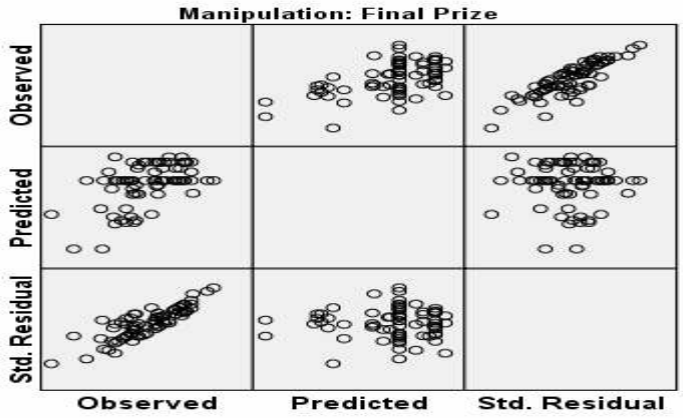
Based on Type III Sum of Squares

Mastery * Type(a)

Measure: MEASURE_1

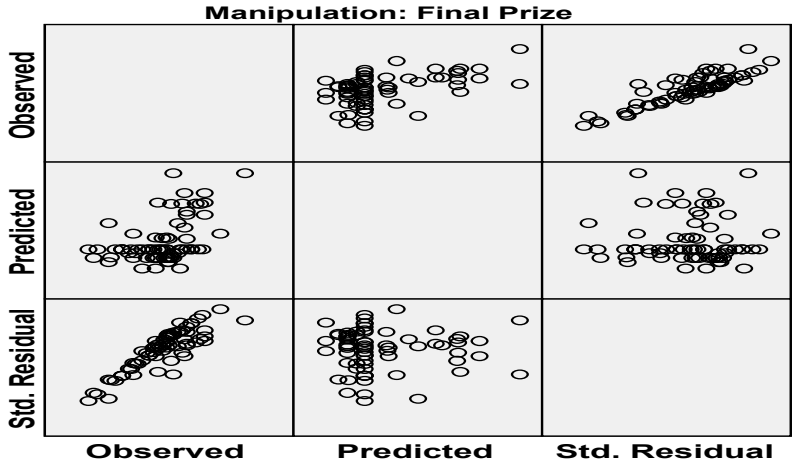
Mastery	Type	Mean	Std. Error	99% Confidence Interval	
				Lower Bound	Upper Bound
Low	1	-.584	1.045	-3.363	2.196
	2	-2.530	.743	-4.508	-.553
High	1	-3.133	1.570	-7.310	1.044
	2	-1.584	1.117	-4.555	1.388

Dependent Variable: Competing in Zero-sum Situations



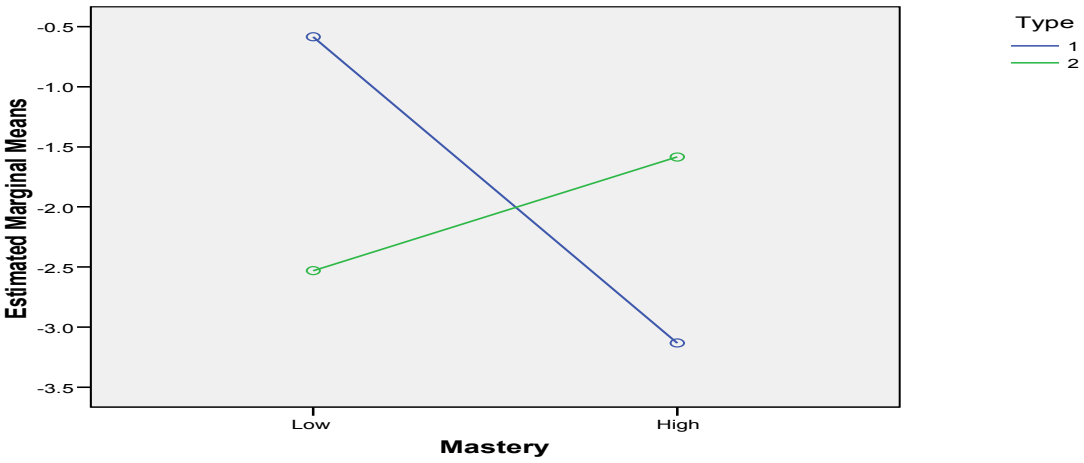
Model: Intercept + Mastery + Mastery * SitPer1 + Mastery * SitPer2 + Mastery * SitPerc3 + Mastery * SitPer4

Dependent Variable: Cooperating in Variable-sum Situations



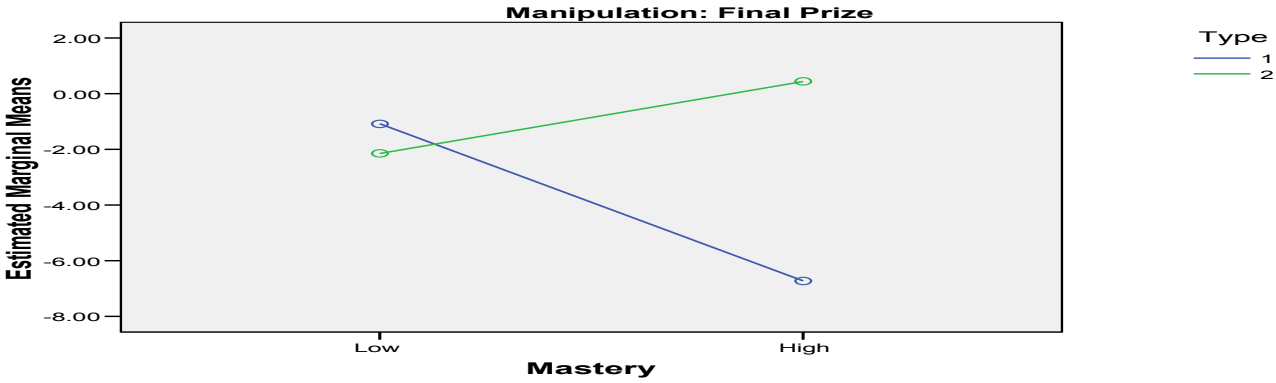
Model: Intercept + Mastery + Mastery * SitPer1 + Mastery * SitPer2 + Mastery * SitPerc3 + Mastery * SitPer4

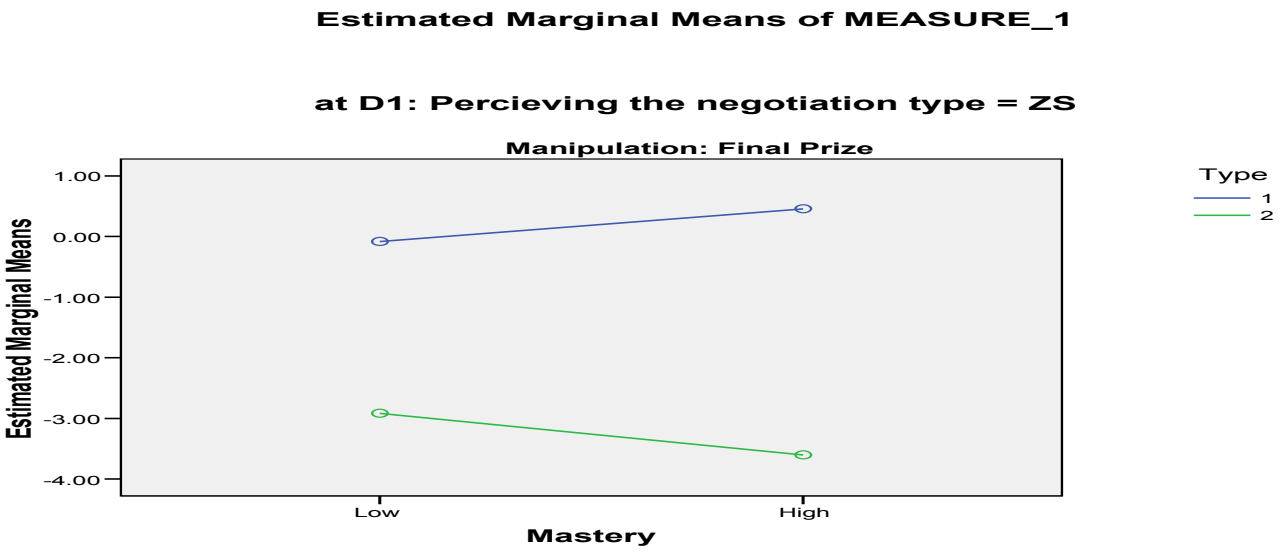
Graph (10): The moderating effect of perception of the situation type on the relationship between mastery and adaptability within all situations

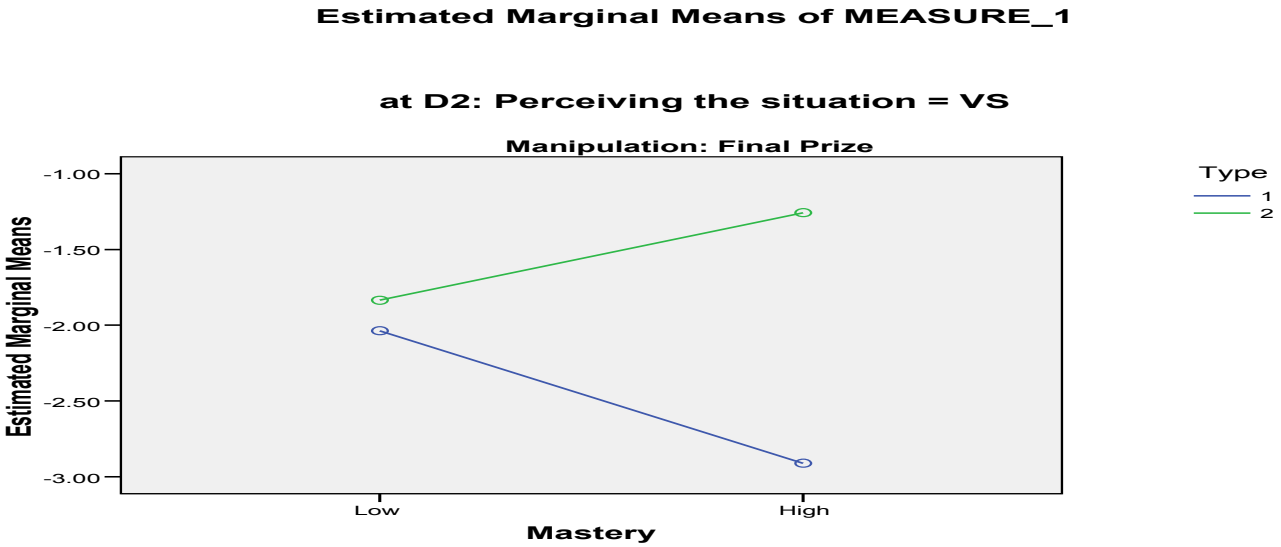


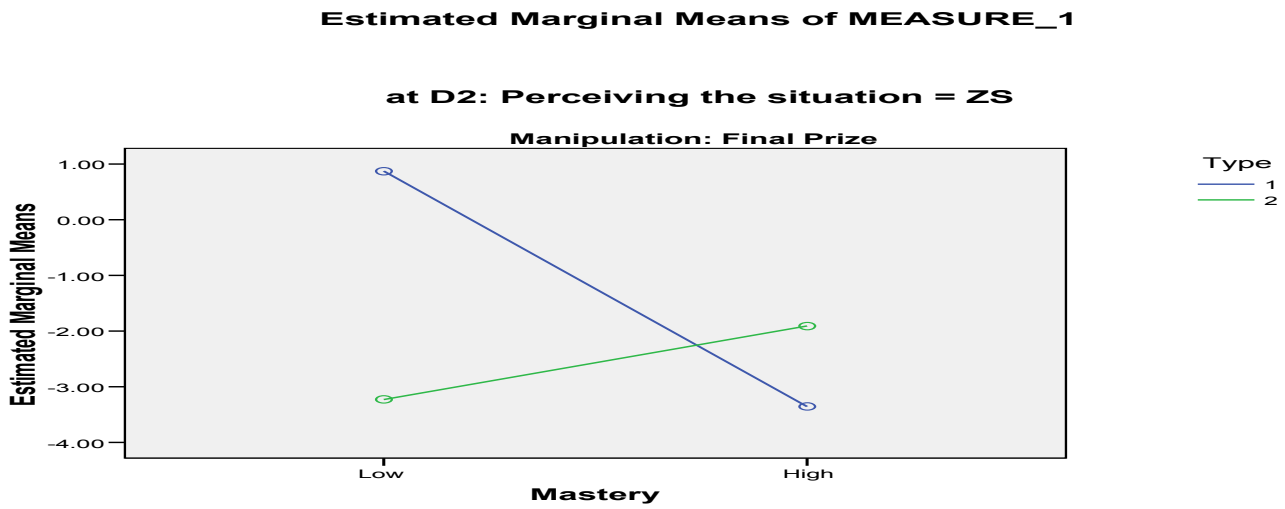
Estimated Marginal Means of MEASURE_1

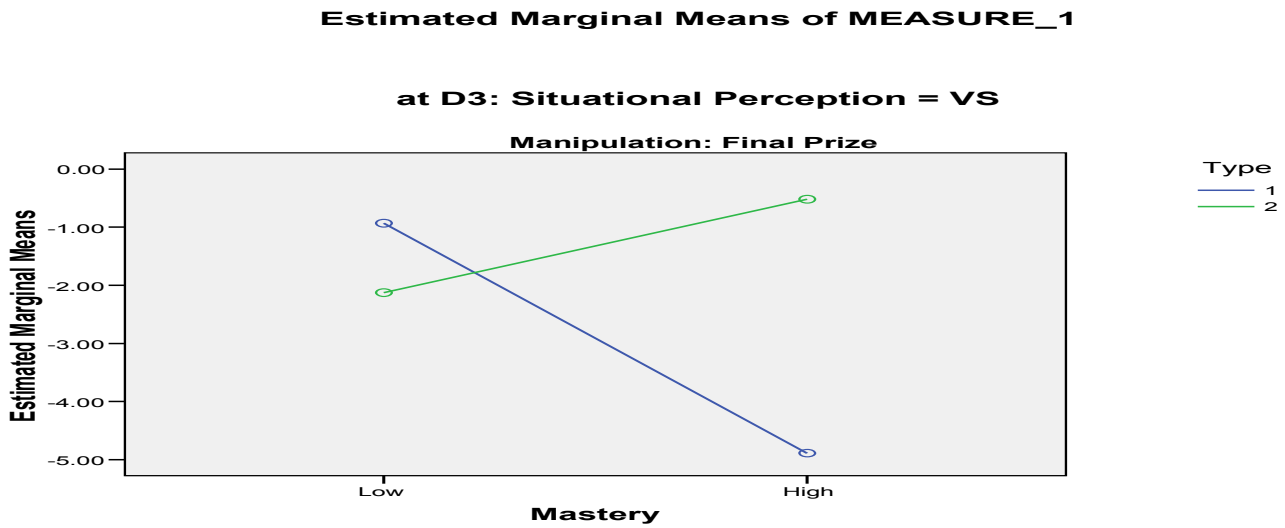
at D1: Percieving the negotiation type = VS

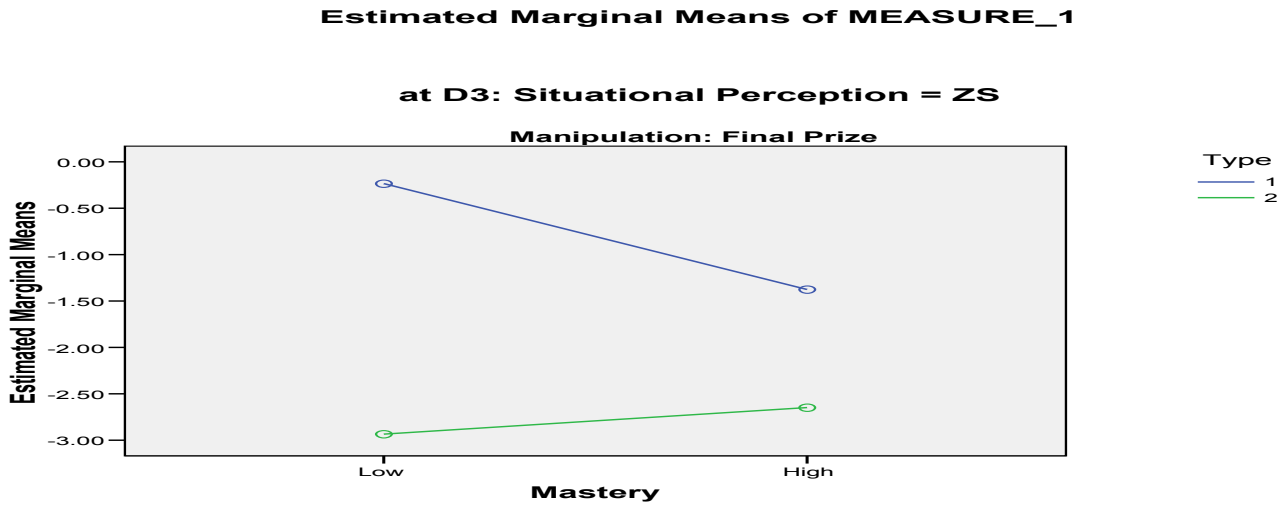


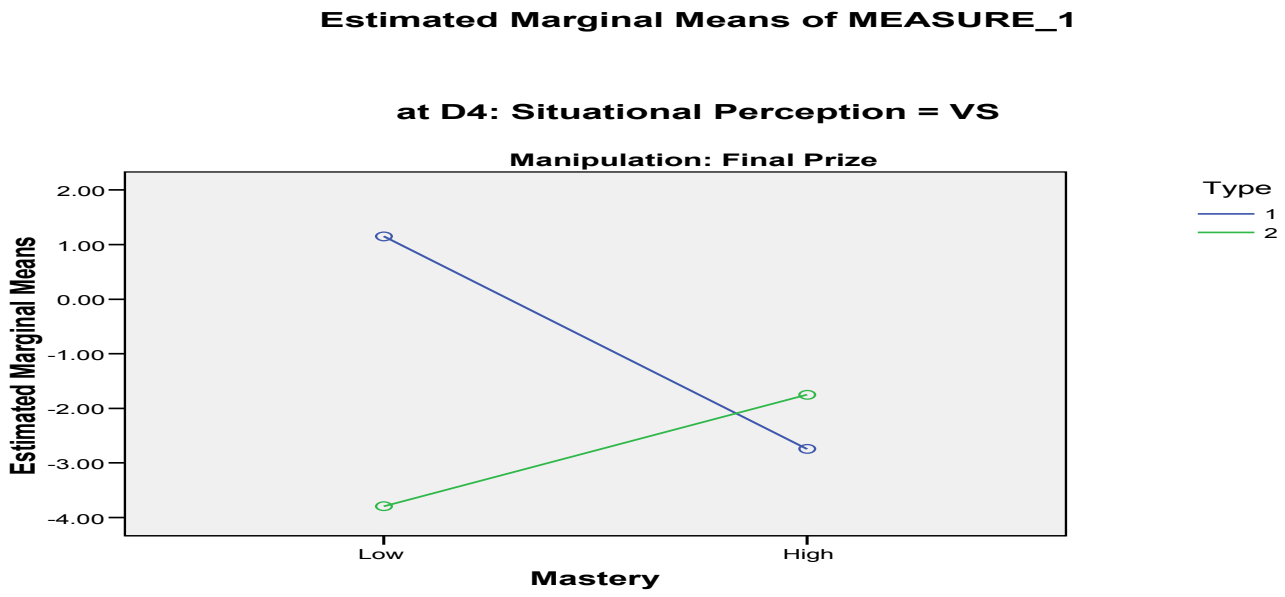

Estimated Marginal Means of MEASURE_1
at D1: Percieving the negotiation type = ZS
Manipulation: Final Prize
Estimated Marginal Means
1.00
0.00
-1.00
-2.00
-3.00
-4.00
Low
High
Mastery
Type
1
2

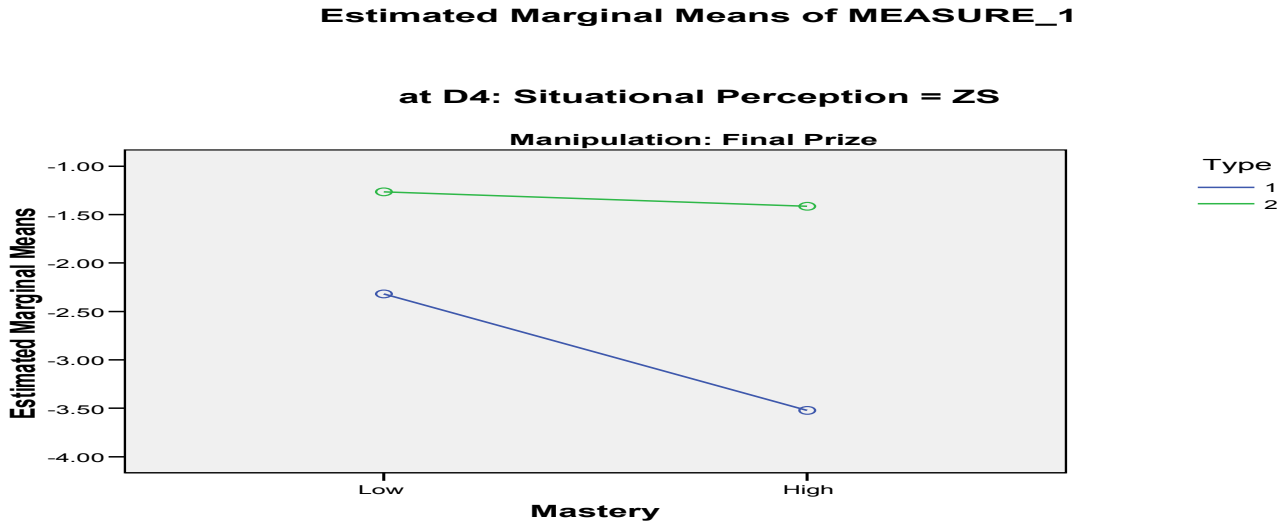

Estimated Marginal Means of MEASURE_1
at D2: Perceiving the situation = VS
Manipulation: Final Prize
Estimated Marginal Means
-1.00
-1.50
-2.00
-2.50
-3.00
Low
High
Mastery
Type
1
2


Estimated Marginal Means of MEASURE_1
at D2: Perceiving the situation = ZS
Manipulation: Final Prize
Estimated Marginal Means
1.00
0.00
-1.00
-2.00
-3.00
-4.00
Low
High
Mastery
Type
1
2


Estimated Marginal Means of MEASURE_1
at D3: Situational Perception = VS
Manipulation: Final Prize
Estimated Marginal Means
0.00
-1.00
-2.00
-3.00
-4.00
-5.00
Low
High
Mastery
Type
1
2


Estimated Marginal Means of MEASURE_1
at D3: Situational Perception = ZS
Manipulation: Final Prize
Estimated Marginal Means
0.00
-0.50
-1.00
-1.50
-2.00
-2.50
-3.00
Low
High
Mastery
Type
1
2


Estimated Marginal Means of MEASURE_1
at D4: Situational Perception = VS
Manipulation: Final Prize
Estimated Marginal Means
2.00
1.00
0.00
-1.00
-2.00
-3.00
-4.00
Low
High
Mastery
Type
1
2


Estimated Marginal Means of MEASURE_1
at D4: Situational Perception = ZS
Manipulation: Final Prize
Estimated Marginal Means
-1.00
-1.50
-2.00
-2.50
-3.00
-3.50
-4.00
Low
High
Mastery
Type
1
2

APPENDIX (K)
THE INTERACTION BETWEEN PERFORMANCE AND TYPE-PERCEPTION ACROSS ZERO- AND VARIABLE-SUM SITUATIONS

Results of the repeated measure ANOVA

Between-Subjects Factors(a)

		Value Label	N
Performance	1.00	Low	38
	2.00	High	26
D1: Perceiving the negotiation type	1.00	VS	17
	2.00	ZS	47
D2: Perceiving the situation	1.00	VS	44
	2.00	ZS	20
D3: Situational Perception	1.00	VS	11
	2.00	ZS	53
D4: Situational Perception	1.00	VS	47
	2.00	ZS	17

a Manipulation = Final Prize

Multivariate Tests(b,c)

Effect		Value	F	Hypothesis df	Error df	Sig.
type	Pillai's Trace	.026	1.220(a)	1.000	46.000	.275
	Wilks' Lambda	.974	1.220(a)	1.000	46.000	.275
	Hotelling's Trace	.027	1.220(a)	1.000	46.000	.275
	Roy's Largest Root	.027	1.220(a)	1.000	46.000	.275
type * Performance	Pillai's Trace	.024	1.115(a)	1.000	46.000	.296
	Wilks' Lambda	.976	1.115(a)	1.000	46.000	.296
	Hotelling's Trace	.024	1.115(a)	1.000	46.000	.296
	Roy's Largest Root	.024	1.115(a)	1.000	46.000	.296
type * SitPer1	Pillai's Trace	.005	.244(a)	1.000	46.000	.624
	Wilks' Lambda	.995	.244(a)	1.000	46.000	.624
	Hotelling's Trace	.005	.244(a)	1.000	46.000	.624
	Roy's Largest Root	.005	.244(a)	1.000	46.000	.624
type * SitPer2	Pillai's Trace	.017	.818(a)	1.000	46.000	.370
	Wilks' Lambda	.983	.818(a)	1.000	46.000	.370
	Hotelling's Trace	.018	.818(a)	1.000	46.000	.370
	Roy's Largest Root	.018	.818(a)	1.000	46.000	.370
type * SitPerc3	Pillai's Trace	.023	1.101(a)	1.000	46.000	.300
	Wilks' Lambda	.977	1.101(a)	1.000	46.000	.300
	Hotelling's Trace	.024	1.101(a)	1.000	46.000	.300
	Roy's Largest Root	.024	1.101(a)	1.000	46.000	.300
type * SitPer4	Pillai's Trace	.017	.815(a)	1.000	46.000	.371
	Wilks' Lambda	.983	.815(a)	1.000	46.000	.371
	Hotelling's Trace	.018	.815(a)	1.000	46.000	.371
	Roy's Largest Root	.018	.815(a)	1.000	46.000	.371
type * Performance * SitPer1	Pillai's Trace	.038	1.831(a)	1.000	46.000	.183
	Wilks' Lambda	.962	1.831(a)	1.000	46.000	.183

	Hotelling's Trace	.040	1.831(a)	1.000	46.000	.183
	Roy's Largest Root	.040	1.831(a)	1.000	46.000	.183
type * Performance * SitPer2	Pillai's Trace	.036	1.724(a)	1.000	46.000	.196
	Wilks' Lambda	.964	1.724(a)	1.000	46.000	.196
	Hotelling's Trace	.037	1.724(a)	1.000	46.000	.196
	Roy's Largest Root	.037	1.724(a)	1.000	46.000	.196
type * SitPer1 * SitPer2	Pillai's Trace	.020	.960(a)	1.000	46.000	.332
	Wilks' Lambda	.980	.960(a)	1.000	46.000	.332
	Hotelling's Trace	.021	.960(a)	1.000	46.000	.332
	Roy's Largest Root	.021	.960(a)	1.000	46.000	.332
type * Performance * SitPer1 * SitPer2	Pillai's Trace	.065	3.179(a)	1.000	46.000	.081
	Wilks' Lambda	.935	3.179(a)	1.000	46.000	.081
	Hotelling's Trace	.069	3.179(a)	1.000	46.000	.081
	Roy's Largest Root	.069	3.179(a)	1.000	46.000	.081
type * Performance * SitPerc3	Pillai's Trace	.067	3.319(a)	1.000	46.000	.075
	Wilks' Lambda	.933	3.319(a)	1.000	46.000	.075
	Hotelling's Trace	.072	3.319(a)	1.000	46.000	.075
	Roy's Largest Root	.072	3.319(a)	1.000	46.000	.075
type * SitPer1 * SitPerc3	Pillai's Trace	.016	.759(a)	1.000	46.000	.388
	Wilks' Lambda	.984	.759(a)	1.000	46.000	.388
	Hotelling's Trace	.016	.759(a)	1.000	46.000	.388
	Roy's Largest Root	.016	.759(a)	1.000	46.000	.388
type * Performance * SitPer1 * SitPerc3	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * SitPer2 * SitPerc3	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * Performance * SitPer2 * SitPerc3	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * SitPer1 * SitPer2 * SitPerc3	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * Performance * SitPer1 * SitPer2 * SitPerc3	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * Performance *	Pillai's Trace	.008	.352(a)	1.000	46.000	.556

SitPer4						
	Wilks' Lambda	.992	.352(a)	1.000	46.000	.556
	Hotelling's Trace	.008	.352(a)	1.000	46.000	.556
	Roy's Largest Root	.008	.352(a)	1.000	46.000	.556
type * SitPer1 * SitPer4	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * Performance * SitPer1 * SitPer4	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * SitPer2 * SitPer4	Pillai's Trace	.001	.036(a)	1.000	46.000	.850
	Wilks' Lambda	.999	.036(a)	1.000	46.000	.850
	Hotelling's Trace	.001	.036(a)	1.000	46.000	.850
	Roy's Largest Root	.001	.036(a)	1.000	46.000	.850
type * Performance * SitPer2 * SitPer4	Pillai's Trace	.034	1.603(a)	1.000	46.000	.212
	Wilks' Lambda	.966	1.603(a)	1.000	46.000	.212
	Hotelling's Trace	.035	1.603(a)	1.000	46.000	.212
	Roy's Largest Root	.035	1.603(a)	1.000	46.000	.212
type * SitPer1 * SitPer2 * SitPer4	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * Performance * SitPer1 * SitPer2 * SitPer4	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * SitPerc3 * SitPer4	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * Performance * SitPerc3 * SitPer4	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * SitPer1 * SitPerc3 * SitPer4	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * Performance * SitPer1 * SitPerc3 * SitPer4	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.

	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * SitPer2 * SitPerc3 * SitPer4	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * Performance * SitPer2 * SitPerc3 * SitPer4	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * SitPer1 * SitPer2 * SitPerc3 * SitPer4	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000
type * Performance * SitPer1 * SitPer2 * SitPerc3 * SitPer4	Pillai's Trace	.000	.(a)	.000	.000	.
	Wilks' Lambda	1.000	.(a)	.000	46.000	.
	Hotelling's Trace	.000	.(a)	.000	2.000	.
	Roy's Largest Root	.000	.000(a)	1.000	45.000	1.000

a Exact statistic
b Design: Intercept+Performance+SitPer1+SitPer2+SitPerc3+SitPer4+Performance * SitPer1+Performance * SitPer2+SitPer1 * SitPer2+Performance * SitPer1 * SitPer2+Performance * SitPerc3+SitPer1 * SitPerc3+Performance * SitPer1 * SitPerc3+SitPer2 * SitPerc3+Performance * SitPer2 * SitPerc3+SitPer1 * SitPer2 * SitPerc3+Performance * SitPer1 * SitPer2 * SitPerc3+Performance * SitPer4+SitPer1 * SitPer4+Performance * SitPer1 * SitPer4+SitPer2 * SitPer4+Performance * SitPer2 * SitPer4+SitPer1 * SitPer2 * SitPer4+Performance * SitPer1 * SitPer2 * SitPer4+SitPerc3 * SitPer4+Performance * SitPerc3 * SitPer4+SitPer1 * SitPerc3 * SitPer4+Performance * SitPer1 * SitPerc3 * SitPer4+SitPer2 * SitPerc3 * SitPer4+Performance * SitPer2 * SitPerc3 * SitPer4+SitPer1 * SitPer2 * SitPerc3 * SitPer4+Performance * SitPer1 * SitPer2 * SitPerc3 * SitPer4
Within Subjects Design: type
c Manipulation = Final Prize

Mauchly's Test of Sphericity(b,c)

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon(a)		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
type	1.000	.000	0	.	1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.
a May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.
b Design: Intercept+Performance+SitPer1+SitPer2+SitPerc3+SitPer4+Performance * SitPer1+Performance * SitPer2+SitPer1 * SitPer2+Performance * SitPer1 * SitPer2+Performance * SitPerc3+SitPer1 * SitPerc3+Performance * SitPer1 * SitPerc3+SitPer2 * SitPerc3+Performance * SitPer2 * SitPerc3+SitPer1 * SitPer2 * SitPerc3+Performance * SitPer1 * SitPer2 * SitPerc3+Performance * SitPer4+SitPer1 * SitPer4+Performance * SitPer1 * SitPer4+SitPer2 * SitPer4+Performance * SitPer2 * SitPer4+SitPer1 * SitPer2 * SitPer4+Performance * SitPer1 * SitPer2 * SitPer4+SitPerc3 * SitPer4+Performance * SitPerc3 * SitPer4+SitPer1 * SitPerc3 * SitPer4+Performance * SitPer1 * SitPerc3 * SitPer4+SitPer2 * SitPerc3 * SitPer4+Performance * SitPer2 * SitPerc3 *

SitPer4+SitPer1 * SitPer2 * SitPerc3 * SitPer4+Performance * SitPer1 * SitPer2 * SitPerc3 * SitPer4
Within Subjects Design: type
c Manipulation = Final Prize

Tests of Within-Subjects Effects(a)

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
type	Sphericity Assumed	5.253	1	5.253	1.220	.275
	Greenhouse-Geisser	5.253	1.000	5.253	1.220	.275
	Huynh-Feldt	5.253	1.000	5.253	1.220	.275
	Lower-bound	5.253	1.000	5.253	1.220	.275
type * Performance	Sphericity Assumed	4.802	1	4.802	1.115	.296
	Greenhouse-Geisser	4.802	1.000	4.802	1.115	.296
	Huynh-Feldt	4.802	1.000	4.802	1.115	.296
	Lower-bound	4.802	1.000	4.802	1.115	.296
type * SitPer1	Sphericity Assumed	1.051	1	1.051	.244	.624
	Greenhouse-Geisser	1.051	1.000	1.051	.244	.624
	Huynh-Feldt	1.051	1.000	1.051	.244	.624
	Lower-bound	1.051	1.000	1.051	.244	.624
type * SitPer2	Sphericity Assumed	3.522	1	3.522	.818	.370
	Greenhouse-Geisser	3.522	1.000	3.522	.818	.370
	Huynh-Feldt	3.522	1.000	3.522	.818	.370
	Lower-bound	3.522	1.000	3.522	.818	.370
type * SitPerc3	Sphericity Assumed	4.742	1	4.742	1.101	.300
	Greenhouse-Geisser	4.742	1.000	4.742	1.101	.300
	Huynh-Feldt	4.742	1.000	4.742	1.101	.300
	Lower-bound	4.742	1.000	4.742	1.101	.300
type * SitPer4	Sphericity Assumed	3.510	1	3.510	.815	.371
	Greenhouse-Geisser	3.510	1.000	3.510	.815	.371
	Huynh-Feldt	3.510	1.000	3.510	.815	.371
	Lower-bound	3.510	1.000	3.510	.815	.371
type * Performance * SitPer1	Sphericity Assumed	7.883	1	7.883	1.831	.183
	Greenhouse-Geisser	7.883	1.000	7.883	1.831	.183
	Huynh-Feldt	7.883	1.000	7.883	1.831	.183
	Lower-bound	7.883	1.000	7.883	1.831	.183
type * Performance * SitPer2	Sphericity Assumed	7.424	1	7.424	1.724	.196
	Greenhouse-Geisser	7.424	1.000	7.424	1.724	.196
	Huynh-Feldt	7.424	1.000	7.424	1.724	.196
	Lower-bound	7.424	1.000	7.424	1.724	.196
type * SitPer1 * SitPer2	Sphericity Assumed	4.136	1	4.136	.960	.332
	Greenhouse-Geisser	4.136	1.000	4.136	.960	.332
	Huynh-Feldt	4.136	1.000	4.136	.960	.332
	Lower-bound	4.136	1.000	4.136	.960	.332
type * Performance * SitPer1 * SitPer2	Sphericity Assumed	13.691	1	13.691	3.179	.081

	Greenhouse-Geisser	13.691	1.000	13.691	3.179	.081
	Huynh-Feldt	13.691	1.000	13.691	3.179	.081
	Lower-bound	13.691	1.000	13.691	3.179	.081
type * Performance * SitPerc3	Sphericity Assumed	14.294	1	14.294	3.319	.075
	Greenhouse-Geisser	14.294	1.000	14.294	3.319	.075
	Huynh-Feldt	14.294	1.000	14.294	3.319	.075
	Lower-bound	14.294	1.000	14.294	3.319	.075
type * SitPer1 * SitPerc3	Sphericity Assumed	3.267	1	3.267	.759	.388
	Greenhouse-Geisser	3.267	1.000	3.267	.759	.388
	Huynh-Feldt	3.267	1.000	3.267	.759	.388
	Lower-bound	3.267	1.000	3.267	.759	.388
type * Performance * SitPer1 * SitPerc3	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * SitPer2 * SitPerc3	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * Performance * SitPer2 * SitPerc3	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * SitPer1 * SitPer2 * SitPerc3	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * Performance * SitPer1 * SitPer2 * SitPerc3	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * Performance * SitPer4	Sphericity Assumed	1.514	1	1.514	.352	.556
	Greenhouse-Geisser	1.514	1.000	1.514	.352	.556
	Huynh-Feldt	1.514	1.000	1.514	.352	.556
	Lower-bound	1.514	1.000	1.514	.352	.556
type * SitPer1 * SitPer4	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * Performance * SitPer1 * SitPer4	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.

type * SitPer2 * SitPer4	Sphericity Assumed	.155	1	.155	.036	.850
	Greenhouse-Geisser	.155	1.000	.155	.036	.850
	Huynh-Feldt	.155	1.000	.155	.036	.850
	Lower-bound	.155	1.000	.155	.036	.850
type * Performance * SitPer2 * SitPer4	Sphericity Assumed	6.903	1	6.903	1.603	.212
	Greenhouse-Geisser	6.903	1.000	6.903	1.603	.212
	Huynh-Feldt	6.903	1.000	6.903	1.603	.212
	Lower-bound	6.903	1.000	6.903	1.603	.212
type * SitPer1 * SitPer2 * SitPer4	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * Performance * SitPer1 * SitPer2 * SitPer4	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * SitPerc3 * SitPer4	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * Performance * SitPerc3 * SitPer4	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * SitPer1 * SitPerc3 * SitPer4	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * Performance * SitPer1 * SitPerc3 * SitPer4	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * SitPer2 * SitPerc3 * SitPer4	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * Performance * SitPer2 * SitPerc3 * SitPer4	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * SitPer1 * SitPer2 *	Sphericity Assumed	.000	0	.	.	.

SitPerc3 * SitPer4						
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
type * Performance * SitPer1 * SitPer2 * SitPerc3 * SitPer4	Sphericity Assumed	.000	0	.	.	.
	Greenhouse-Geisser	.000	.000	.	.	.
	Huynh-Feldt	.000	.000	.	.	.
	Lower-bound	.000	.000	.	.	.
Error(type)	Sphericity Assumed	198.090	46	4.306		
	Greenhouse-Geisser	198.090	46.000	4.306		
	Huynh-Feldt	198.090	46.000	4.306		
	Lower-bound	198.090	46.000	4.306		

a Manipulation = Final Prize

Tests of Within-Subjects Contrasts(a)

Measure: MEASURE_1

Source	type	Type III Sum of Squares	df	Mean Square	F	Sig.
type	Linear	5.253	1	5.253	1.220	.275
type * Performance	Linear	4.802	1	4.802	1.115	.296
type * SitPer1	Linear	1.051	1	1.051	.244	.624
type * SitPer2	Linear	3.522	1	3.522	.818	.370
type * SitPerc3	Linear	4.742	1	4.742	1.101	.300
type * SitPer4	Linear	3.510	1	3.510	.815	.371
type * Performance * SitPer1	Linear	7.883	1	7.883	1.831	.183
type * Performance * SitPer2	Linear	7.424	1	7.424	1.724	.196
type * SitPer1 * SitPer2	Linear	4.136	1	4.136	.960	.332
type * Performance * SitPer1 * SitPer2	Linear	13.691	1	13.691	3.179	.081
type * Performance * SitPerc3	Linear	14.294	1	14.294	3.319	.075
type * SitPer1 * SitPerc3	Linear	3.267	1	3.267	.759	.388
type * Performance * SitPer1 * SitPerc3	Linear	.000	0	.	.	.
type * SitPer2 * SitPerc3	Linear	.000	0	.	.	.
type * Performance * SitPer2 * SitPerc3	Linear	.000	0	.	.	.
type * SitPer1 * SitPer2 * SitPerc3	Linear	.000	0	.	.	.
type * Performance * SitPer1 * SitPer2 * SitPerc3	Linear	.000	0	.	.	.
type * Performance * SitPer4	Linear	1.514	1	1.514	.352	.556
type * SitPer1 * SitPer4	Linear	.000	0	.	.	.
type * Performance * SitPer1 * SitPer4	Linear	.000	0	.	.	.
type * SitPer2 * SitPer4	Linear	.155	1	.155	.036	.850

type * Performance * SitPer2 * SitPer4	Linear	6.903	1	6.903	1.603	.212
type * SitPer1 * SitPer2 * SitPer4	Linear	.000	0	.	.	.
type * Performance * SitPer1 * SitPer2 * SitPer4	Linear	.000	0	.	.	.
type * SitPerc3 * SitPer4	Linear	.000	0	.	.	.
type * Performance * SitPerc3 * SitPer4	Linear	.000	0	.	.	.
type * SitPer1 * SitPerc3 * SitPer4	Linear	.000	0	.	.	.
type * Performance * SitPer1 * SitPerc3 * SitPer4	Linear	.000	0	.	.	.
type * SitPer2 * SitPerc3 * SitPer4	Linear	.000	0	.	.	.
type * Performance * SitPer2 * SitPerc3 * SitPer4	Linear	.000	0	.	.	.
type * SitPer1 * SitPer2 * SitPerc3 * SitPer4	Linear	.000	0	.	.	.
type * Performance * SitPer1 * SitPer2 * SitPerc3 * SitPer4	Linear	.000	0	.	.	.
Error(type)	Linear	198.090	46	4.306		

a Manipulation = Final Prize

Tests of Between-Subjects Effects(a)

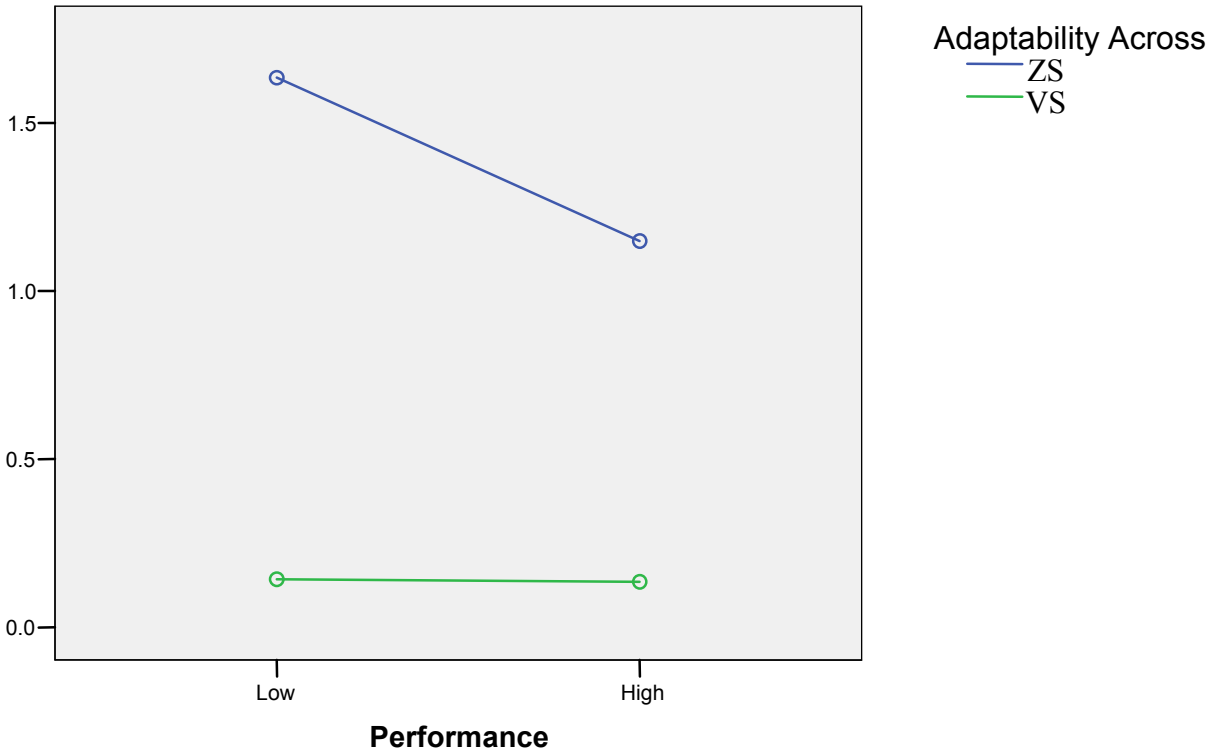
Measure: MEASURE_1
Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	9.420	1	9.420	2.816	.100
Performance	4.643	1	4.643	1.388	.245
SitPer1	1.074	1	1.074	.321	.574
SitPer2	1.596	1	1.596	.477	.493
SitPerc3	5.662	1	5.662	1.692	.200
SitPer4	4.736	1	4.736	1.416	.240
Performance * SitPer1	4.200	1	4.200	1.256	.268
Performance * SitPer2	9.616	1	9.616	2.875	.097
SitPer1 * SitPer2	2.335	1	2.335	.698	.408
Performance * SitPer1 * SitPer2	21.019	1	21.019	6.283	.016
Performance * SitPerc3	11.294	1	11.294	3.376	.073
SitPer1 * SitPerc3	4.004	1	4.004	1.197	.280
Performance * SitPer1 * SitPerc3	.000	0	.	.	.
SitPer2 * SitPerc3	.000	0	.	.	.
Performance * SitPer2 * SitPerc3	.000	0	.	.	.
SitPer1 * SitPer2 * SitPerc3	.000	0	.	.	.

Performance * SitPer1 * SitPer2 * SitPerc3	.000	0	.	.	.
Performance * SitPer4	.655	1	.655	.196	.660
SitPer1 * SitPer4	.000	0	.	.	.
Performance * SitPer1 * SitPer4	.000	0	.	.	.
SitPer2 * SitPer4	.061	1	.061	.018	.894
Performance * SitPer2 * SitPer4	10.144	1	10.144	3.032	.088
SitPer1 * SitPer2 * SitPer4	.000	0	.	.	.
Performance * SitPer1 * SitPer2 * SitPer4	.000	0	.	.	.
SitPerc3 * SitPer4	.000	0	.	.	.
Performance * SitPerc3 * SitPer4	.000	0	.	.	.
SitPer1 * SitPerc3 * SitPer4	.000	0	.	.	.
Performance * SitPer1 * SitPerc3 * SitPer4	.000	0	.	.	.
SitPer2 * SitPerc3 * SitPer4	.000	0	.	.	.
Performance * SitPer2 * SitPerc3 * SitPer4	.000	0	.	.	.
SitPer1 * SitPer2 * SitPerc3 * SitPer4	.000	0	.	.	.
Performance * SitPer1 * SitPer2 * SitPerc3 * SitPer4	.000	0	.	.	.
Error	153.888	46	3.345		

a Manipulation = Final Prize

Graph (11): The moderating effect of perception of the situation type on the relationship between performance and adaptability



APPENDIX (L)

THE INTERACTION EFFECT OF RECIPROCITY AND PERCEPTION OF THE COUNTERPART STYLE ON ADAPTABILITY ACROSS ZERO- AND VARIABLE-SUM SITUATIONS

Between-Subjects Factors

		Value Label	N
RO	1.00	Low	88
	2.00	High	47
D4: Counterpart Style	1.00	Cooperative	97
	2.00	Competitive	38

Descriptive Statistics(a)

Dependent Variable: Adaptability

RO	D4: Counterpart Style	Mean	Std. Deviation	N
Low	Cooperative	1.1413	4.22990	67
	Competitive	1.4090	4.97925	21
	Total	1.2063	4.40547	88
High	Cooperative	1.3182	3.87936	30
	Competitive	.7036	2.87275	17
	Total	1.1003	3.62673	47
Total	Cooperative	1.1921	4.11222	97
	Competitive	1.1207	4.26181	38
	Total	1.1722	4.14007	135

a Weighted Least Squares Regression - Weighted by Total SD

Levene's Test of Equality of Error Variances(a,b)

Dependent Variable: Adaptability

F	df1	df2	Sig.
3.350	3	131	.021

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a Design: Intercept+RO+CNTS4+RO * CNTS4

b Weighted Least Squares Regression - Weighted by Total SD

Tests of Between-Subjects Effects(b,c)

Dependent Variable: Adaptability

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	51.570(a)	3	17.190	1.003	.394	.022
Intercept	1273.487	1	1273.487	74.303	.000	.362
RO	17.013	1	17.013	.993	.321	.008
CNTS4	7.333	1	7.333	.428	.514	.003
RO * CNTS4	47.422	1	47.422	2.767	.099	.021
Error	2245.208	131	17.139			
Total	4106.514	135				
Corrected Total	2296.779	134				

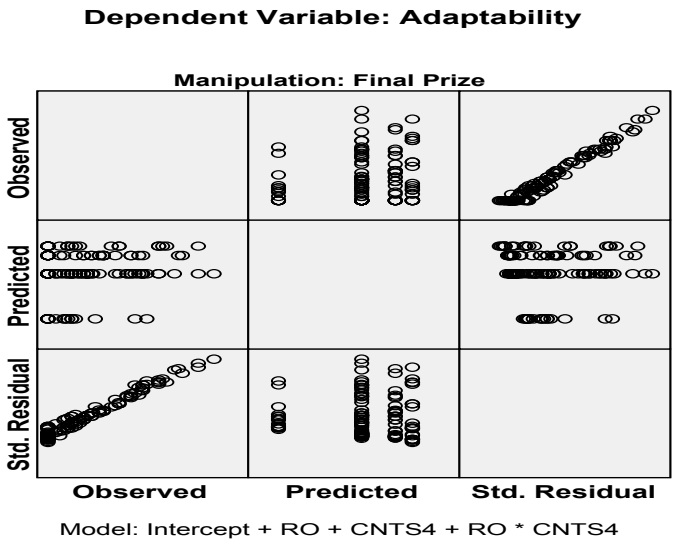
a R Squared = .022 (Adjusted R Squared = .000) b Weighted Least Squares Regression - Weighted by Total SD

Estimated Marginal Means

Dependent Variable: Adaptability

RO	D4: Counterpart Style	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low	Cooperative	1.141	.159	.827	1.456
	Competitive	1.409	.281	.853	1.965
High	Cooperative	1.318	.251	.823	1.814
	Competitive	.704	.338	.035	1.372

a Weighted Least Squares Regression - Weighted by Total SD



Graph (12): The moderating effect of perception of the counterpart style on the relationship between reciprocity orientation and adaptability