ABSTRACT

Title of Document: 

CULTURAL CONTINGENCIES OF MEDIATION: EFFECTIVENESS OF MEDIATION STYLES IN INTERCULTURAL DISPUTES.

Elizabeth Dunbar Salmon, Master of Science, 2012

Directed By: 

Michele J. Gelfand, Ph.D., Professor, Department of Psychology

The difficulties of intercultural negotiations are well established, yet few studies have examined the factors that facilitate the successful resolution of these disputes. This research took a dynamic approach and examined the types of mediation tactics that are most effective in intercultural disputes given specific disputant characteristics. One-hundred and ten participants from the United States and Turkey negotiated a community-based dispute using a newly developed virtual lab. Dyads were randomly assigned to negotiate with a formulative computer mediator, a manipulative computer mediator, or in an unmediated control condition. As predicted, the results showed a significant interaction between manipulative mediation and dispute difficulty; manipulative mediation produced better objective and subjective outcomes in dyads that reported difficult disputing conditions than in dyads with
favorable conditions. The results support the contingency approach using two new indicators of difficult conditions (generalized trust and cultural intelligence).
CULTURAL CONTINGENCIES OF MEDIATION:
EFFECTIVENESS OF MEDIATION STYLES IN INTERCULTURAL DISPUTES.

By

Elizabeth Dunbar Salmon.

Thesis submitted to the Faculty of the Graduate School of the University of Maryland, College Park, in partial fulfillment of the requirements for the degree of Master of Science 2012

Advisory Committee:
Professor Michele J. Gelfand, Chair
Professor Paul J. Hanges
Professor Jonathan Wilkenfeld
Acknowledgements

I would like to thank my committee for their guidance and intellectual support during this process. Specifically, I am deeply grateful for the inspiration, feedback, and encouragement offered by my advisor and chair, Michele Gelfand. I would also like to thank my husband and family for their unwavering support throughout this process. Finally, I am forever grateful to my colleagues, Laura Severance, Rabiah Muhammad, Juliet Aiken, and Anna Sheveland, for their guidance, collaboration, and friendship. The work on this thesis was supported by the U.S. Army Research Laboratory and the U.S. Army Research Office under Grant W911NF-08-1-0144.
# Table of Contents

Acknowledgements ........................................................................................................ ii  
Table of Contents .......................................................................................................... iii  
List of Tables.................................................................................................................. v  
List of Figures ................................................................................................................ vii  
Chapter 1: Introduction .................................................................................................. 1  
  General Review of Mediation Theory, Tactics, and Styles .................................. 4  
    Mediator Tactics ...................................................................................................... 4  
    Dimensions of Mediator Tactics ........................................................................... 5  
  The Contingency Approach to Mediation .............................................................. 10  
  Difficulties of Intercultural Disputes .................................................................... 14  
  Hypotheses ............................................................................................................... 20  
  Study Overview ....................................................................................................... 24  
Chapter 2: Methods ...................................................................................................... 28  
  Participants ............................................................................................................... 28  
  Design and Procedure ............................................................................................. 29  
    Materials: Disputing Case ..................................................................................... 31  
    Apparatus: The Virtual Lab .................................................................................. 34  
    Apparatus: Agent Mediator .................................................................................. 36  
  Pilot Tests: Disputing Case, Virtual Laboratory, and Agent Mediator .................. 38  
  Measures .................................................................................................................. 39  
    Dispute Difficulty Markers .................................................................................. 39  
    Outcomes ............................................................................................................ 42  
Chapter 3: Results ......................................................................................................... 46  
  Preliminary Analyses .............................................................................................. 46  
    Suspicion and Manipulation Checks .................................................................. 47  
  Primary Analyses ..................................................................................................... 48  
    Contextualized Trust ............................................................................................ 49  
    Willingness to Concede ....................................................................................... 49  
    Openness to Mediation ......................................................................................... 50  
    Generalized Trust ................................................................................................. 50  
    Cultural Intelligence .............................................................................................. 51  
Chapter 4: Discussion ................................................................................................... 53  
  Contributions to Theory and Research ................................................................. 54  
  Contributions to Practice ......................................................................................... 56  
  Limitations and Future Directions ........................................................................ 57  
  Conclusion ................................................................................................................. 60  
Footnote ....................................................................................................................... 62  
Tables ............................................................................................................................ 63  
Figures ......................................................................................................................... 76  
Appendices ................................................................................................................... 84  
  Appendix A ............................................................................................................ 84  
  Appendix B ............................................................................................................ 99
List of Tables

Table 1. Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Cultural Intelligence Scale
Table 2. Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Modified Subjective Value Inventory
Table 3. Aggregation Statistics
Table 4. Means, standard deviations, and bivariate correlations among the variables
Table 5. Hierarchical Multiple Regression Analyses Predicting Pareto Efficiency of Agreements from Mediation Condition and Contextualized Trust
Table 6. Hierarchical Multiple Regression Analyses Predicting Overall Satisfaction from Mediation Condition and Contextualized Trust
Table 7. Hierarchical Multiple Regression Analyses Predicting Pareto Efficiency of Agreements from Mediation Condition and Willingness to Concede
Table 8. Hierarchical Multiple Regression Analyses Predicting Overall Satisfaction from Mediation Condition and Willingness to Concede
Table 9. Hierarchical Multiple Regression Analyses Predicting Pareto Efficiency of Agreements from Mediation Condition and Openness to Mediation
Table 10. Hierarchical Multiple Regression Analyses Predicting Satisfaction with Outcome from Mediation Condition and Openness to Mediation
Table 11. Hierarchical Multiple Regression Analyses Predicting Pareto Efficiency of Agreements from Mediation Condition and Generalized Trust
Table 12. Hierarchical Multiple Regression Analyses Predicting Pareto Efficiency of Agreements from Mediation Condition and Cultural Intelligence, Motivation Subscale
List of Figures

Figure 1. Two-way interaction of mediation condition and contextualized trust on Pareto efficiency.

Figure 2. Two-way interaction of mediation condition and contextualized trust on overall satisfaction.

Figure 3. Two-way interaction of mediation condition and willingness to concede on Pareto efficiency.

Figure 4. Two-way interaction of mediation condition and willingness to concede on overall satisfaction.

Figure 5. Two-way interaction of mediation condition and openness to mediation on Pareto efficiency.

Figure 6. Two-way interaction of mediation condition and openness to mediation on satisfaction with outcome.

Figure 7. Two-way interaction of mediation condition and generalized trust on Pareto efficiency.

Figure 8. Two-way interaction of mediation condition and motivational CQ on Pareto efficiency.
Chapter 1: Introduction

With the current trend towards globalization, individuals are thrust into situations in which they must communicate and solve problems with people from a variety of cultures. Globalization has increased contact between individuals from diverse cultural backgrounds in diplomatic, military, business, organizational, and community settings, bringing with it a heightened occurrence of intercultural conflicts and disputes. While the issues at stake in these conflicts may be no different from those that occur between individuals from the same culture, intercultural disputes are plagued by additional difficulties stemming from cultural differences in conflict styles (Hammer, 2005; Kimmel, 2000). While theories and research enumerating the difficulties associated with intercultural disputes abound (e.g., Brett, 2001; Kimmel, 2000), scant attention has been paid to the factors that facilitate the resolution of intercultural disputes.

In spite of the dearth of literature on the topic, mediation may provide a uniquely successful method of dealing with these difficult conflicts. People from certain cultural backgrounds may be hesitant to attempt to resolve a dispute directly; for example, disputants from collectivistic cultures may prefer to use third party intermediaries rather than attempting to resolve the conflict through direct communication with the other individual (Leung, 1988). In other words, because of cultural norms regarding the expectation that a conflict should not be addressed without a third party, some intercultural disputes may never be resolved without the intervention of a mediator. Mediators may also provide a unique outside perspective that can help identify issues stemming from cultural differences that the disputants themselves may not recognize. Disputants hold unconscious expectations of how people in conflict situations should
behave, and these expectations are shaped by cultural background (Kimmel, 2000). In an intercultural dispute, these expectations may be mismatched, leading to misunderstandings between the disputants. Mediators may possess a unique perspective from which they can identify the source of misunderstandings between disputants and create a “microculture” that allows disputants to share norms, expectations, and perceptions of the interaction (Kimmel, 2000, p. 453).

Given the added difficulty associated with intercultural disputes and the unique potential of third parties to bring about positive outcomes in these situations, it is crucial that researchers and practitioners consider the relationships between conflict, culture, and mediation. However, while theory and research on conflict and negotiation has expanded to explore the role of culture (e.g., Gelfand & Brett, 2004), including intercultural disputes (e.g., Ting-Toomey & Oetzel, 2001), research on culture and conflict has generally not examined mediation in intercultural disputes. And while the field of mediation has also been extremely productive, it has generally ignored issues of culture and the mediation of intercultural disputes (for exceptions, see the work of Cohen, 1996 on culture in international mediation, and Wall & colleagues, 1991, 1993, 1994, 1997, 1999, 2004, on mediation tactics across cultures). The current study locates itself at the intersection of culture, conflict, and mediation to begin exploring this understudied area.

This research examines the questions: Which mediation styles are most effective in managing intercultural disputes, and are there situational factors that make certain styles more or less effective in this context? Researchers investigating mediation have catalogued and organized tactics into clusters based on reports from professional, community, and managerial third parties (Beardsley, Quinn, Biswas, & Wilkenfeld, 2006; Carnevale & Pegnetter, 1985; Kressel & Pruitt, 1985; McLaughlin, Carnevale, &
Lim, 1991). In addition, previous research in both psychology and political science has supported the notion that mediators select styles to use based on dispute characteristics, such as disputant resistance to mediation, hostility between the disputants, and low disputant trust (Carnevale, 1986; Lim & Carnevale, 1990). Further, style effectiveness is contingent on these characteristics; some styles are more effective in certain disputing contexts than others (Lim & Carnevale, 1990). Though the contingent effectiveness of these styles is strongly supported, there has yet to be any research on whether the contingency approach operates in intercultural disputes and how the cultural composition of disputing dyads may act as an additional factor impacting the effectiveness of mediation styles. The current research seeks to begin filling this gap.

In what follows, I first provide a review of the literature on mediation and mediation tactics, focusing on the previously established organizing taxonomies of these tactics and providing justification of the mediation styles selected for the current investigation. Second, I review previous theoretical and empirical support for the contingent use and effectiveness of mediation tactics in intracultural disputes. I go on to describe the unique challenges of intercultural disputes to suggest that the cultural context may pose as a previously unexplored contingency impacting mediation style effectiveness. Fourth, I present three hypotheses. I then present the methods employed to test these hypotheses, followed by a presentation of the results. I conclude with a review of the contributions and limitations of the study, and a presentation of potential future directions.
General Review of Mediation Theory, Tactics, and Styles

The following section will provide a brief introduction to the concept of mediation and a review of basic mediation tactics. The discussion will move to discuss a theoretically and empirically supported taxonomy that groups these tactics into mediation styles, with an eye toward motivating the selection of the styles used in the current study of intercultural disputes. The section will also provide a brief review of the replication of these two styles in multiple cultures to justify their appropriateness for use in an intercultural study.

Mediation is defined as:

A process of conflict management where disputants seek the assistance of, or accept an offer of help from, an individual, group, state, or organization to settle their conflict or resolve their differences without resorting to physical force or invoking the authority of the law (Bercovitch, Anagnoson, & Wille, 1991, p. 8).

Mediation has been found to have many benefits for the management of disputes, including improved settlement rates (Wilkenfeld, Young, Asal, & Quinn, 2003), increased disputant satisfaction with outcome (Depner, Cannata, & Ricci, 1994; Wilkenfeld et al., 2003), and more durable settlements (Elleman, 1997).

Mediator Tactics

Discussions of mediation tactics and techniques abound in the literature (for a comprehensive list of tactics, see Wall, 1981). Though each tactic may fulfill multiple mediator goals, tactics are generally assumed to address one of four areas of the dispute (Carnevale & Pruitt, 1992). The first area that mediators must confront is the relationship between the disputants, which involves managing the communication, perceptions, and power differentials between parties through the use of tactics like trust building (Wall,
1981; Wall, Stark, & Standifer, 2001). Another area is the relationship between the mediator and the disputants, which is managed using tactics designed to gain disputants’ trust and underscore the importance of their participation (Kressel & Pruitt, 1985; Wall, 1981). The third and final relational aspect of mediation is the affiliation of the disputants with their respective parties or constituencies, which requires mediators to help disputants maintain positive relationships with their constituents (Wall, 1981). While relational concerns are important influences on the process of mediation, the final aspect of the mediation process that must be addressed is the dispute itself. To do so, mediators may establish ground rules for the negotiation or provide information to the parties (Carnevale & Pruitt, 1992; Wall, 1981). Mediators may also subtly or explicitly influence the resolution of the dispute by suggesting potential settlements, punishing the disputants for failing to reach an agreement, or rewarding disputants for concessions (Wall et al., 2001; Wall & Lynn, 1993).

Dimensions of Mediator Tactics

While taxonomies of mediation tactics based on intuition or personal experience are common, Kressel and Pruitt's (1985) categorization of tactics is one of the few that has been empirically tested and supported. In this taxonomy, interventions are labeled as reflexive, contextual, or substantive, and within each type of intervention, tactics vary along an assertive-passive dimension. Reflexive interventions include the tactics mediators use "to orient themselves to the dispute and to establish the groundwork upon which their later activities will be built" (p. 188), such as building the disputants trust in the mediator and gathering information. Contextual interventions are those that "alter the climate and conditions prevailing between the parties so as to facilitate mutual problem
solving” (p. 191), and include tactics such as dealing with disputants’ anger and structuring the agenda. **Substantive interventions** are those "by which the mediator deals directly with the issues in the dispute" (p. 192). Substantive interventions include tactics such as identifying areas of compromise, suggesting solutions, and helping the disputants evaluate potential agreements. Kressel and Pruitt’s (1985) taxonomy provides theoretical support for the clustering of mediation tactics into a substantive style, but does not account for the possibility of a separate style or substyle for more forceful or pressing tactics, such as punishing the disputants or offering rewards for concessions.

McLaughlin et al. (1991) provided evidence for the separation of substantive tactics into separate substyles. In their examination of professional mediators’ categorization of common tactics, 54 mediators sorted 36 tactics into mutually exclusive categories, which were analyzed using multidimensional scaling and cluster analyses. The multidimensional scaling analyses supported Kressel and Pruitt’s (1985) distinction between substantive and reflexive interventions, as well as the existence of an assertive-passive dimension cutting across each category. The cluster analyses uncovered four general clusters. The first and second clusters corresponded with Kressel and Pruitt’s reflexive and contextual interventions. The remaining two clusters were made up of substantive factors. The first of these two clusters, the **Maneuvering** cluster, involved substantive tactics designed to alter the disputants' positions and was further divided into two subclusters. The first subcluster within Maneuvering, labeled **Make Suggestions**, included behaviors designed to offer specific suggestions to the disputants to move them to a new position, such as suggesting a particular settlement and discussing potential settlements. **Pressing**, the second Maneuvering subcluster, was comprised of tactics designed to move a disputant off a position, and included strategies like pointing out the
costs of disagreement and pressing disputants hard to make a compromise. The second of the two substantive clusters, the *Facilitating* cluster, involved tactics related to "facilitating or controlling communication between disputants" (McLaughlin et al., 1991, p. 470). In summary, McLaughlin et al.’s analyses uncovered separate clusters of substantive tactics; *Make suggestions*, which included only proposing and discussing settlement options, and *Pressing*, which included more forceful tactics used to push disputants to an agreement.

In addition to McLaughlin et al.’s (1991) multidimensional scaling and cluster analysis study, Lim and Carnevale’s (1990) factor analysis of mediators’ reported use of tactics also supports the existence of separate suggesting and pressing styles. In this study, 255 professional mediators reported on several aspects of their most recently completed mediation case, including the tactics they used. Lim and Carnevale (1990) factor analyzed the mediators’ reported tactic use. The final model was a six-factor solution. The factor analysis uncovered three subcategories of substantive interventions. Two of these factors, *Substantive/Suggestions* and *Substantive/Press* were consistent with McLaughlin et al.’s (1991) *Make Suggestions* and *Pressing* subclusters of the *Maneuvering* cluster, respectively. The final substantive factor uncovered by Lim and Carnevale (1990) was *Substantive/Face-Saving*, and included tactics that helped disputants save face during the negotiations. In addition, there was a clear reflexive category. The contextual category of behavior was split into a trust factor, which included activities meant to build trust between the actors in the dispute, and an agenda factor, which covered tactics meant to control the agenda. Lim and Carnevale’s analysis provides further support for the existence of separate suggesting and pressing styles of mediation.
Taken together, the results from McLaughlin et al.’s (1991) multidimensional scaling and cluster analysis and Lim and Carnevale’s (1990) factor analysis support the existence of separate substantive clusters related to making suggestions and pressing the disputants. These two styles are also consistent with previous theoretical perspectives of mediator behavior in political science. Touval and Zartman (1985) define three mediator roles. The first role, the mediator as facilitator or communicator, corresponds with both the reflexive and contextual styles (Touval & Zartman, 1985; Wilkenfeld et al., 2003). The remaining two roles reflect two of the subcategories included in the substantive type. In the mediator as formulator role, the mediator contributes to the negotiations by developing and providing potential solutions to the disputants (Touval & Zartman, 1985; Wilkenfeld et al., 2003); this role corresponds with the Maneuvering: Make Suggestions subcluster and Substantive/Suggestions factor. Finally, the mediator as manipulator role involves both providing potential solutions and “[manipulating] the parties into agreement” (Touval & Zartman, 1985, p. 12) by using their power, position, or influence to change the appeal of a given solution (Wilkenfeld et al., 2003). The manipulator role is generally characterized by the use of threats, rewards, and punishments, called “carrot and stick” measures, to aggressively push for a solution. The studies conducted by McLaughlin et al. (1991) and Lim and Carnevale (1990) did not include these carrot and stick measures, likely because professional mediators in industrial, organizational, and community disputes often do not have the necessary power to exact such tactics (Hopmann, 1996). However, the manipulator role shares key aspects of the Substantive/Press factor and Maneuvering: Pressing subcluster, including pressing disputants hard to make a compromise, trying to change the disputants’ expectations,
trying to move disputants off a position, and making the disputants aware of the costs of nonagreement (Beardsley et al., 2006; Lim & Carnevale, 1990; McLaughlin et al., 1991).

Additional support for the investigation of the formulative/make suggestions and manipulative/pressing styles of mediator behavior in the current study is provided by studies of intracultural mediation in non-Western nations. While there is considerable variability in mediation practices across cultures (e.g., Callister & Wall, 1997; Callister and Wall, 2004; Davidhesier, 2005; Kim, Wall, Sohn, & Kim, 1993; Wall & Blum, 1991; Wall, Callister, & Callister, 1999), there may also be commonalities that indicate a core of universal techniques (Carnevale, Cha, Wan, & Fraidin, 2004; Dialdin & Wall, 1999; LeResche, 1992). Previous research has suggested that making suggestions and using pressing techniques may be core universal techniques, in that mediators involved in disputes at a variety of levels from Malaysia (Wall, Callister, & Callister, 1999), Thailand (Callister & Wall, 2004), China (Wall & Blum, 1991), Japan (Callister & Wall, 1997), South Korea (Kim et al, 1993), Turkey (Kozan & Ilter, 1994), and Gambia (Davidhesier, 2005) reported both proposing solutions to disputants and pushing them hard to an agreement. Since the current paper focuses on intercultural disputes, it is important to select mediation styles that are deployed effectively in a variety of cultural contexts.

Based on the theoretical support for and empirical stability of the formulative and manipulative styles of mediator intervention, the current research will focus on the effectiveness of these two styles in intercultural disputes. The clustering of tactics within the reflexive and contextual styles was not consistent between McLaughlin et al. (1991) and Lim and Carnevale (1990), making it difficult to clearly determine the tactics included in each style. Given that there are also inconsistencies in the theoretical perspectives in psychology and political science regarding whether the contextual and
reflexive categories are separate styles, these two groups of mediator behavior are not
tested in the current research. I return to the importance of future research on these styles
in the discussion section. The two styles of mediation used in the current study are
defined as such:

Formulative (aka “make suggestions” mediation): a collection of tactics
employed by a mediator to move a party onto a new position by making
specific, substantive contributions to the negotiations

Manipulative (aka “pressing” mediation): a collection of tactics employed
by a mediator to move a party off a previous held position or push the
parties toward settlement by threatening, punishing, or rewarding one or
both disputants.

*The Contingency Approach to Mediation*

With the goal of understanding how mediators mediate, recent research has
developed, tested, and refined a contingency theory of mediation. This theory posits that
mediators base their selection of styles on observations of various aspects of the situation,
such as disputant hostility, and that these factors in turn impact the effectiveness of
mediation styles (e.g., Bercovitch & Houston, 2000; Carnevale & Pegnetter, 1985;
Hiltrop, 1985; Lim & Carnevale, 1990). The basis of contingent theory is the assumption
that “in order to be effective, the mediator must choose a strategy responsive to the
dispute situation” (Hiltrop, 1985, p. 93). Previous research has largely supported this
assumption, finding that the effectiveness of mediation tactics and styles is dependent on
various aspects of the disputing context (e.g., Hiltrop, 1985, 1989; Lim & Carnevale,
1990). Due to the focus of the current research on the formulative and manipulative mediation styles, the following review of contingencies in mediation will focus specifically on the disputing context(s) in which these styles are used and the effectiveness of these styles in different situations.

The relationship between difficult dispute conditions and the effectiveness of manipulative techniques has been supported by a number of theoretical perspectives and field studies (e.g., Bercovitch, 1997; Hiltrop, 1985, 1989; Kleiboer, 1996; Rubin, 1980; Wilkenfeld et al., 2003). Rubin (1980) and Donohue (1989) noted that forceful tactics were often ineffective or even counterproductive in low-intensity disputes, in which disputants were likely to be resentful of the mediators’ attempts to control the negotiation. In contrast, they argued that forceful tactics would be especially effective in high-intensity disputes, as disputants could blame concessions on mediator pressure and thus save face. Likewise, Bercovitch (1997) and Wilkenfeld et al. (2003) argued that disputants are more receptive to formulative and manipulative mediation during intense crisis situations rather than in lower-intensity contexts.

In field work on the contingent effectiveness of mediation styles, Hiltrop (1985) investigated the effectiveness of mediator strategies in collective bargaining disputes. This research showed that the use of forceful tactics was positively related to settlement by mediation when a strike action had been imposed, but did not impact settlement when strikes had not been imposed. These findings suggest that directive and forceful behaviors may be more likely to lead to settlements, but only when the interpersonal relationship between disputing parties is negative and the dispute is intense. Hiltrop also found that directive strategies were positively related to settlement in disputes over issues other than pay, but negatively related to settlement in disputes over pay. Hiltrop
suggested that disputes over principles rather than tangible, “more compromisable” issues like pay may require more force on the part of the mediator, especially to move disputants off of their positions. This finding speaks to the possibility that deeply-held disputant principles may increase the intensity of the dispute situation and harm the relationship between disputants due to refusals to compromise. In addition, Zubek and colleagues (1992) found that when joint problem solving was low and disputants had a contentious relationship, mediator efforts to suggest new solutions were positively related to settlement. In contrast, when joint problem solving was high, the same mediator behavior was negatively related to agreement.

In the most comprehensive investigation of contingencies in mediation style selection and effectiveness, Lim and Carnevale (1990) linked professional mediators’ reports of the disputing context in their most recently completed case to the use and effectiveness of mediation styles. As in previous field research, mediators reported using manipulative mediation to a greater extent in hostile disputes, which included conditions of low contextualized trust (i.e., low trust between the disputants) and refusal to compromise. In addition, the effectiveness of manipulative mediation was moderated by difficult conditions, which included hostility, internal party problems (lack of disputant preparation or experience), and resistance to mediation (low trust in the mediator, high desire for control over negotiation). Under these difficult conditions, manipulative mediation was positively related to desired outcomes, but the relationship between manipulative mediation and outcomes was negative under conditions of low difficulty. For example, under high hostility, manipulative mediation was positively related to the achievement of a general settlement and an improved disputant relationship, but this relationship became negative under conditions of low hostility. These findings show that
manipulative mediation is effective under difficult conditions, but may be counterproductive when conditions are more favorable.

Lim & Carnevale’s (1990) results regarding formulative mediation were less consistent. First, dispute hostility was not related to the selection of formulative tactics, but hostility did interact with formulative mediation to predict outcomes. As with manipulative mediation, formulative mediation was positively related to the achievement of a general settlement and improved disputant relationship under conditions of high hostility, but negatively related to these outcomes under low hostility. Internal party problems also moderated the relationship between formulative mediation and general settlement. However, in a reversal of the pattern found for hostility, under a low degree of internal party problems, the relationship between formulative mediation and settlement was positive, but as the degree of internal party problems increased, this relationship switched from positive to negative. In sum, while formulative mediation interacted with difficult conditions, the pattern of the interactions was not consistent; in the case of hostility, formulative mediation performed better under difficult conditions, but in the case of internal party problems, formulative mediation performed worse under difficult conditions. These findings suggest that the relationship between formulative mediation and outcomes is not consistent across different types of dispute difficulty.

Taken together, previous theoretical and field work on the contingent use and effectiveness of formulative and manipulative strategies supports the idea that manipulative mediation may be effective only in situations where dispute intensity is high, the disputant relationship is contentious, or when joint problem-solving is low (Carnevale & Pruitt, 1992). In contrast, these strategies are ineffective and even counterproductive under more positive conditions. Despite the breadth of this literature, it
remains limited in several ways. Most of the studies on the contingency theory have relied entirely on reports from mediators in the field, and have gathered data on all variables (dispute characteristics, mediation style, and outcomes) from the mediator alone. In particular, these studies have relied on mediators’ reports of their use of tactics; to date, there is no research examining the interaction between difficult conditions and mediation style when disputes are randomly assigned to a mediation style. Further, the contingency approach has not been tested when mediators were limited to using only one style during the dispute, or in a study that included an adequate control condition of no mediation. Finally, the theory and literature on the contingent effectiveness of mediation has not considered the cultural context of the dispute. The following section will enumerate the difficulties that may arise in intercultural disputes to suggest that cultural difference may be a previously unexplored dispute characteristic that may moderate the effectiveness of mediation styles.

**Difficulties of Intercultural Disputes**

While all disputes and conflicts have their difficulties, disputes between parties from different cultures may be prone to unique challenges, especially if the disputants’ cultures are very different. Hofstede (1980) defined culture as “the collective programming of the mind,” which distinguishes human groups from one another and influences how they respond to their respective environments (p. 25). Similarly, the GLOBE study defined culture as common practices and common values (House & Javidan, 2004). Triandis (1972) focused on subjective culture, which is a society’s “characteristic way of perceiving its social environment” (p. 3), including the assumptions, norms, and standard operating procedures that are shared among societal
members. While there is variation in the definitions of culture, many perspectives point to the shared nature of culture, its ability to impart adaptive (or once adaptive) knowledge, and its transmission across time and generation (Triandis, Kurowski, & Gelfand, 1994).

Previous research has suggested that culture and negotiation are inextricably linked, in that culture shapes negotiator interests, priorities, and strategies (e.g., Adair, Brett, Lempereur, Okumura, Tinsley, & Lytle, 1998; Avruch, 2003; Avruch & Black, 1991; Brett, 2000, 2001; Brett, Adair, Lempereur, Okumura, Shikirev, Tinsley et al., 1998; Gelfand & Brett, 2004; Gelfand & Christakopolou, 1999; Gelfand, Higgins, Nishii, Raver, Dominguez, Yamaguchi, et al., 2002; Gelfand, Nishii, Holcombe, Dyer, Ohbuchi, & Fukumo, 2001; Hammer, 2005; Imai & Gelfand, 2009). Culture forms the foundations of disputant expectations for behavior during the conflict (Kimmel, 2000; Ting-Toomey & Oetzel, 2001); when these expectations are not shared between disputants or when one party deviates from the other party’s expectations, a unique set of challenges is layered over the original conflict. The following section will enumerate a number of previously supported cultural differences that come to bear during negotiations and offer potential mechanisms by which these cultural differences increase the difficulty of finding resolution in intercultural disputes.

One key area in which cultures differ is the metaphors used to think about negotiation (Gelfand & McCusker, 2002). Metaphors are “sets of conceptual mappings that take place between domains of experience” (p. 298). Though the function of metaphors is universal, the content is culture specific. Metaphors for negotiation provide actors with information on the nature of the disputing task, how they should behave in the dispute situation, and how to interpret different events during the dispute. In sum,
metaphors provide a lens through which disputing parties understand the conflict and a filter that affects their behavior during the dispute.

Difficulties may arise when disputants hold different metaphors for negotiation, which is likely when the disputing parties are from different cultures. For example, a sports metaphor is commonly held by American negotiators, whereas an *ie*, or household, metaphor is commonly held by Japanese negotiators (Gelfand & McCusker, 2002). In an intercultural dispute between an American disputant and a Japanese disputant, these divergent metaphors may lead to a different understanding of the negotiation task as well as to different behaviors and reactions during the task. Whereas the American disputant might view conflict as a normal activity characterized by overt, task-oriented behaviors, the Japanese disputant would likely view conflict as an activity to be avoided and only addressed through covert, relationally-oriented behaviors. Similarly, the American-held sports metaphor may result in negotiation behavior that is aggressive and exchanged in turns, whereas the Japanese household metaphor may lead to lower aggression and activities determined by status and needs. Based on this example, it is clear that divergent metaphors, such as those that may be held by disputants from different cultures, may create conflicting expectations about the negotiating task and process. These divergent expectations may hinder the disputants’ ability to coordinate joint problem solving and may produce behaviors that violate expectations for behavior.

A second way in which culture affects negotiation is through communication. While communication strategies can be linked to metaphors, cultural differences in norms for communication cut across many different situations. Two primary systems of communication norms are particularly relevant for the impact of culture in disputing contexts. First, Hall (1976) argued that languages can be distinguished based on whether
they favor high or low context communication. In high context communication “most of the information is either in the physical context or internalized in the person” whereas in low context communication most of the information is “in the coded, explicit, transmitted part of the message (Hall, 1976, p. 91). For example, Hall (1976) posited that Japanese, Chinese, Arabic, and Mediterranean languages are often high-context, whereas German, English, and Northern European languages are low-context. The high-low context distinction is particularly relevant for communication over conflict. Low-context negotiators may emphasize using explicit, direct, and unambiguous language to clearly express their position, while high-context negotiators may try to use indirect, ambiguous communication approaches to try to express their true intentions (Hammer 1997, 2005; Ting-Toomey, 1985, 1988).

The second system of communication norms that impacts negotiation concerns the expression of emotion in verbal and non-verbal behaviors. There are differences in cultural norms regarding the expression of emotion (Ekman & Frisen, 1969), especially during social interactions (Hammer, 2005). For example, Trompenaars and Hampden-Turner (1998) found that the majority of respondents in Poland, Japan, and Ethiopia reported that they would not express emotions openly if they felt upset at work, whereas the majority of respondents from Kuwait, Egypt, Oman, Spain, Cuba, Saudi Arabia, Venezuela, and the Philippines indicated that they would openly express their feelings. Members of cultures where emotional restraint is valued tend to avoid overt expressions of emotion by containing, hiding, or masking their feelings (Hammer, 2005). In contrast, emotionally expressive cultures express their emotions through both verbal and non-verbal behaviors, including gestures, voice volume, and posture (Hammer, 2005; Zandpour & Sadri, 1996).
The cultural differences in metaphors and communication norms establish expectations and behavioral patterns that impact the negotiation context. While there may be variation within a culture in the extent to which individual negotiators hold the same metaphor for negotiation or adhere to the same communication norms (Brett, 2001), there is a strong relationship between common culture and shared mindsets regarding disputes and negotiations (Kimmel, 2000). In addition to cultural differences in metaphors and communication norms, intercultural disputes may also be complicated by more diffuse cultural differences that impact expectations of conflicts and their resolution (Ting-Toomey & Oetzel, 2001), such as value patterns (e.g., individualism-collectivism and power distance, Hofstede, 1980), conflict norms (e.g., equity vs. communal norms, Leung & Bond, 1984; Leung & Iwawaki, 1988), and face concerns (Condon, 1984, Ting-Toomey, 1988). Disputants from the same or similar cultures share similar understandings of what conflict means and the appropriate behavior for addressing it; in contrast, disputants from different cultures often do not share the unconscious expectations, norms for behavior, and communication styles that guide behavior in conflict situations (Kimmel, 2000). These divergences may lead to “surprises” during the dispute (Cohen, 1991), in that one disputant will likely violate the other disputant’s expectations (Kimmel, 2000).

These violations may not only disrupt the coordination of behaviors and communication during the dispute, but may also lead to negative assumptions about the violators’ behavior and intentions. Previous research has suggested that people unconsciously assume mindsets congruent with their culture (Glenn, 1962), and assume that their expectations and behavior are correct (Kimmel, 2000). When a person violates these unconscious rules, the violator’s behavior may be attributed to personal traits or
motivations (e.g., “he’s lazy” or “she’s trying to be evasive”) rather than to cultural differences in acceptable behavior or communication during disputes (Cohen, 1991; Kimmel, 2000; Ting-Toomey & Oetzel, 2001). Such negative attributions may damage the perceiver’s motivation to continue in the resolution process; the perception that the violator is behaving in a hostile or contentious manner decreases efforts to engage in joint problem-solving (Zubek et al., 1992). In addition, if the negative attributions are communicated to the violator, they may decrease his or her receptivity to the other disputant (Kimmel, 2000). Thus, cultural differences not only make it difficult to coordinate behavior and expectations, but violations may lead to negative attributional processes that damage the relationship between disputants and may lead to lower receptivity and increased hostility.

The potential for negative outcomes in intercultural dyads may be further amplified by stereotypes (Ting-Toomey & Oetzel, 2001). For example, negative attributions are related to the commonly held beliefs within a culture (Kimmel, 2000). Behavior exhibited by a disputant is judged based on the stereotypes held by the other party about that behavior; for example, a disputant who negotiates at a slower pace may be labeled as lazy by an American disputing partner, because slower paces are associated with laziness in the American cultural context. Stereotypes of the opposing disputant’s culture may also negatively impact the negotiation process. Disputants from cultures that share common norms and behavioral scripts for negotiation may not recognize these similarities if they hold cultural stereotypes that label the opposing disputant’s culture as very different from their own (Brett, 2000). In addition, even if a disputant tries to deviate from the stereotypically held beliefs about how members of his or her culture behave during negotiation, the opposing disputant may be unlikely to take the deviating
disputant’s behavior seriously (Brett, 2001). Thus, while some theorists suggest creating a “microculture” in which negotiators adapt to each other to form a common approach to the negotiation (e.g., Drake & Donohue, 1996; Kimmel, 2000; Pinkley & Northcraft, 1994), these adaptations may be challenging to achieve in real negotiations (Brett, 2000), perhaps in part because of the difficulty in overcoming cultural stereotypes.

In sum, previous research has suggested that there are fundamental cultural differences in the expectations, values, interests, and norms surrounding negotiation. The variation in the approaches to negotiation results in unexpected behavior and potential violations of norms and expectations. Violations, in turn, may lead to negative attributional judgments and may be exacerbated by cultural stereotypes. The differences in expectations between disputants from different cultures, as well as their divergent negotiation communication and behavior, hinder coordination and joint problem-solving. In addition, through stereotyping and attributional processes, these factors may increase feelings of contention between the disputants, thus escalating the intensity of the dispute and decreasing the disputants’ desire to reach a settlement. Given the previous research on contingencies in mediation and the added difficulties of intercultural disputes, the current paper argues that the cultural context of a dispute, specifically whether it takes place in an intercultural context, may act as a contextual variable affecting the success of mediation styles.

**Hypotheses**

Based on the previous research testing contingencies in mediation, it is expected that measures of dispute difficulty (e.g., low trust in the other disputant, low willingness
to concede, and low openness to mediation) will impact the effectiveness of mediation styles in intercultural disputes.

*Hypothesis 1:* There will be a significant interaction between manipulative mediation and measures of dispute difficulty. Manipulative mediation will produce better outcomes in difficult conditions, but worse outcomes in easier conditions.

*Hypothesis 1a:* There will be a significant interaction between manipulative mediation and contextualized trust. Manipulative mediation will produce better outcomes when dyads report low contextualized trust, but worse outcomes when dyads report higher contextualized trust.

*Hypothesis 1b:* There will be a significant interaction between manipulative mediation and willingness to concede. Manipulative mediation will produce better outcomes when dyads report low willingness to concede, but worse outcomes when dyads are more willingness to concede.

*Hypothesis 1c:* There will be a significant interaction between manipulative mediation and openness to mediation. Manipulative mediation will produce better outcomes when dyads report low openness to mediation, but worse outcomes when dyads are more open to mediation.

Given the previously discussed inconsistencies regarding the interaction between formulative mediation and difficult dispute conditions (Lim & Carnevale, 1990), the
current study does not offer any specific predictions regarding the behavior of formulative mediation.

The current study will also explore the impact of two previously unexplored measures of dispute difficulty, generalized trust and cultural intelligence, on the effectiveness of mediation styles. Generalized trust is an “[acceptance of] vulnerability based on positive expectations of the intentions or behaviour of another” (Rousseau, Sitkin, Burt & Camerer, 1998, p. 395). Contextualized trust is based on disputant reports of trust in the other disputant to behave appropriately in the specific context of the negotiation. Generalized trust is less concrete and specific in its target, and is thus less contingent on the specific situation (Gheorghiu, Vignoles, & Smith, 2009). Previous research has suggested that people with higher generalized trust are more likely to perceive others, even strangers, as trustworthy and may be more likely to trust them in specific situations (Gheorghiu et al., 2009); thus, I expect that low generalized trust may impact the effectiveness of mediation styles in a similar manner as contextualized trust.

*Hypothesis 2:* There will be a significant interaction between manipulative mediation and generalized trust. Manipulative mediation will produce better outcomes when dyads report low generalized trust, but worse outcomes when dyads are more trusting.

One individual difference factor that may help to overcome the difficulties of intercultural disputes is cultural intelligence (CQ), which is an individual’s capacity to function and manage in culturally diverse situations (Earley & Ang, 2003). CQ is comprised of four dimensions. *Metacognitive CQ* refers to an individual’s level of awareness of cultural preferences and norms during intercultural interactions (Ang & Van Dyne, 2008). *Cognitive CQ* is the knowledge of cultural norms, practices, and
conventions, while *Motivational CQ* refers to an individual’s drive to learn about and function in situations with culturally diverse people (Ang & Van Dyne, 2008). Finally, *Behavioral CQ* is a measure of an individual’s ability to appropriately display verbal and nonverbal signals in cross-cultural situations (Ang & Van Dyne, 2008). CQ has received attention for its theoretical potential to smooth relations in intercultural interactions (Brislin, Worthley, & MacNab, 2006), and it has been shown to improve performance and adjustment in intercultural situations (Ang, Van Dyne, Koh, Ng, Templer, & Tay, 2007; Flaherty, 2008). CQ has also been linked to performance in intercultural negotiations. Imai and Gelfand (2010) found that motivational CQ predicted integrative information sequences in intercultural negotiations, which in turn positively predicted joint outcomes. This research suggests that CQ, particularly motivational CQ, may help to ameliorate the difficulties of intercultural disputes. As such, CQ may be another contingency affecting the effectiveness of mediation styles in intercultural disputes. Intercultural disputes in which the disputants have low cultural intelligence may be more difficult, and thus manipulative mediation may be more effective in these situations. In contrast, when disputants in intercultural disputes have higher cultural intelligence, the disputes may be less difficult and therefore may not benefit from the pressing tactics of the manipulative mediator.

*Hypothesis 3:* There will be a significant interaction between manipulative mediation and cultural intelligence. Manipulative mediation will produce better outcomes when dyads have low CQ scores, but worse outcomes when dyads have higher CQ score.
Study Overview

The current study sought to expand the literature on the contingencies of mediation style effectiveness through four means. First, disputing dyads were randomly assigned to either negotiation in a formulative mediation, manipulative mediation, or a no mediation condition. In this sense, the study was similar to that of Wilkenfeld et al. (2003), which randomly assigned negotiating dyads to facilitative, manipulative, or no mediation conditions, though the current study replaces the facilitative style with the formulative style. Random assignment was necessary to ensure that any differences in outcomes are due to the effects of mediation style, and not to other factors like characteristics of the dispute or the negotiators.

Second, this study standardized the mediation styles in the mediated conditions by employing a computer agent. While previous studies investigating mediation styles have generally manipulated mediation style through trained human mediators (e.g., Bartunek, Benton, & Keys, 1975; Kimsey, Fuller, Bell, & McKinney, 1994; Wilkenfeld et al., 2003), computer agents have been developed and used successfully as mediators in computer science (Chalamish & Kraus, 2007) as well as in traditional conflict resolution studies (Wittmer, Carnevale, & Walker, 1991). While the use of a live mediator may enhance the realism of the simulation, it also requires consistent monitoring of the mediator behavior to ensure reliability within mediation style (as in Wilkenfeld et al., 2003), or the delivery of pre-scripted statements at certain times during the negotiation (as in Bartunek, Benton, & Keys, 1975).

The use of a computer agent as the mediator offered several advantages. First, the mediation style of the agent was standardized across every dyad in each mediation style
condition, ensuring that there were no undetected differences in the how the mediation style was deployed across dyads. Second, the agent was able to react contingently to the disputants’ offer behavior while reliably maintaining the selected style. However, there are tradeoffs to using an agent mediator. Participants may be suspicious that the agent is not a real person, and the fact that the agent only sent text messages to the disputants rather than taking part in the discussion may have reduced the social presence of the mediator. The current study went to great lengths to ensure that participants believed the mediator was a real person and that the social presence of the mediator was sufficient to impact the negotiations. In addition, previous studies using agent mediators have suggested that only a minority of participants were suspicious of the mediator (Wittmer et al., 1991).

Third, the current study used measures of difficulty collected directly from the disputants, rather than basing them on the mediator’s perception of dispute difficulty. As discussed, the current study focused on several markers of dispute difficulty. First, it focused on three previously utilized metrics of difficulty: contextualized trust (i.e., trust in the other disputant), willingness to concede, and openness to mediation. These measures were found in the top five most cited indicators predictive of unsuccessful mediation attempts in Carnevale, Putnam, Conlon, and O’Connor’s (1991) study of community mediation, suggesting that they are likely to be common indicators of dispute difficulty. The study also explored two new difficulty markers, generalized trust and cultural intelligence. These two difficulty markers were expected to impact mediation style effectiveness in the same manner as the previously explored factors.

Fourth, the current study attempted to replicate previous findings on contingencies of mediation style effectiveness in intercultural disputes. The study used
samples of American and Turkish students paired into intercultural dyads. The United States and Turkey were selected for the sample sites for a number of reasons. First, much of the research on intercultural disputes focuses on disputes occurring between negotiators from the West, especially from the United States, and East Asia (e.g., Arunachalam, Lytle, & Wall, 2001; Imai & Gelfand, 2010). Intercultural disputes between negotiators in the US and non-East Asian cultures have received relatively little attention. Second, the US and Turkey differ on a number of cultural value metrics that may impact negotiations. Turkey scores relatively high on collectivism, power distance, and uncertainty avoidance (Hofstede, 1980). People in Turkey tend to value maintaining harmony and smooth relationships (Kozan, Ergin, & Varoglu, 2007), eschewing aggressive individualism and confrontational behaviors during interactions (Dindi, Gazur, & Kirkkopru-Dindi, 1989; Kozan et al., 2007). In contrast, individuals from the US are highly individualistic (Hofstede, 1980), endorse an independent self-construal (Markus & Kitayama, 1991), and value competition (Triandis, McCusker, & Hui, 1990). Further, Turkey and the United States differ on the value placed on assertiveness, with the GLOBE study reporting that the American sample reported significantly higher assertiveness values ($M = 4.32$) than the Turkish sample ($M = 2.66$; den Hartog, 2004). Assertiveness is linked to valuing dominant behavior, competition, and direct communication and expression of emotion (den Hartog, 2004). Individuals from assertive cultures tend to emphasize results over interpersonal relationships. In contrast, individuals from cultures scoring low on assertiveness tend to value cooperation, relationships, and indirect communication.

The United States and Turkey also differ on institutional collectivism, or the degree to which institutional practices encourage and reward collective action (Gelfand,
Bhawuk, Nishii, & Bechtold, 2004), with Turkey scoring significantly higher ($M = 5.26$) on institutional collectivism values than the United States ($M = 4.17$) in the GLOBE study. Individualism and collectivism have been linked to a number of differences in negotiation behavior. Individualist tend to manage conflict using self-defensive, controlling, dominant, and competitive styles, while collectivists tend to rely on more integrative, compromising, obliging, and avoidant styles (Chau & Gudykunst, 1987; Ting-Toomey & Oetzel, 2001). In Turkey specifically, previous research has suggested that parties tend to focus on establishing relationships in negotiations, and that economic interests are generally pursued in a very indirect way (Kozan et al., 2007; White, 1994). Finally, the United States and Turkey also differ on communication norms; Turkish is considered a high context language, while English is considered a low context language. This difference impacts expectations surrounding the use of direct versus ambiguous communications. In sum, the United States and Turkey differ markedly on several cultural dimensions, and these differences were expected to affect how members of these respective cultures approach disputing situations.
Chapter 2: Methods

Participants

A total of 53 American students from a large, mid-Atlantic, public university and 53 Turkish students from a small private university outside of Istanbul, Turkey participated in the study. Power analyses revealed that approximately 51 dyads would provide 85% percent power to detect large effects with the reported experimental design and planned regression analyses. Additional participants were recruited to ensure that a sufficient number of usable dyads would be available for the analyses. Participants were recruited through classroom announcements and on-campus flyers. Experimenters also approached students in public locations on the campuses and asked if they would like to participate. Participants received $20 USD (or equivalent) for their participation.

The American sample included 24 male and 29 female participants between the ages of 18 and 45 years of age ($M = 21.2, SD = 4.2$). The majority of the participants identified themselves as European American (62.2%, $n = 33$), followed by Asian (20.7%, $n = 11$), African American (7.5%, $n = 4$), and bi- or multi racial (3.8%, $n = 2$). Three participants (5.7%) chose not indicate their ethnicity. The majority of the sample described their socio-economic status as middle-class (75.5%, $n = 40$), followed by upper class (15.1%, $n = 8$), and lower class (9.4%, $n = 5$).

The Turkish sample included 24 male and 29 female participants between the ages of 18 and 30 ($M = 21.6, SD = 2.5$). Participants in the Turkish sample were not asked to indicate their ethnicity; based on collaborator feedback, the ethnicity question was removed from the Turkish demographics questionnaire due to its potential to cause participants discomfort. The majority of the sample described their socio-economic status
as middle class (62.2%, n = 33), followed by lower class (40.0%, n = 18), and upper class (5.7%, n = 3).

**Design and Procedure**

The study employed a three condition (No Mediation, Formulative Mediation, Manipulative Mediation) between-subjects experimental design. Subjects were paired into same-gender intercultural dyads based on their availability. Within each dyad, participants were randomly assigned to player role (Player 1 or Player 2). Each dyad was randomly assigned to mediation condition. Seventeen dyads completed the simulation with a formulative mediator, 18 dyads completed the simulation with a manipulative mediator, and 18 dyads completed the simulation with no mediator. All materials were in English, and the dyads negotiated in English.

The study was conducted in two parts. In Part I, participants completed an online survey (Part I Questionnaire) in which they read the disputing scenario (see Appendix A), responded to scales measuring cultural values and individual differences, including generalized trust, and completed a demographics questionnaire (see Appendix B).

Participants completed Part II of the study in designated laboratory spaces on the two university campuses. Participants were given five minutes to review the disputing scenario at the beginning of Part II. Participants then completed a pre-negotiation questionnaire, which included items measuring contextualized trust, willingness to concede during the negotiation, and openness to mediation (see Appendix C).

After completing the pre-negotiation questionnaire, participants reviewed a Power Point tutorial which explained how to use the virtual lab, which will be discussed further in the Apparatus section below. Following the tutorial, the experimenters opened the
virtual lab on the computer. The participants were instructed by the experimenter to sit at the computer, put on their headsets, and begin their discussion with the other player. The participants were given 28 minutes to negotiate a solution to the disputing scenario. The negotiation period was divided into seven four-minute rounds. If both participants consented, the video conference was recorded; if one or both participants declined to be recorded, the experimenters did not record the video conference. Participants in four dyads declined to be recorded. The experimenter did not monitor the negotiation. When the participants had reached a solution or the 28-minute time limit expired, they completed a post-negotiation questionnaire (see Appendix D), which included a modified version of the Subjective Value Inventory (SVI, Curhan, Elfenbein, & Xu, 2006). The post-negotiation questionnaire also included manipulation check items about the mediator; only participants who indicated that a mediator intervened in their discussion answered questions about the mediator. The three manipulation check items measured perceptions of the mediator's actions during the negotiation; participants were asked to rate the extent to which the mediator suggested offers, pushed the players to accept proposals, and threatened to punish the players (1 = not at all, 5 = very much). At the end of the post-negotiation questionnaire, all participants completed a series of funnel debriefing questions designed to assess suspicion about the mediator and the study. These questions asked participants about their impressions of the study, the purpose of the study, whether anything stood out or seemed strange to them, or if they noticed anything unusual about their partner or the mediator. Any participants who indicated that they believed that the mediator was not a real person were excluded from the analyses. Fifty-three of the 55 dyads (96.3%) did not indicate suspicion about the mediator; only two participants were suspicious of the mediator and the data from these two dyads were
excluded from the analyses. The final sample consisted of 24 male and 29 female intercultural dyads.

**Materials: Disputing Case**

The scenario used in the study is a mixed-motive community disputing case between two tenants in a company-owned apartment building (see Appendix A). This new case was developed based on in-depth interviews conducted with participants in the Middle East and the United States. The case was developed in collaboration with researchers in the United States, Israel, and Turkey, and extensive pilot data and feedback was collected to ensure that the issues in the case were relevant across the cultures of interest. The case was also pretested with American intracultural, Turkish intracultural, and American-Turkish intercultural dyads to ensure that the allotted negotiation time was appropriate and that the case was sufficiently motivating.

There were five issues under dispute in the case, and each issue was associated with five potential solutions. Each solution was assigned a point value. If the participants agreed on the same solution options for all five issues, they received the number of points associated with each solution option. The case was constructed so that two of the issues were distributive (Garbage and Noise), two of the issues were integrative (Basketball Court Use and Patio Use), and one issue represented compatible interests (Parking Lot Access). Thus, the case had integrative potential, in that if disputants shared information on their differing priorities and compatible interests, they could enhance their joint outcome. The case also included a Best Alternative to the Negotiated Agreement (BATNA); the case instructions stated that if the participants did not come to an agreement in the allotted time or chose to end the negotiations without a full agreement,
each player would be automatically assigned a point value equal to that of the least Pareto efficient agreement possible (i.e., 280 points for each player). Five disputing dyads received the BATNA because they did not reach an agreement in the allotted time.

The disputing case consisted of the basic scenario, which includes general information about the dispute, a description of the five issues, the potential solutions for each issue with the assigned point values, and a summary issue chart (see Appendix A). In addition to the basic scenario, additional passages were included in the case for the formulative and manipulative mediation conditions. In both mediated conditions, an additional passage in the directions described that the building manager, who is friends with the disputants’ supervisor at work, had stepped in to help the disputants come to an agreement. The passage explained that an expert mediator would play the role of the building manager in the dispute, and that the mediator would monitor the participants’ discussion and send messages with potential solutions to the participants. The passage stated that:

Because the dispute has been impossible to resolve up to this point, a mediator has stepped in to help you and your partner come to a solution. It is very common for mediators to try to help people in difficult conflicts such as the one you will read about. In this study, a trained mediator with extensive experience will try to help you and your partner find the best solution. The mediator will watch as you and your partner exchange offers during the negotiation. When he thinks of an offer that might interest you and your partner, he will send it to you. Even if you and your partner think you may have come to an agreement, the mediator might send you another offer if he thinks that you could improve your agreement. The mediator will likely contact you every 3-4 minutes during your negotiation. Though the mediator is here to help you, you are under no obligation to accept his offers. The mediator cannot force you to accept a final agreement.

In addition to the above passage, participants in the manipulative mediation condition read a second additional passage at the end of the case. This passage included a
description of the manipulative mediator, explaining that he had several means for pressing the disputing tenants to resolve their conflicts. The passage stated:

The conflict with Alex has continued for several weeks. Since the two of you cannot seem to resolve your differences and your arguments have been negatively affecting other tenants at Oakland Apartments, the building manager, Jordan Smith, has stepped in to try to help solve the conflict. In the past, Jordan has tried to treat disputing tenants fairly while also trying to find an appropriate solution. However, he does have some power over the tenants because of his close relationship with the owners of the apartments, the Oakland Company. In the past he has had to use several methods to encourage disputing tenants to settle their arguments. The following options are available to Jordan as he tries to help you and Alex resolve your disagreements. If Jordan chooses to use any of these methods, which he can do at any time, points will be taken away from the points you or Alex earn during the negotiation. To show the cost of each of Jordan’s actions, we have created a points system.

The passage then listed three potential punishments that the mediator could use or threaten to use during the dispute. The punishments as described in the story included both social and financial costs to the participants, and each punishment was assigned a point-value penalty that was taken out of participants’ final scores. If the mediator put a disputant on probation, the penalty was 60 points, if the mediator reported a dispute to the tenants’ workplace, the penalty was 90 points, and if the mediator advised the disputant's company to evict them, the penalty was 120 points. The disputing case was also altered to reflect the intercultural nature of the dispute and the gender of the dyad. The names used in the case reflected the player role assignments and culture of the participants; for example, in a dyad in which the American participant was assigned to the role of Player 1 and the Turkish participant was assigned to the role of Player 2, the names “Alex” and “Deniz” were used as the disputant names in the case. The names used in the case (Alex, Tyler, Özgür, Deniz) are considered gender-neutral in their native language. The general information portion of the case also includes a brief description of both disputants.
(e.g., “Alex, a young man from the United States”); this description was altered to reflect
the national origin of the participants (i.e., “from the United States”; “from Turkey”) in
their player roles and the gender (“a young man”; “a young woman”) of the dyad.

Apparatus: The Virtual Lab

The study developed and utilized a “virtual lab,” which combined a video
conference with a web-based negotiation interface. The study employed video
conferencing to facilitate a realistic discussion of the dispute; the video conference
allowed participants to both see and hear their partner in real time during the negotiation
period. During the negotiation session, participants communicated using the ooVoo video
conferencing software (www.oovoo.com). Computers at both universities were outfitted
with identical webcams and headsets with microphones. The ooVoo video conference
interface displays one window with the participant’s video feed, and another window
with the participant’s partner’s video feed. The ooVoo software also allowed optional
recording of the video conference.

In addition to the video conference, participants interacted through a web-based
negotiation interface (see Appendix E for a screen shot of the interface), which the
participants used to send their formal offers to their partner. The interface was necessary
to communicate real-time information about the participants’ negotiation to the mediator
and to create a channel though which the agent mediator could send messages to the
participants. The interface consisted of 5 drop-down menus, one for each of the issues in
the disputing scenario. Each drop-down menu included the 5 solution options for the
dispute issue and the point values associated with each solution option. To send a
proposal, the participants had to select the terms of their proposed agreement from the
drop-down menus and press “send.” The participants were alerted to incoming proposals with a text message that appeared in the middle of the interface window. To respond to an offer, the participants had to select the offer by clicking on it in the history of actions portion of the interface, and then press “accept” or “reject.” The interface allowed participants to make partial offers (i.e., they did not have send proposals with solutions for all five offers). As participants came to agreement on the issues, the agreed-upon terms were displayed next to the drop-down menus.

When the participants reached an agreement on all five issues, they had to enter the terms of their agreement using pre-programmed drop-down menus and submit it to the program. If the terms from both players were identical, the negotiation ended and the interface automatically logged the participants off of the system. If the final agreement terms entered by the players were not identical, the interface sent the participants a message indicating that the terms did not match and they were returned to the negotiation interface to resolve the disagreement. The agreements made through the interface were not binding until a final agreement was submitted; the participants were free to renegotiate the terms of their agreement at any time regardless of whether a previous proposal had been accepted. The participants were also able to end the negotiation at any time by clicking the “Opt-Out” button on the interface. None of the dyads in the current study opted out of the negotiation. The interface was also programmed to send reminder messages to the participants. If the participants went one four-minute round without sending or responding to offers through the interface, the interface displayed a message reminding the participants to use the interface to send their offers. The interface also sent a message at the beginning of the final four-minute round indicating that the participants had one round remaining in their negotiation session. The interface recorded the offers.
and responses made during the negotiation, the final offer if one was reached, and the number of round taken to reach resolution.

**Apparatus: Agent Mediator**

The mediator was played by a computer agent programmed to mediate using either a formulative or manipulative mediation style. The agent proposed solutions and sent messages to the participants through the negotiation interface. All mediator messages were sent as text messages that appeared in the center of the negotiation interface window, and participants had to manually close each mediator message in order to continue using the interface. In both mediated conditions, the mediator sent an introductory message to the participants. In the formulative mediation condition, the introduction stated that the mediator would be taking the role of the building manager in the dispute, and that he would monitor the discussion and send messages or proposals if he thought he could help the players come to a solution (see Appendix F for mediator introductions). In the manipulative mediation condition, the introductory message also stated that the mediator had methods of pushing the players to come to an agreement, summarized the potential punishments the mediator could use, and stated that if he used any of these methods, points would be taken off of the player’s final scores.

Throughout the negotiation, both the formulative and the manipulative mediator sent proposals to the participants. The agent mediator in both conditions was programmed to maximize the social welfare of the participants’ agreement. The agent was programmed with information about how the players ranked each issue in terms of importance, which was based on the point value of the issue, but the agent did not have complete information of the players’ issue charts. The agent monitored the offers sent
through the negotiation interface, and waited for the players to exchange proposals. Based on the player proposals, the agent identified the issue or issues relevant to the players’ current discussion. The agent then used the player proposals to calculate a set of potential solutions to propose, which were ordered based on the joint rankings and consequent social welfare. The agent discarded any solutions with lower social welfare ranking than the last offer, or any solutions that were non-Pareto-optimal. Once it determined an acceptable solution, the agent sent the proposed solution to the participants with a pre-defined set of messages to persuade the players to accept the solution (see Appendix F for an example proposal message). The agent sent proposed solutions to the players throughout the negotiation session, and each proposal message was sent to both players simultaneously.

The manipulative mediator was also programmed to send pre-defined threat and punishment messages to the players (see Appendix F for example threat and punishment messages). The threat messages warned the target participant that the mediator was considering enacting a punishment against him or her, and the punishment messages enacted these threats by taking points away from the participant. These messages were triggered by several negotiator behaviors: failing to make offers, making bad offers (i.e., offers that were highly unfavorable to the other player), and rejecting good offers (i.e., offers that were favorable to both players). If a participant engaged in any of these behaviors, the mediator first sent him or her a threat message indicating why the player was being threatened and that the mediator would take away points if the player did not change his or her behavior. If the player corrected his or her bad behavior, the mediator sent a message indicating that the threat had been cleared and that the player was no longer at risk for losing points. If the player did not correct his or her behavior, the
mediator sent a punishment message that included the number of points to be taken from his or her final score. The mediator in the study was based on AutoMed (Chalamish & Kraus, 2007), an automated mediator shown to produce better settlement rates, faster settlements, and more negotiator satisfaction than unmediated negotiations; the AutoMed mediator was then adapted to program the manipulative mediator used in the current study.

\textit{Pilot Tests: Disputing Case, Virtual Laboratory, and Agent Mediator}

Due to the importance of creating a negotiating task and experimental context that would be equivalent in both cultures, the disputing case, virtual lab, and agent mediator were calibrated using pilot studies. The disputing case was developed based on in-depth interviews conducted with participants in the Middle East and the United States. The case was developed in collaboration with researchers in the United States, Israel, and Turkey to ensure that the issues in the case were relevant in the US and Turkey and that the case was sufficiently motivating for the participants.

The design of the virtual lab and the agent mediator were also piloted extensively to ensure that the interface was easy to use and that the mediator was believable. The interface design was adjusted based on participant feedback collected in the United States and Turkey, as well as samples from Israel collected by our collaborators. Further, our team created several different means of communicating the agent mediator's messages to the participants, including text messages, text messages plus a text-based mediator introduction and mediator avatar, and an animated mediator avatar with both text and verbal messages. Feedback from pilot participants indicated that the text messages plus
mediator introduction and avatar delivery maximized the social presence of the mediator while minimizing suspicion about the mediator.

**Measures**

**Dispute Difficulty Markers**

Contextualized trust is defined as the negotiator’s trust in his or her partner in the negotiation. Contextualized trust was operationalized using a one-item measure (“I feel that I can depend on my partner to have my best interests at heart during this negotiation,” with 1 = *strongly disagree*, 7 = *strongly agree*) in the pre-negotiation questionnaire. Openness to mediation was operationalized using a one-item measure (“I want the mediator to get involved in this dispute,” with 1 = *strongly disagree*, 7 = *strongly agree*) in the pre-negotiation questionnaire. Willingness to concede was operationalized using a semantic differential item about the negotiator’s planned behavior for the negotiation session (“I plan to be…during the negotiation” 1 = *unwilling to make concessions*, 7 = *willing to make concessions*) measured in the pre-negotiation questionnaire.

Generalized trust was measured with Yamagishi & Yamagishi’s (1994) six-item trust scale in the Part I online survey. An example of the items included in this scale is “Most people are basically honest,” and the scale is measured on a seven point scale (1 = *strongly disagree*, 7 = *strongly agree*). The Cronbach’s alpha for the scale was .85 (Turkish sample α = .82; American sample α = .88), and a composite score was calculated for each participant by averaging the six items of the scale.

Cultural intelligence was measured using Ang et al.’s (2007) cultural intelligence scale, which includes items that measure the four dimensions of CQ: cognitive (e.g., “I
know the cultural values and religious beliefs of other cultures”), motivational (e.g., “I am confident that I can socialize with locals in a culture that is unfamiliar to me”), behavioral (e.g., “I change my verbal behavior when a cross-cultural interaction requires it), and metacognitive (e.g., “I am conscious of the cultural knowledge I use when interacting with people from different cultural backgrounds.”). All the items are measured on a seven point scale (1 = strongly disagree, 7 = strongly agree).

Procrustes Factor Analysis (PFA) was used to assess the factor structure and structural equivalence (i.e., the similarity in factor structures) of the CQ scale across the American and Turkish samples. In general, Procrustes analysis performs a shape-preserving Euclidean transformation to a set of factor matrices (Barrett, 2006). The Orthosim-2 program (Barrett, 2006) computes Procrustes analyses for factor loading matrices produced by exploratory factor analysis. In short, Orthosim rotates a comparison matrix against a target matrix to assess the similarity between the matrices. When using the Procrustes approach, the program stretches or shrinks the target and comparison matrices so they occupy the same unit-metric space (Barrett, 2006). The program produces the mean solution cosine, or overall solution congruence for the entire factor structure. Recommendations for acceptable levels of overall solution congruence generally range from .85 (e.g., Mulaik, 1972) to .90 (Barrett, 1986; Van de Vijer & Leung, 1997). The program also produces the congruence coefficients calculated for each row (variable) in the target and maximally congruent target matrix. Barrett (1986) suggested that congruence coefficients equal or greater than .80 indicate useful conceptual similarity.

To conduct the PFA using Orthosim, separate exploratory factor analyses were conducted on the cultural intelligence scale for the American and Turkish samples using
maximum likelihood extraction and varimax rotation. The two rotated factor matrices were submitted to the Orthosim program, with the American factor matrix specified as the target matrix and the Turkish factor matrix specified as the comparison matrix (i.e., the Turkish matrix was rotated against the American matrix). The two factor matrices showed an acceptable level of congruence, with the overall solution congruence equaling .92. All congruence coefficients for the variables exceeded the .80 cutoff except for one coefficient which equaled .77. At this point, the full combined sample was used to conduct an exploratory factor analysis on all of the items using maximum likelihood extraction and varimax rotation. The factor analysis produced a four factor solution. The rotated factor matrix was examined, and three items with loadings below .40 or that displayed cross-loading, as indicated by factor loading values with less than a .20 difference on multiple factors, were removed from the analysis. The final factor structure indicated four factors with all factor loadings above .40 (see Table 1).

The first factor that emerged included the six items from the cognitive subscale. The Cronbach’s alpha for the subscale was .88 (Turkish sample α = .80; American sample α = .92). The second factor that emerged included the four items from the metacognitive subscale and one item from the behavioral subscale. The Cronbach’s alpha for the second subscale was .86 (Turkish sample α = .82; American sample α = .89). The third factor that emerged included four of the five items from the motivational subscale, and the Cronbach’s alpha for this subscale was .83 (Turkish sample α = .75; American sample α = .88). The final factor that emerged included two of the items from the behavioral subscale. The Cronbach’s alpha for the fourth subscale was .75 (Turkish sample α = .77; American sample α = .76).
Outcomes

Joint outcome was assessed using the Pareto efficiency of the final agreement. The Pareto efficiency of the agreement is a dyadic level measure of the joint efficiency of the agreement. Because of the integrative potential in the disputing scenario, it was possible for participants to logroll, or trade-off on low priority issues to gain value in higher priority issues (Froman & Cohen, 1970). The more participants logroll, the more efficient the agreement. The most efficient agreement, or the one for which there are no additional agreements that could improve the outcome of one party without hurting the other party, is called the Pareto efficient agreement (Galinsky, Leonardelli, Okhuysen, & Musswiler, 2005; Thompson, 1990, 2001; Tripp & Sondak, 1992). To calculate the efficiency of an agreement, it is necessary to first calculate the number of solutions that would be better for both negotiators (“better”) and the number of solutions that would be worse for both negotiators (“worse”). Pareto efficiency is calculated as such:

\[
PE = \frac{1 - \text{better}}{\text{better} + \text{worse}}
\]

The current study used the Okhuysen and Pounds, version 1.23 (2005) spreadsheet to calculate the Pareto efficiency of the agreements. To use the spreadsheet, each of the solution levels of the five issues in the disputing case and the point values of the solutions for each player were entered. The agreements for all dyads were also entered, and the spreadsheet uses algorithms based on Tripp & Sondak (1992) to calculate the Pareto efficiency of each agreement.

The current study utilized a modified version of the Subjective Value Inventory (SVI, Curhan, Elfenbein, & Xu, 2006) to assess subjective satisfaction with the negotiation. The SVI was designed to assess the social psychological outcomes of a
negotiation, and the original scale included 16 items to assess four components of subjective value: feelings about the instrumental outcome, feelings about the self, feelings about the process, and feelings about the relationship. These subscales can be averaged to create a global subjective value score. In the current study, 15 items based off of the original SVI were used to create a base subjective value scale; one of the original items (“Did you behave according to your own principles and values”) was deleted due to reports that participants had difficulty responding to the item in the study pilots. Additional items were added to assess the impact of the negotiations on the participants honor and reputation (“did this game positively or negatively impact your honor,” and “did this game positively or negative impact your reputation”) and perceptions of cooperation (“how cooperative do you think you were during the game”). See Appendix D for the full subjective value scale used in the current study.

Procrustes Factor Analysis (PFA) was used to assess the factor structure and structural equivalence of the subjective value scale across the American and Turkish samples. To conduct the PFA, separate exploratory factor analyses on the subjective value scale were conducted for the American and Turkish samples using maximum likelihood extraction and varimax rotation. The two rotated factor matrices were submitted to the Orthosim-2 program, with the American factor matrix specified as the target matrix and the Turkish factor matrix specified as the comparison matrix (i.e., the Turkish matrix was rotated against the American matrix). An iterative process of assessing the overall solution congruence and congruence coefficients for acceptable levels of similarity was used. Because the initial overall solution congruence and several congruence coefficients fell below the recommended cut-offs, problematic items were
deleted and the exploratory factor analyses for the two samples were run re-run and resubmitted to the Orthosim program.

After three iterations and deleting 4 items from the scale, the two factor matrices reached an overall solution congruence of .91, and all of the congruence coefficients exceeded .80 except for one coefficient which equaled .70. At this point, the full combined sample was used to conduct an exploratory factor analysis on the remaining variables using maximum likelihood extraction and varimax rotation. The factor analysis produced a four factor solution. The rotated factor matrices were examined, and any items with loadings below .40 or that displayed cross-loading across factors were removed from the analysis. The final factor structure indicated four factors with all factor loadings above .40 (see Table 2).

The first factor included three of the original SVI items measuring feelings about the instrumental outcomes, as well as one item measuring feelings about the negotiation process (“how satisfied are you with the ease of reaching an agreement”). This subscale is labeled “satisfaction with outcome.” It is relevant to note that a clear factor reflecting the original SVI subscale of feelings about process did not emerge in the present sample. The Cronbach’s alpha for the satisfaction with outcome subscale was .88 (Turkish sample $\alpha = .91$; American sample $\alpha = .88$).

The second factor included two of the original SVI items measuring feelings about the self, as well as the added measure of impact on reputation. This subscale is labeled “feelings about self” and the Cronbach’s alpha for this subscale is .79 (Turkish sample $\alpha = .80$; American sample $\alpha = .80$). The third factor included two of the original SVI items measuring feelings about process and one of the original SVI items measuring feelings about the relationship. Because all three of the items broadly assess the
relationship between the negotiators, this subscale is labeled “rapport” (Curhan, Elfenbein, & Xu, 2006). The Cronbach’s alpha for this scale was .86 (Turkish sample α = .83; American sample α = .87). Finally, the fourth factor included two items, one of the original SVI instrumental items assessing the fairness of the outcome and the added item regarding cooperativeness during the negotiation. Because this factor was not theoretically meaningful and the Cronbach’s alpha for the subscale fell below an acceptable level (α = .66), this factor will not be discussed in the remainder of the paper. As with the original SVI, a global subjective value score, labeled “overall satisfaction,” was computed by averaging the first three subscales. The Cronbach’s alpha for the overall satisfaction scale was .88 (Turkish sample α = .87; American sample α = .90)
Chapter 3: Results

Preliminary Analyses

As stated, the objective outcome of Pareto efficiency is a dyadic level measure. I also aggregated the subjective measures to the dyad level, and justified aggregation using recommended standards. The intraclass correlation coefficients, ICC(1) and ICC(2), were used to assess whether aggregation was appropriate (Bleise, 2000). The ICC(1) statistic, which is a ratio of between-group variance to total variance, has been interpreted as the proportion of total variance attributable to group membership (Bryk & Raudenbush, 1982) and as an index of interrater reliability (James, 1982). The current analyses calculated ICC(1) values using a one-way random-effects ANOVA model and the Bartko (1976) formula. ICC(2) values, which estimate the reliability of the group means (Bliese, 2000), were also calculated. The intraclass correlations for the outcomes and difficulty markers are listed in Table 3. The ICC(1) values for satisfaction with outcome, rapport, and overall satisfaction were greater than .3, and the ICC(2) values were greater than .5, warranting aggregation to the dyad level. The intraclass correlation for the feelings about self subscale did not meet the standards for aggregation and so was not analyzed at the dyad level.

The difficulty measures were also aggregated to the dyad level. These follow an additive composition model (Chan, 1998); the aggregated construct is simply an average of the individual units without consideration of the variance at the individual level. Because the difficulty measures were assessed before any interaction occurred between the participants in each dyad, there is no reason to expect within-dyad consensus on these items, and so aggregation is not predicated on adequate levels of agreement between
participants within the dyads. For all questionnaire items and scales, the mean was calculated for the dyad. Means, standard deviations, and the bivariate correlations between all the measures are listed in Table 4.

**Suspicion and Manipulation Checks**

The study included a number of manipulation checks. In addition, at the end of the post-negotiation questionnaire, all participants completed funnel debriefing questions designed to assess suspicion about the mediator and the study. Any participants who indicated that they believed that the mediator was not a real person were excluded from the analyses. Fifty-three of the 55 dyads (96.3%) did not indicate suspicion about the mediator; only two participants were suspicious of the mediator and the data from these two dyads were excluded from the analyses. The final sample consisted of 24 male and 29 female intercultural dyads.

Of the 35 dyads in the mediated conditions, 32 correctly responded that a mediator had intervened in their dispute; the remaining three came to a solution before the mediator could intervene. Analyses of the three manipulation check items included in the post-negotiation questionnaire indicated that the two mediated conditions differed only on the last item; dyads in the manipulative mediation condition ($M = 2.08, SD = 1.48$) reported that the mediator threatened them more than dyads in the formulative mediation condition ($M = 1.07, SD = .18, t(30) = 2.65, p < .05$).

In addition, a review of the mediator's behavior during the negotiations indicated that the number of mediator offers sent to the dyads ranged from zero to 14, with a mean of 6.23 offers and a standard deviation of 4.54 offers. An analysis of the mediator behavior during the negotiations indicated that there were no differences in the number of
proposals the mediator sent to the dyads in the two conditions \((t(33) = .14, p = .89)\). The manipulative mediator sent a total of 10 threat messages to 8 of the 18 dyads in the manipulative mediation condition, and only enacted punishment in one dyad.

**Primary Analyses**

A series of hierarchical regressions were used to assess the interaction between manipulation condition and dispute difficulty. For each difficulty marker, separate three-step hierarchical regressions were conducted for the Pareto efficiency and subjective value outcomes. In the first step, gender was entered as a covariate; previous meta-analyses have uncovered significant gender differences in negotiation outcomes (Stuhlmacher & Walters, 1999). In addition, exploratory analyses indicated that there were significant gender differences in the Pareto efficiency outcome, with male dyads \((M = 863.38, SD = 277.12)\) achieving more efficient solutions than female dyads \((M = 670.26, SD = 366.41, t(51) = 2.25, p < .05)\). In the second step, the terms for mediation condition and the focal difficulty marker were entered. Two effects-coded variables were used for mediation condition. The first variable was the effects coded variable for formulative mediation, and was coded as such: \(-1 = \) no mediation, \(1 = \) formulative, \(0 = \) manipulative. The second variable was the effects coded variable for manipulative mediation, and was coded as such: \(-1 = \) no mediation, \(0 = \) formulative mediation, \(1 = \) manipulative mediation. Effects coding was used to facilitate the interpretation of the regression coefficients; the regression coefficients for the first and second effects coded variables for mediation condition provide a test of whether formulative and manipulative mediation, respectively, outperformed the average of the three mediation conditions. In the third step, two terms were entered to assess the interaction of mediation condition and
the focal difficulty marker; the interaction terms were created by multiplying the difficulty marker with each of the effect coded mediation terms.

Contextualized Trust

Hypothesis 1a predicted that there would be a significant interaction between manipulative mediation and contextualized trust. The results supported Hypothesis 1a. For the Pareto efficiency outcome, the interaction between the variable for manipulative mediation and contextualized trust was significant in the full model \( B = -156.79, p < .01; \) see Table 5). Consistent with Hypothesis 1a, dyads with lower contextualized trust achieved more efficient solutions than dyads with higher contextualized trust in the manipulative condition (see Figure 1). The results for overall satisfaction also confirmed Hypothesis 1a (see Table 6). There was a significant interaction between the variable for manipulative mediation and contextualized trust \( B = -0.31, p < .05; \) in the manipulative mediation condition, dyads with lower contextualized trust reported higher overall satisfaction than dyads with higher contextualized trust (see Figure 2).

Willingness to Concede

The results also supported Hypothesis 1b, which stated there would be a significant interaction between manipulative mediation and willingness to concede. For the Pareto efficiency outcome, the interaction between the variable for manipulative mediation and willingness to concede was marginally significant in the full model \( B = -168.53, p < .10; \) see Table 7). Consistent with Hypothesis 1b, dyads who were unwilling to concede achieved more efficient solutions than dyads who reported being more willing to concede in the manipulative condition (see Figure 3). The results for overall satisfaction also confirmed Hypothesis 1b (see Table 8). In the full model, there was a significant
interaction between the variable for manipulative mediation and willingness to concede \( (B = -0.44, p < 0.05) \). In the manipulative mediation condition, dyads that were unwilling to concede reported higher overall satisfaction than dyads who reported more willingness to concede (see Figure 4).

**Openness to Mediation**

Hypothesis 1c predicted that there would be a significant interaction between manipulative mediation and openness to mediation. The results supported Hypothesis 1c. For the Pareto efficiency outcome, the interaction between the variable for manipulative mediation and openness to mediation was significant in the full model \( (B = -143.99, p < 0.05; \) see Table 9). Consistent with Hypothesis 1c, dyads who reported low openness to mediation reached more efficient solutions than dyads who reported being more open in the manipulative condition (see Figure 5). The results for overall satisfaction did not support Hypothesis 1c. Further analyses indicated that the results for satisfaction with outcome subscale did support the hypothesis. In the full model, there was a significant interaction between the variable for manipulative mediation and openness to mediation \( (B = -0.42, p < 0.05; \) see Table 10). In the manipulative mediation condition, dyads who reported low openness to mediation reported higher satisfaction with the outcome than dyads who reported being more open to mediation (see Figure 6).

**Generalized Trust**

Hypothesis 2 predicted that there would be an interaction between manipulative mediation and generalized trust. The results partially supported Hypothesis 2. For the Pareto efficiency outcome, the interaction between the variable for manipulative mediation and generalized trust were significant in the full model \( (B = -175.39, p < 0.05; \)
see Table 11). Consistent with Hypothesis 2, dyads who reported low generalized trust reached more efficient solutions than dyads who reported higher generalized trust (see Figure 7). The results for overall satisfaction and the subjective value subscales did not support Hypothesis 2.

*Cultural Intelligence*

As discussed, intercultural disputes pose a unique set of challenges, which may be partly ameliorated when disputants possess higher cultural intelligence scores. To explore this possibility, another series of hierarchical regressions identical to the previously presented analyses were conducted by replacing the difficulty markers with the cultural intelligence subscales and global measure. Hypothesis 3 predicted that there would be a significant interaction between manipulative mediation and cultural intelligence. The results suggested trending support for Hypothesis 3 with regards to motivational CQ. Though the statistics for $R^2$-change, the overall ANOVA, and the regression coefficients did not reach significance, the results for the motivational component of cultural intelligence showed a similar trend to the previously reported results for the Pareto efficiency outcome (see Table 12). The interaction between the effects coded variable for manipulative mediation and motivational CQ was negative ($B = -128.43, p = .18$). These results suggest a trend in which dyads who with low motivational CQ reached more efficient agreements than dyads with higher motivational CQ (see Figure 8). None of the other CQ measures interacted with the effects coded variables for mediation condition. This result suggests that low cultural intelligence may possibly operate as an additional difficulty factor in intercultural disputes, though it is important to emphasize that these
findings merely replicate the trend uncovered for the difficulty markers, as the statistics failed to reach significance.
Chapter 4: Discussion

The current study is the first to examine which mediation styles are most effective in managing intercultural disputes in an experimental setting. In an era of increasing global interdependence, intercultural disputes occur in a wide range of contexts, from international to organizational to interpersonal. Yet there is very little research that has explored which factors affect the resolution of intercultural disputes, and no experimental work on mediation styles in intercultural conflicts. Moreover, the mainstream mediation literature has yet to examine the cultural context of disputes. Accordingly, this study begins to fill an important void in the literature.

I designed a study in which intercultural dyads, composed of college students in the United States and Turkey, were randomly assigned to negotiate an agreement to a community dispute under formulative mediation, manipulative mediation, or no mediation. The results supported the contingency approach to mediation. As hypothesized, in the manipulative mediation condition, dyads in more difficult disputes achieved better outcomes than dyads in less difficult disputes. The results provided support for the hypotheses regarding previously used difficulty markers (contextualized trust, willingness to concede, and openness to mediation), and suggest that generalized trust may be an additional factor moderating the effectiveness of mediation styles. Finally, though the results did not reach standard tests for significance, the general trend suggests that cultural intelligence may be another factor that moderates the effectiveness of mediation tactics in intercultural disputes.
Contributions to Theory and Research

As discussed, the current study offers additional support for the contingency theory of mediation, finding that the effectiveness of mediation styles varies depending on aspects of the disputing context. Specifically, the current study supports previous theory and research on the interaction between difficult conditions and pressing or manipulative styles to predict effectiveness. In addition to the general support of contingency theory, the current study also supported the theory in intercultural contexts; the current study is the first known study to test the theory on the contingent effectiveness of mediation tactics in intercultural disputes. The current study not only shows that the contingent view of mediation may be applicable in both intracultural and intercultural disputes, but also suggests that the cultural context of the dispute may be an important factor that also acts as a contingency affecting mediation style effectiveness.

The current study tested traditional markers of dispute difficulty like contextualized trust, intransigence, and resistance to mediation, but also proposed and tested difficulty markers that were not included in previous theory. The inclusion of generalized trust as a difficulty marker indicates that more general individual differences can impact the effectiveness of mediation styles. Further, though the results did not reach significance, the trends uncovered for motivational CQ support previous findings that cultural intelligence may mitigate some of the difficulties in intercultural disputes (Imai & Gelfand, 2010), and thus suggest that CQ may also act as a moderator of mediation style effectiveness.

The current study is also among the first to test the contingency theory using experimentally manipulated and standardized mediation styles and disputant reports of
difficulty markers. As discussed, previous tests of the contingent effectiveness of mediation styles have generally relied on mediator reports of dispute characteristics and mediation style. Dyads in the current study were randomly assigned to mediation condition, and the styles in the two mediated conditions were standardized using agent mediators. By manipulating rather than measuring mediation style, the experimental design of the current study strengthens the confidence in the results. Further, the standardization of mediation style ensured that there were no systematic differences in the content or delivery of the mediator intervention across dyads. In addition, the collection of the difficulty and subjective value outcome data from the disputants rather than from the mediator avoids potential biases in the measurement of these variables and supports the contingency theory of mediation style effectiveness using disputant reports. Finally, the current study design includes an unmediated condition, providing an appropriate control condition against which to compare the impact of different mediation styles on dispute outcomes.

The current study also offers several contributions to general research on intercultural disputes and conflict resolution. The study is one of the first to create and implement a “virtual lab” for the study of intercultural negotiation. This technology allowed participants to negotiate in real-time with both audio and visual contact while staying in their home countries. The negotiation interface simultaneously allowed for the recording of disputants’ offer behavior and the monitoring of the negotiation by the agent mediator. The virtual lab thus facilitated a realistic conversation between members of different cultures while also providing objective data on their negotiations. This technology may help free researchers interested in intercultural interactions from relying on expatriate samples, and may encourage further intercultural research by providing a
low cost communication medium through which participants in different cultures can communicate. Further, the study provided additional support for the use of agent mediators in studies of negotiation and disputing. The study also facilitated the development of a new community-based mediation case that is appropriate to use in studies of intercultural disputes.

**Contributions to Practice**

The current study has several implications for mediators. Generally, it supports the contingency approach in encouraging mediators to consider the disputing context when determining whether to intervene in a dispute and how to select intervention tactics. Specifically, the current study suggests that when disputes are very difficult, as defined by low contextualized or generalized trust, resistance to mediation, or disputants who are unwilling to concede, mediators will likely facilitate the best outcomes by using manipulative tactics. However, such tactics may actually inhibit the achievement of high objective and subjective outcomes when the dispute characteristics are more favorable. Further, the study suggests that mediators should assess the cultural context of the dispute when determining whether and how to intervene in a dispute. The current study focused on the intercultural context, and suggests that mediators should be aware of the unique difficulties of intercultural disputes when selecting tactics. The tentative results suggest that intercultural disputes may be particularly difficult when disputants have low cultural intelligence, and that these disputes may be amenable to forceful or pressing mediator tactics. Combined with previous theory and research on the impact of culture on disputing and mediation, the current study highlights the need for mediators to account for the cultural context of the negotiation when intervening in a dispute. Interestingly, the
current study also provides an interesting paradox for real-world mediators; though disputants from very different cultures may be the least open to mediation (Inman, Kishi, & Wilkenfeld, in preparation), when a mediator does intervene, it may be the most pressing and forceful tactics that produce the highest outcomes to the disputants.

Limitations and Future Directions

The current study is limited by its use of a hypothetical disputing case and its reliance on student samples from only two cultures. First, though the use of hypothetical disputing cases is common in negotiation research, the ensuing disputes are necessarily somewhat artificial. However, the case used in the current study was pretested to ensure that it was engaging, realistic, and produced intense disputes in student samples. Real-world disputes are likely to be even more intense, suggesting that the present results will likely generalize to actual disputes. Second, the sample in the current data collection relies on young, educated student samples from democratic nations, which may impact the generalizability of the findings. These students may not have real world experience dealing with conflict or may exhibit unique conflict resolution tactics as compared to adult community members in their cultures. However, given that the disputing scenario was designed and piloted to be realistic to the student participants, who have likely experienced conflict within their living arrangements, this limitation should not impact the validity of the general findings. Nevertheless, future research is necessary to explore how mediation styles function in inter- and intracultural disputes between negotiators from different cultures and demographic backgrounds (Henrich, Heine, & Norenzayan, 2011). In addition, future research could experimentally examine how cultural heterogeneity impacts mediation style effectiveness; previous archival analyses have
suggested that manipulative mediation may be more effective in disputes with negotiators from very difficult cultures (Inman, Kishi, & Wilkenfeld, in preparation).

The current study is also limited by the lack of intracultural comparison groups. As such, any comments or conclusions regarding the impact of intercultural disputes on mediation style effectiveness are at best tentative; without a comparison to American and Turkish intracultural disputes, there are limited grounds to claim that the intercultural disputes studied here were more difficult than intracultural disputes or that cultural context posed as an additional difficulty factor impacting the effectiveness of mediation tactics. To address this weakness, our research team is currently collecting data from American and Turkish intracultural dyads using methods identical to those presented here. Upon completion of data collection, all analyses will be re-run using the full sample. In addition, a new set of analyses will compare the impact of intercultural versus intracultural disputing contexts to measure whether the intercultural disputes are more difficult than the intracultural disputes, and whether the increased difficulty of intercultural disputes impacts mediation style effectiveness.

An additional limitation of the study arises from the trade-off between the internal and external validity of the mediation style manipulation. While the current study attempted to use standardized “pure” forms of mediation by programming the agent to exhibit only formulative or manipulative mediation, this behavior is probably not reflective of how mediators mediate in real life. Real mediators adjust their styles to both the dispute context (Lim and Carnevale, 1991), as well as to the temporal stage of the negotiation (Pruitt, 2006). Further, the context of the dispute may also change as the negotiations progress; for example, negotiators may become more or less trusting of each other or more or less intransigent as the negotiations proceed. It follows from
contingency theory that real mediators likely monitor the characteristics of the dispute and change their mediation style contingently throughout the negotiation. Future research may explore the temporal aspect of mediation style selection and effectiveness, particularly in intercultural disputes, which may follow a different temporal trajectory from intracultural disputes.

There are additional questions raised by the programming of the manipulative mediator. For example, the current study does not address whether the effects of the manipulator were caused by the potential to threaten and punish the disputants or by the actual punishments. As mentioned, the mediator only sent threat messages to 8 of the 18 dyads in the manipulative condition, and only punished in one dyad. However, all dyads in the manipulative mediation condition were informed that the mediator could threaten and punish them. Future studies could explore whether mediators actually need to punish disputants to achieve better outcomes, or whether it is enough that the disputants know that the mediator has the potential or power to punish them. In addition, the manipulator in the current study was only programmed to administer threats and punishments. This decision was motivated by the inability to create realistic “carrots” or rewards in the community-based disputing case. However, as such, the current study does not explore the full range of manipulative or pressing mediator behavior, and future studies can explore the impact of mediator carrots on dispute outcomes under conditions of differing dispute difficulty.

Another limitation of the current study is the exclusion of the facilitative mediation style, or one in which the mediator acts to facilitate and improve communication between the disputants. This mediation style was excluded due to the theoretical inconsistencies regarding the tactics included in this style as well as the
inability to program the agent mediator to implement facilitative behaviors; as a channel of communication, the facilitative mediator must be able to monitor and respond to the conversational exchanges between disputants, a task that current computer agents are not able to achieve in a realistic way. Future directions could explore the impact of facilitative mediation on inter- and intracultural disputes using trained human mediators. In particular, it would be informative to compare whether facilitative mediators can improve outcomes in low difficulty disputes. The current results showed that dyads in the least difficult disputes often performed best without a mediator, but perhaps the facilitator could improve these dyads’ outcomes by enhancing their communication and information exchange.

Conclusion

Globalization has increased contact between members of different cultures in political, military, social, organizational, and community contexts. The development of culturally-sensitive means of conflict resolution are thus of great importance, and the current study begins to contribute to this goal by exploring the role of mediation and mediation styles in intercultural disputes. As suggested by the current study, cultural differences are one of many difficulties that can impede successful conflict resolution, but there are also effective methods of third party intervention that may help to ameliorate these problems. This study extends previous research on contingencies in mediation style by including the cultural context and individual differences as potentially important factors affecting style effectiveness, and provides critical information for formal and informal mediators who are likely to face difficult disputes frequently. The
study represents a step toward a full understanding of the intersection of culture, conflict, and mediation.
Footnote

1 The data were analyzed with and without the three dyads that were in a mediated condition but did receive messages from the mediator; the results did not change when the three dyads were excluded from the sample, and the analyses presented include the entire sample.
Tables
Table 1

Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Cultural Intelligence Scale

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1: Cognitive</th>
<th>Factor 2: Metacognitive</th>
<th>Factor 3: Motivational</th>
<th>Factor 4: Behavioral</th>
</tr>
</thead>
<tbody>
<tr>
<td>I know the legal and economic systems of other cultures.</td>
<td>.66</td>
<td>.14</td>
<td>.21</td>
<td>.05</td>
</tr>
<tr>
<td>I know the rules (e.g. vocabulary, grammar) of other languages.</td>
<td>.78</td>
<td>-.01</td>
<td>.21</td>
<td>.07</td>
</tr>
<tr>
<td>I know the cultural values and religious beliefs of other cultures.</td>
<td>.77</td>
<td>.248</td>
<td>.15</td>
<td>.09</td>
</tr>
<tr>
<td>I know the marriage systems of other cultures.</td>
<td>.66</td>
<td>.173</td>
<td>.18</td>
<td>.09</td>
</tr>
<tr>
<td>I know the arts and crafts of other cultures.</td>
<td>.71</td>
<td>.12</td>
<td>.22</td>
<td>.31</td>
</tr>
<tr>
<td>I know the rules for expressing non-verbal behaviors in other cultures.</td>
<td>.69</td>
<td>.19</td>
<td>.05</td>
<td>.17</td>
</tr>
<tr>
<td>I change my non-verbal behavior when a cross-cultural situation</td>
<td>.16</td>
<td>.53</td>
<td>.08</td>
<td>.24</td>
</tr>
<tr>
<td>requires it.</td>
<td>.08</td>
<td>.86</td>
<td>.16</td>
<td>-.08</td>
</tr>
<tr>
<td>I am conscious of the cultural knowledge I use when interacting with</td>
<td>.11</td>
<td>.80</td>
<td>.13</td>
<td>.224</td>
</tr>
<tr>
<td>people from different cultural backgrounds.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I adjust my cultural knowledge as I interact with people from a culture</td>
<td>.14</td>
<td>.82</td>
<td>.23</td>
<td>.17</td>
</tr>
<tr>
<td>than is unfamiliar to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am conscious of the cultural knowledge I apply to cross-cultural</td>
<td>.26</td>
<td>.56</td>
<td>.10</td>
<td>.08</td>
</tr>
<tr>
<td>interactions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I check the accuracy of my cultural knowledge as I interact with</td>
<td>.26</td>
<td>.56</td>
<td>.10</td>
<td>.08</td>
</tr>
<tr>
<td>people from different cultures.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am confident that I can socialize with locals in a culture that is</td>
<td>.18</td>
<td>.12</td>
<td>.68</td>
<td>.16</td>
</tr>
<tr>
<td>unfamiliar to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am sure I can deal with the stresses of adjusting to a culture that</td>
<td>.12</td>
<td>.13</td>
<td>.84</td>
<td>.05</td>
</tr>
<tr>
<td>is new to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy living in cultures that are unfamiliar to me.</td>
<td>.33</td>
<td>.11</td>
<td>.70</td>
<td>.08</td>
</tr>
<tr>
<td>I am confident that I can get accustomed to the shopping conditions</td>
<td>.19</td>
<td>.24</td>
<td>.58</td>
<td>.21</td>
</tr>
<tr>
<td>in a different culture.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I change my verbal behavior (e.g. accent, tone) when a cross-cultural</td>
<td>.19</td>
<td>.20</td>
<td>.21</td>
<td>.86</td>
</tr>
<tr>
<td>interaction requires it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use pause and silence differently to suit different cross-cultural</td>
<td>.28</td>
<td>.26</td>
<td>.21</td>
<td>.54</td>
</tr>
<tr>
<td>situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2

Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Modified Subjective Value Inventory

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1: Satisfaction with Outcome</th>
<th>Factor 2: Feelings about Self</th>
<th>Factor 3: Rapport</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>How satisfied are you with your own outcome—i.e., the extent to which</td>
<td>.86</td>
<td>.12</td>
<td>.26</td>
<td>.15</td>
</tr>
<tr>
<td>the terms of your exchanges (or lack of exchanges) benefit you?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How satisfied are you with the balance between your own outcome and</td>
<td>.76</td>
<td>.10</td>
<td>.12</td>
<td>.36</td>
</tr>
<tr>
<td>the other participant’s outcome?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How satisfied are you with the ease (or difficulty) of reaching an</td>
<td>.69</td>
<td>.21</td>
<td>.30</td>
<td>.25</td>
</tr>
<tr>
<td>agreement?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you feel like you forfeited or “lost” in this game?</td>
<td>.67</td>
<td>.08</td>
<td>.33</td>
<td>.01</td>
</tr>
<tr>
<td>Did this game positively or negatively impact how competent you feel as</td>
<td>.22</td>
<td>.75</td>
<td>.16</td>
<td>.02</td>
</tr>
<tr>
<td>a negotiator?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How did this game positively or negatively impact your self-image or</td>
<td>.05</td>
<td>.97</td>
<td>.12</td>
<td>-.01</td>
</tr>
<tr>
<td>your impression of yourself?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How did this game positively or negatively impact your reputation?</td>
<td>.07</td>
<td>.51</td>
<td>.15</td>
<td>.20</td>
</tr>
<tr>
<td>Do you think the other participant understood your concerns?</td>
<td>.32</td>
<td>.20</td>
<td>.74</td>
<td>.20</td>
</tr>
<tr>
<td>Did the other participant consider your wishes, opinions, or needs?</td>
<td>.40</td>
<td>.21</td>
<td>.77</td>
<td>.21</td>
</tr>
<tr>
<td>Did the game make you trust the other participant?</td>
<td>.26</td>
<td>.28</td>
<td>.56</td>
<td>.31</td>
</tr>
<tr>
<td>Do you think the terms of your exchanges would be considered fair by</td>
<td>.24</td>
<td>.18</td>
<td>.20</td>
<td>.54</td>
</tr>
<tr>
<td>an objective third party?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How cooperative do you think you were in the game?</td>
<td>.14</td>
<td>.01</td>
<td>.17</td>
<td>.78</td>
</tr>
</tbody>
</table>
Table 3

Aggregation Statistics

<table>
<thead>
<tr>
<th>Outcome</th>
<th>F</th>
<th>ICC(1)</th>
<th>ICC(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with Outcome</td>
<td>4.05**</td>
<td>.60</td>
<td>.75</td>
</tr>
<tr>
<td>Feelings about Self</td>
<td>.83</td>
<td>-.09</td>
<td>-.21</td>
</tr>
<tr>
<td>Rapport</td>
<td>2.25**</td>
<td>.38</td>
<td>.56</td>
</tr>
<tr>
<td>Overall Satisfaction</td>
<td>2.11**</td>
<td>.36</td>
<td>.53</td>
</tr>
</tbody>
</table>

**Difficulty Markers**

<table>
<thead>
<tr>
<th>Markers</th>
<th>F</th>
<th>ICC(1)</th>
<th>ICC(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contextualized Trust</td>
<td>.84</td>
<td>-.09</td>
<td>-.20</td>
</tr>
<tr>
<td>Willingness to Concede</td>
<td>.58</td>
<td>-.27</td>
<td>-.73</td>
</tr>
<tr>
<td>Openness to Mediation</td>
<td>.88</td>
<td>-.07</td>
<td>-.14</td>
</tr>
<tr>
<td>Generalized Trust</td>
<td>.93</td>
<td>-.03</td>
<td>-.07</td>
</tr>
<tr>
<td>Metacognitive CQ</td>
<td>.62</td>
<td>-.23</td>
<td>-.62</td>
</tr>
<tr>
<td>Cognitive CQ</td>
<td>.73</td>
<td>-.15</td>
<td>-.37</td>
</tr>
<tr>
<td>Motivational CQ</td>
<td>.55</td>
<td>-.29</td>
<td>-.81</td>
</tr>
<tr>
<td>Behavioral CQ</td>
<td>.90</td>
<td>-.05</td>
<td>-.11</td>
</tr>
<tr>
<td>Overall CQ</td>
<td>.61</td>
<td>-.24</td>
<td>-.64</td>
</tr>
</tbody>
</table>

†p < .10  *p < .05  **p < .01
Table 4

Means, standard deviations, and bivariate correlations among the variables

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Contextualized Trust</td>
<td>3.77</td>
<td>1.09</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Willingness to Concede</td>
<td>4.51</td>
<td>.80</td>
<td>.07</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Openness to Mediation</td>
<td>4.23</td>
<td>1.02</td>
<td>.07</td>
<td>.02</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Generalized Trust</td>
<td>4.46</td>
<td>.80</td>
<td>.15</td>
<td>.17</td>
<td>-.14</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Cognitive CQ</td>
<td>4.28</td>
<td>.74</td>
<td>-.01</td>
<td>-.21</td>
<td>-.04</td>
<td>-.09</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. Metacognitive CQ</td>
<td>5.26</td>
<td>.62</td>
<td>-.06</td>
<td>.09</td>
<td>.03</td>
<td>-.26</td>
<td>.34*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. Motivational CQ</td>
<td>5.19</td>
<td>.63</td>
<td>.00</td>
<td>.03</td>
<td>-.28</td>
<td>.09</td>
<td>.46**</td>
<td>.29*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. Behavioral CQ</td>
<td>4.66</td>
<td>.91</td>
<td>-.14</td>
<td>.02</td>
<td>-.08</td>
<td>-.09</td>
<td>.31*</td>
<td>.26</td>
<td>.47**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9. Total CQ</td>
<td>4.85</td>
<td>.52</td>
<td>-.08</td>
<td>-.05</td>
<td>-.12</td>
<td>-.12</td>
<td>.73**</td>
<td>.62**</td>
<td>.76**</td>
<td>.76**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10. Pareto Efficiency</td>
<td>757.72</td>
<td>322.99</td>
<td>-.17</td>
<td>-.16</td>
<td>-.12</td>
<td>-.07</td>
<td>.15</td>
<td>.24</td>
<td>.13</td>
<td>.04</td>
<td>.18</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11. Satisfaction with</td>
<td>5.46</td>
<td>1.05</td>
<td>-.12</td>
<td>-.04</td>
<td>-.11</td>
<td>.05</td>
<td>.07</td>
<td>.04</td>
<td>.13</td>
<td>.16</td>
<td>.16</td>
<td>.60**</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>12. Feelings about</td>
<td>4.65</td>
<td>.67</td>
<td>.24</td>
<td>.02</td>
<td>.07</td>
<td>.16</td>
<td>.08</td>
<td>-.21</td>
<td>.16</td>
<td>-.09</td>
<td>-.03</td>
<td>.20</td>
<td>.33**</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>13. Rapport</td>
<td>5.40</td>
<td>.95</td>
<td>.17</td>
<td>.19</td>
<td>-.01</td>
<td>.18</td>
<td>.08</td>
<td>-.06</td>
<td>.24</td>
<td>.11</td>
<td>.13</td>
<td>.27</td>
<td>.71**</td>
<td>.51**</td>
<td>-</td>
</tr>
<tr>
<td>14. Overall</td>
<td>5.15</td>
<td>.73</td>
<td>.09</td>
<td>.08</td>
<td>-.01</td>
<td>.12</td>
<td>.10</td>
<td>-.02</td>
<td>.20</td>
<td>.13</td>
<td>.15</td>
<td>.47**</td>
<td>.87**</td>
<td>.65**</td>
<td>.90**</td>
</tr>
</tbody>
</table>

Note: N = 53 dyads for all variables.

* p < .05, ** p < .01
### Table 5

Hierarchical Multiple Regression Analyses Predicting Pareto Efficiency of Agreements from Mediation Condition and Contextualized Trust

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Step 1</th>
<th></th>
<th></th>
<th></th>
<th>Step 2</th>
<th></th>
<th></th>
<th></th>
<th>Step 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td></td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td>96.56*</td>
<td>42.92</td>
<td>.30</td>
<td></td>
<td>89.25*</td>
<td>43.74</td>
<td>.28</td>
<td></td>
<td>125.58**</td>
<td>42.94</td>
</tr>
<tr>
<td>Contextualized Trust (CT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-36.23</td>
<td>40.47</td>
</tr>
<tr>
<td>Formulative Med. (FM)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>58.31</td>
<td>61.70</td>
</tr>
<tr>
<td>Manipulative Med. (MM)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12.06</td>
<td>60.92</td>
</tr>
<tr>
<td>CT x FM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>619.51**</td>
<td>215.23</td>
</tr>
<tr>
<td>CT x MM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-1.57</td>
<td>51.35</td>
</tr>
<tr>
<td>$R^2$</td>
<td></td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2_{adj}$</td>
<td></td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2_{Change}$</td>
<td></td>
<td>.09*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall $F$</td>
<td></td>
<td>5.06*</td>
<td></td>
<td></td>
<td></td>
<td>1.85</td>
<td></td>
<td></td>
<td></td>
<td>3.03*</td>
<td></td>
</tr>
<tr>
<td>$df$</td>
<td></td>
<td>51</td>
<td></td>
<td></td>
<td></td>
<td>48</td>
<td></td>
<td></td>
<td></td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

Note: Formulative Med is coded as such: -1 = no mediation, 1 = formulative, 0 = manipulative; Manipulative Med is coded as such: -1 = no mediation, 0 = formulative, 1 = manipulative

$\dagger p < .10 \ast p < .05 \ast\ast p < .01$
Table 6

Hierarchical Multiple Regression Analyses Predicting Overall Satisfaction from Mediation Condition and Contextualized Trust

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Step 1</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
</tr>
<tr>
<td>Gender</td>
<td>.06</td>
<td>.10</td>
<td>.08</td>
<td>.07</td>
<td>.10</td>
<td>.09</td>
<td>.12</td>
<td>.10</td>
<td>.17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contextualized Trust (CT)</td>
<td></td>
<td></td>
<td></td>
<td>.09</td>
<td>.09</td>
<td>.14</td>
<td>.12</td>
<td>.09</td>
<td>.18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formulative Med. (FM)</td>
<td></td>
<td></td>
<td></td>
<td>.36*</td>
<td>.14</td>
<td>.41</td>
<td>.14</td>
<td>.46</td>
<td>.16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manipulative Med. (MM)</td>
<td></td>
<td></td>
<td></td>
<td>-.19</td>
<td>.14</td>
<td>-.21</td>
<td>1.02*</td>
<td>.50</td>
<td>1.16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT x FM</td>
<td></td>
<td></td>
<td></td>
<td>.06</td>
<td>.12</td>
<td>.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT x MM</td>
<td></td>
<td></td>
<td></td>
<td>-.31*</td>
<td>.13</td>
<td>-1.42</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.01</td>
<td></td>
<td></td>
<td>.14</td>
<td></td>
<td></td>
<td>.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2_{adj}$</td>
<td>-.01</td>
<td></td>
<td></td>
<td>.07</td>
<td></td>
<td></td>
<td>.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2_{\text{Change}}$</td>
<td>.01</td>
<td></td>
<td></td>
<td>.13†</td>
<td></td>
<td></td>
<td>.11†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall $F$</td>
<td>.29</td>
<td></td>
<td></td>
<td>1.93</td>
<td></td>
<td></td>
<td>2.47*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$df$</td>
<td>51</td>
<td></td>
<td></td>
<td>48</td>
<td></td>
<td></td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Formulative Med is coded as such: -1 = no mediation, 1 = formulative, 0 = manipulative; Manipulative Med is coded as such: -1 = no mediation, 0 = formulative, 1 = manipulative

† $p < .10$  * $p < .05$  ** $p < .01$
Table 7

Hierarchical Multiple Regression Analyses Predicting Pareto Efficiency of Agreements from Mediation Condition and Willingness to Concede

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Step 1</th>
<th></th>
<th></th>
<th>Step 2</th>
<th></th>
<th></th>
<th>Step 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td>Gender</td>
<td>96.56*</td>
<td>42.92</td>
<td>.30</td>
<td>94.41*</td>
<td>43.24</td>
<td>.29</td>
<td>83.81*</td>
<td>41.07</td>
</tr>
<tr>
<td>Willingness to Concede (WC)</td>
<td>-48.71</td>
<td>57.25</td>
<td>-.12</td>
<td>-90.66</td>
<td>57.08</td>
<td>-.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formulative Med. (FM)</td>
<td>46.35</td>
<td>64.73</td>
<td>.12</td>
<td>186.42</td>
<td>341.74</td>
<td>.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manipulative Med. (MM)</td>
<td>15.20</td>
<td>61.55</td>
<td>.04</td>
<td>818.92†</td>
<td>420.74</td>
<td>2.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WC x FM</td>
<td>-36.15</td>
<td>77.08</td>
<td>-.41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WC x MM</td>
<td>-168.53†</td>
<td>89.94</td>
<td>-.206</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[
R^2 \quad .09 \quad .13 \quad .26
\]

\[
R^2_{adj} \quad .07 \quad .06 \quad .16
\]

\[
R^2_{change} \quad .09* \quad .04 \quad .12*
\]

Overall F | 5.06 | 1.83 | 2.64*

\[
df \quad 51 \quad 48 \quad 46
\]

Note: Formulative Med is coded as such: -1 = no mediation, 1 = formulative, 0 = manipulative; Manipulative Med is coded as such: -1 = no mediation, 0 = formulative, 1 = manipulative

\[† p < .10 \quad * p < .05 \quad ** p < .01\]
Table 8

Hierarchical Multiple Regression Analyses Predicting Overall Satisfaction from Mediation Condition and Willingness to Concede

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Step 1</th>
<th></th>
<th>Step 2</th>
<th></th>
<th>Step 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$B$</td>
<td>$SE$</td>
<td>$B$</td>
<td>$SE$</td>
<td>$B$</td>
</tr>
<tr>
<td>Gender</td>
<td>.06</td>
<td>.10</td>
<td>.08</td>
<td>.05</td>
<td>.10</td>
<td>.03</td>
</tr>
<tr>
<td>Willingness to Concede (WC)</td>
<td></td>
<td></td>
<td></td>
<td>.19</td>
<td>.13</td>
<td>.09</td>
</tr>
<tr>
<td>Formulative Med. (FM)</td>
<td></td>
<td></td>
<td></td>
<td>.42*</td>
<td>.15</td>
<td>.09</td>
</tr>
<tr>
<td>Manipulative Med. (MM)</td>
<td></td>
<td></td>
<td></td>
<td>- .21</td>
<td>.14</td>
<td>.77</td>
</tr>
<tr>
<td>WC x FM</td>
<td></td>
<td></td>
<td></td>
<td>.07</td>
<td>.18</td>
<td>.07</td>
</tr>
<tr>
<td>WC x MM</td>
<td></td>
<td></td>
<td></td>
<td>-.44*</td>
<td>.20</td>
<td>2.12</td>
</tr>
</tbody>
</table>

$R^2$                                      | .01    |        | .16   |        | .26   |        |

$R^2_{adj}$                                 | -.01   |        | .09   |        | .16   |        |

$R^2_{Change}$                              | .01    |        | .15*  |        | .10†  |        |

Overall $F$                                 | .29    |        | 2.27† |        | 2.66* |        |

$df$                                        | 51     |        | 48    |        | 46    |        |

Note: Formulative Med is coded as such: -1 = no mediation, 1 = formulative, 0 = manipulative; Manipulative Med is coded as such: -1 = no mediation, 0 = formulative, 1 = manipulative

† $p < .10$  * $p < .05$  ** $p < .01$
Table 9

Hierarchical Multiple Regression Analyses Predicting Pareto Efficiency of Agreements from Mediation Condition and Openness to Mediation

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Step 1</th>
<th></th>
<th></th>
<th>Step 2</th>
<th></th>
<th></th>
<th>Step 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
</tr>
<tr>
<td>Gender</td>
<td>96.56*</td>
<td>42.92</td>
<td>.30</td>
<td>88.84†</td>
<td>44.36</td>
<td>.28</td>
<td>92.09*</td>
<td>42.45</td>
<td>.29</td>
</tr>
<tr>
<td>Openness to Mediation (OM)</td>
<td>-31.74</td>
<td>45.51</td>
<td>-.10</td>
<td>-12.91</td>
<td>44.61</td>
<td>-.04</td>
<td>-143.99*</td>
<td>59.28</td>
<td>-1.59</td>
</tr>
<tr>
<td>Formulative Med. (FM)</td>
<td>66.90</td>
<td>61.79</td>
<td>.17</td>
<td>6.75</td>
<td>255.71</td>
<td>.02</td>
<td>-143.99*</td>
<td>59.28</td>
<td>-1.59</td>
</tr>
<tr>
<td>Manipulative Med. (MM)</td>
<td>14.39</td>
<td>61.93</td>
<td>.04</td>
<td>627.57*</td>
<td>263.11</td>
<td>1.62</td>
<td>-143.99*</td>
<td>59.28</td>
<td>-1.59</td>
</tr>
<tr>
<td>OM x FM</td>
<td></td>
<td></td>
<td></td>
<td>6.13</td>
<td>58.66</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OM x MM</td>
<td></td>
<td></td>
<td></td>
<td>-143.99*</td>
<td>59.28</td>
<td>-1.59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ R^2 \]

\[ R^2_{adj} \]

\[ R^2_{\text{Change}} \]

Overall \( F \)

\[ df \]

\[ \bar{F} \]

\[ df \]

Note: Formulative Med is coded as such: -1 = no mediation, 1 = formulative, 0 = manipulative; Manipulative Med is coded as such: -1 = no mediation, 0 = formulative, 1 = manipulative

\* p < .05  ** p < .01
Table 10

Hierarchical Multiple Regression Analyses Predicting Satisfaction with Outcome from Mediation Condition and Openness to Mediation

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Step 1</th>
<th></th>
<th></th>
<th></th>
<th>Step 2</th>
<th></th>
<th></th>
<th></th>
<th>Step 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td>Gender</td>
<td>.08</td>
<td>.15</td>
<td>.07</td>
<td>.05</td>
<td>.15</td>
<td>.05</td>
<td>.06</td>
<td>.14</td>
<td>.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness to Mediation (OM)</td>
<td>-.10</td>
<td>.15</td>
<td>-.10</td>
<td>-.04</td>
<td>.15</td>
<td>-.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formulative Med. (FM)</td>
<td>.46*</td>
<td>.20</td>
<td>.36</td>
<td>.42</td>
<td>.85</td>
<td>.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manipulative Med. (MM)</td>
<td>-.30</td>
<td>.20</td>
<td>-.24</td>
<td>1.48†</td>
<td>.87</td>
<td>1.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OM x FM</td>
<td></td>
<td></td>
<td></td>
<td>-.02</td>
<td>.19</td>
<td>-.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OM x MM</td>
<td></td>
<td></td>
<td></td>
<td>-.42*</td>
<td>.20</td>
<td>-1.43</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R²                       | .01    |       |       | .11    |       | .21   |
R²_adj                   | -.01   |       |       | .04    |       | .10   |
R²_change                | .01    |       |       | .11    |       | .09†  |
Overall F                | .28    |       |       | 1.52   |       | 1.99† |
df                       | 51     |       |       | 48     |       | 46    |

Note: Formulative Med is coded as such: -1 = no mediation, 1 = formulative, 0 = manipulative; Manipulative Med is coded as such: -1 = no mediation, 0 = formulative, 1 = manipulative

† p < .10  * p < .05  ** p < .01
Table 11

Hierarchical Multiple Regression Analyses Predicting Pareto Efficiency of Agreements from Mediation Condition and Generalized Trust

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Step 1</th>
<th></th>
<th>Step 2</th>
<th></th>
<th>Step 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$B$</td>
<td>$SE$</td>
<td>$B$</td>
<td>$SE$</td>
<td>$B$</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td>96.56*</td>
<td>42.92</td>
<td>95.71*</td>
<td>44.05</td>
<td>86.03*</td>
</tr>
<tr>
<td>Generalized Trust (GT)</td>
<td></td>
<td>2.14</td>
<td>56.89</td>
<td>.01</td>
<td>-4.63</td>
<td>55.58</td>
</tr>
<tr>
<td>Formulative Med. (FM)</td>
<td></td>
<td>63.83</td>
<td>62.13</td>
<td>.16</td>
<td>71.49</td>
<td>329.36</td>
</tr>
<tr>
<td>Manipulative Med. (MM)</td>
<td></td>
<td>6.23</td>
<td>61.73</td>
<td>.01</td>
<td>782.44*</td>
<td>359.36</td>
</tr>
<tr>
<td>GT x FM</td>
<td></td>
<td></td>
<td></td>
<td>3.66</td>
<td>73.30</td>
<td>.04</td>
</tr>
<tr>
<td>GT x MM</td>
<td></td>
<td>3.66</td>
<td>73.30</td>
<td>.04</td>
<td>-175.39*</td>
<td>81.09</td>
</tr>
</tbody>
</table>

$R^2$                      | .09    |          | .12    |          | .22    |          |
$R^2_{adj}$                | .07    |          | .05    |          | .12    |          |
$R^2_{Change}$             | .09*   |          | .03    |          | .10†   |          |
Overall $F$                | 5.06*  |          | 1.62   |          | 2.16†  |          |
$df$                      | 51     |          | 48     |          | 46     |          |

Note: Formulative Med is coded as such: -1 = no mediation, 1 = formulative, 0 = manipulative; Manipulative Med is coded as such: -1 = no mediation, 0 = formulative, 1 = manipulative

† $p < .10$, * $p < .05$, ** $p < .01$
Table 12

Hierarchical Multiple Regression Analyses Predicting Pareto Efficiency of Agreements from Mediation Condition and Cultural Intelligence, Motivation Subscale

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Step 1</th>
<th></th>
<th></th>
<th></th>
<th>Step 2</th>
<th></th>
<th></th>
<th></th>
<th>Step 3</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>96.56*</td>
<td>42.92</td>
<td>.30</td>
<td>90.76</td>
<td>44.28</td>
<td>.28</td>
<td>92.60*</td>
<td>44.29</td>
<td>.29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Intelligence: Motivation (CQM)</td>
<td>38.42</td>
<td>71.37</td>
<td>.08</td>
<td>69.78</td>
<td>74.02</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formulative Med. (FM)</td>
<td>61.49</td>
<td>61.86</td>
<td>.16</td>
<td>165.80</td>
<td>537.06</td>
<td>.42</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manipulative Med. (MM)</td>
<td>10.15</td>
<td>61.36</td>
<td>.03</td>
<td>671.32</td>
<td>488.87</td>
<td>1.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CQM x FM</td>
<td></td>
<td></td>
<td></td>
<td>-18.89</td>
<td>102.05</td>
<td>.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CQM x MM</td>
<td></td>
<td></td>
<td></td>
<td>-128.14</td>
<td>94.08</td>
<td>1.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- \( R^2 \)
- \( R^2_{adj} \)
- \( R^2_{Change} \)
- Overall \( F \)
- df

<table>
<thead>
<tr>
<th>( R^2 )</th>
<th>.09</th>
<th>.12</th>
<th>.17</th>
</tr>
</thead>
<tbody>
<tr>
<td>( R^2_{adj} )</td>
<td>.07</td>
<td>.05</td>
<td>.06</td>
</tr>
<tr>
<td>( R^2_{Change} )</td>
<td>.09*</td>
<td>.03</td>
<td>.04</td>
</tr>
<tr>
<td>Overall ( F )</td>
<td>5.06</td>
<td>1.70</td>
<td>1.53</td>
</tr>
<tr>
<td>df</td>
<td>51</td>
<td>48</td>
<td>46</td>
</tr>
</tbody>
</table>

Note: Formulative Med is coded as such: -1 = no mediation, 1 = formulative, 0 = manipulative; Manipulative Med is coded as such: -1 = no mediation, 0 = formulative, 1 = manipulative

† \( p < .10 \)  * \( p < .05 \)  ** \( p < .01 \)
Figures

Figure 1. Two-way interaction of mediation condition and contextualized trust on Pareto efficiency.
Figure 2. Two-way interaction of mediation condition and contextualized trust on overall satisfaction.
Figure 3. Two-way interaction of mediation condition and willingness to concede on Pareto efficiency.
Figure 4. Two-way interaction of mediation condition and willingness to concede on overall satisfaction.
Figure 5. Two-way interaction of mediation condition and openness to mediation on Pareto efficiency.
Figure 6. Two-way interaction of mediation condition and openness to mediation on satisfaction with outcome.
Figure 7. Two-way interaction of mediation condition and generalized trust on Pareto efficiency.
Figure 8. Two-way interaction of mediation condition and motivational CQ on Pareto efficiency.
Appendices

Appendix A

Disputing Case
General Information (identical for both participants)

General Study Directions

Part I

1. Imagine that you are involved in a heated dispute with your neighbor. You are very upset about this difficult dispute. Today you will read about the dispute and the issues your and your neighbor disagree about. While you’re reading about the dispute, imagine that you are really involved in the disagreement. Think about how you would feel if the situation were happening to you in real life. In Part II, you will try to negotiate a solution with another participant playing the role of your neighbor.

2. You will be asked to answer some questions about yourself.

PART II

1. You will be given time to review the story you read in Part I.

2. You will complete a brief questionnaire about the story.

3. You will be given a brief tutorial explaining how you will negotiate with the other disputant.

4. The negotiations will begin. You have 28 minutes to negotiate.

5. You will fill out questionnaires about the negotiation, your partner, and yourself.

If you have questions at any point during the study, please alert the experimenter.
General Information

Oakland Apartments is a small apartment building owned by the Oakland Company, a large international shipping firm, which rents out furnished apartments at discounted rates to its employees who are assigned to work outside of their home country. The building has 8 apartment units, each with a living room, terrace, spacious kitchen, large bedroom, and bathroom. In front of the building is a parking area for the residents and their guests. There are only 10 parking spots, and if those spots are occupied, other residents or guests must park on another street about three blocks away from the building and walk. Behind the apartment building is a medium sized patio with two small tables and four chairs surrounded by a garden. There is also a half-sized basketball court. The complex residents are encouraged to use the patio and basketball court for their own enjoyment or for entertaining friends. The complex employs a part-time night doorman who picks up residents’ garbage from the building’s stairwell at 9:00 pm. The building is maintained by a manager, Jordan Smith, who is a friend of the general manager of the local Oakland branch. The complex has always been a relatively quiet and close-knit community. In general, people have always gotten along and socialized with each other, and any problems were usually resolved quickly and amicably. However, whenever a problem comes up between residents, Jordan has always stepped in to try to solve the conflict. Jordan is an expert mediator. Jordan believes it is very important to create a peaceful living environment, and the leaders at the local Oakland branch fully support him when he intervenes in a conflict between residents. Within the past six months, two new renters have moved into units. When Deniz Yenisu, a young woman from Turkey, moved into unit #6, the other residents of Oakland Apartments were pleased to meet their friendly and helpful new neighbor. The residents were also thrilled when Alex Watkins, a young American woman, moved into unit #5. Despite the history of friendly neighbor relationships in Oakland Apartments, Deniz and Alex always seem to be arguing about something. The conflict really intensified when Alex called the police because Deniz's guests were too loud one weeknight. Deniz retaliated by sending a letter complaining to Jordan Smith about Alex. The other residents don't understand why they can’t get along without bothering the building manager - Alex and Deniz just need to find a good compromise.

Additional passage used in both mediated conditions:

Jordan recently became involved in the conflict and is trying to find solution that will work for both residents. Because of the problems they were causing in the complex, Jordan discussed Alex and Deniz's disagreement with his friend, the general manager of the local Oakland branch. The manager told Jordan to do whatever it takes to resolve the conflict, and that because Alex and Deniz couldn't reach a solution on their own, they need to accept Jordan's help. If they don't come to an agreement, both Alex and Deniz will have to go through a costly and time-consuming company dispute resolution process.

Player 1 Materials
Directions: Alex Watkins

In this study, you are going to read about a dispute going on between two neighbors. Your role in this situation is that of Alex Watkins. The other study participant will be taking on the role of the opposing neighbor, Deniz Yenisu. **It is very important that you take your role seriously. After you read what is happening in the dispute, imagine how you would feel and act if the situation were really happening to you.** Your goal is to try to come up with a solution to this conflict with your partner while also protecting your own interests. As you will read, the dispute has become very intense.

Additional passage used in both mediated conditions:

Because the dispute has been impossible to resolve up to this point, a mediator has stepped in to help you and your partner come to a solution. It is very common for mediators to try to help people in difficult conflicts such as the one you will read about. In this study, an expert mediator will try to help you and your partner find the best solution. The mediator will watch as you and your partner exchange offers during the negotiation. When he thinks of an offer that might interest you and your partner, he will send it to you. Even if you and your partner think you may have come to an agreement, the mediator might send you another offer if he thinks that you could improve your agreement. The mediator will likely contact you every 3-4 minutes during your negotiation. Though the mediator is here to help you, you are under no obligation to accept his offers. The mediator cannot force you to accept a final agreement.
Oakland Apartments
Alex Watkins

You have been selected to take the role of Alex Watkins in the conflict in Oakland Apartments. You have five major issues with the neighbor living in the adjacent apartment, Deniz Yenisu. Each issue has potential solutions that have been assigned a point value. To show the value of each solution to you, we have created a point system. Each solution has been assigned a point value. (Additional passage used in both mediated conditions): An expert mediator will take on the role of the building manager, Jordan Smith, and will try to help you and Deniz come to the best possible solution. This mediator will monitor your discussion with Deniz and send you text messages with suggestions.

Objective: Your objective is to negotiate a solution with Deniz that gives you the highest number of points possible. To earn points, you and Deniz must agree on the same solution. While you should try to maximize the number of points you earn, you should try to get at least 500 points during the negotiation. There will be a lottery for a $200 gift certificate at the end of this study, and you can earn lottery tickets based on your performance during the negotiation. If you earn 500 points or less, you will receive one lottery ticket. For every 50 points you earn over this 500 point benchmark, you will receive an additional ticket to a lottery for a gift certificate. If you do not agree on a solution for every issue with Deniz, you will both be subject to a costly and time-consuming company dispute resolution process and you will only earn 280 points.

The issues: garbage, noise, basketball court use, patio use, and access in and out of the parking area

Explanation of Issues and Solutions:

Garbage: Deniz is so uptight about everything! The doorman picks up the residents’ garbage from the building stairwell at 9:00 pm every night. You sometimes have to work late into the evening at your new job, so you put your trash out when you leave in the morning. Deniz told you that the trash stinks, creates an obstacle in the stairwell, and that it will attract bugs and mice that would infest the other apartments. You’ve tried to tell her that you can’t always get home in time to put your garbage out. Her response to your very reasonable scheduling conflicts has been to put your trash in front of your door. You don’t understand what her problem is – if you can’t get home to put it out in the evening, you have no other choice but to put it out in the morning. She keeps telling you that you are disgusting and gross, but now whenever she talks to you about the garbage, you just roll your eyes and tell her to lighten up. It was annoying enough to deal with her before, but now you’ve found out that she’s told the other residents that you have rats and roaches in your apartment because you’re unclean. You can’t believe she’s lying to other people in the building – you’ve never had a rat or a roach anywhere you’ve lived. This is really embarrassing. You might be able to run home to put the garbage out at 5:00 pm and then return to work,
but you definitely can’t come home to take the garbage out any later than that. You think Deniz is overreacting about your garbage, and you refuse to give in to her requests.

Solutions:
1. You continue to put your trash in the stairwell in the morning. Points: 200
2. You agree to buy a special trash can for the hallway so your garbage doesn’t smell when you put it out in the morning. Points: 150
3. You agree to put your trash out at 5:00 pm. Point: 100
4. You agree to pay the doorman to make another trip to pick up your trash when you get home. Points: 50
5. You agree to always put your trash out only at 8:00 pm or later. Points: 0

Basketball court use: You used to play basketball in high school, and since you moved, you’ve started practicing again on the complex court. You practice several times a week, but the best time is on Saturday afternoons when you are free to play for a long time and can take breaks when you need to. Deniz and her group of Turkish friends also want to play basketball on Saturday afternoons. At first, Deniz asked you if you wanted to play with her and her friends, but you injured your knee playing in high school and are afraid that their rough playing might result in another injury. Now, she just orders you off the court when she and her friends want to play. She and her friends will even start playing around you when you won’t leave the court, and sometimes they “accidentally” bump into you or hit you with their ball. Deniz can’t be such a bossy jerk all the time. If you’re on the court first, you should get to practice until you’re finished. You’re not going to let her and her stupid friends push you around.

Solutions:
1. You get to continue to use the court for as long as you want on Saturday afternoons. Points: 80
2. You agree to use the court for only two hours on Saturday afternoons. Points: 60
3. You agree to use the court for only one hour on Saturday afternoons. Points: 40
4. You agree to leave the court when Deniz and her friends want to use it. Points: 20
5. You agree not to use the court to practice on Saturday afternoons. Points: 0

Noise: Deniz is so childish! She is always loud late into the night on weeknights. It seems like every night, Deniz has guests over to her apartment or on the complex patio and they stay until 2:00 am or later! Sometimes, you only get five or six hours of sleep because Deniz's noise has kept you up. You even fell asleep at your job last week! That's why you called the police on Deniz and her friends. They had the television volume cranked up, and they shouted over it whenever they needed to talk. How can Deniz be so childish? Normal adults are respectful and recognize that other people might not want to be kept up until all hours of the night. Doesn’t Deniz have a job, too? She can’t possibly be doing a good job at work when all she cares about is partying. You could probably deal with it if Deniz would quiet down around 11:00 pm on the weeknights, but things just can't continue the way they are going.
Solutions:
1. Deniz agrees to be quiet after 11:00 pm. Points: 200
2. Deniz agrees to be quiet after 11:30 pm. Points: 150
3. Deniz agrees to be quiet after 12:00 am. Points: 100
4. Deniz agrees to quiet down if you call and ask for less noise. Points: 50
5. Deniz gets to continue to be loud late into the morning on weeknights. Points: 0

Patio Use: Deniz is so inconsiderate! She sits out on the patio at night, taking up one of the few available chairs. Since you moved to the new area for your job, you have met a small group of young Americans who get together in the evening to discuss and debate current events, which they often do over coffee, card games, or chess. You offered to host the group on the patio at Oakland Apartments. Unfortunately, Deniz always hogs one of the chairs that your friends could be sitting in, and often, one of your friends has to leave because Deniz won’t give up her chair. You’ve asked Deniz nicely if she could just sit on her own terrace, but she sneers at you and makes excuses about her terrace being too small. You don’t understand why Deniz needs to sit on the patio in the first place – she has a terrace that she could use, and you know for a fact that she could fit a table and chair on her own terrace because you have fit them on your own terrace. Deniz is just being a jerk so that you can’t have fun with your friends. To get back at her for being such a pain, you’ve starting grabbing her chair any time she gets up. If Deniz won’t stop being a brat and use her own terrace, your social group will have to find a new place to meet. You like having your new friends over and you don’t see why Deniz needs to take up space on the patio when she has a perfectly good terrace to sit on.

Solutions:
1. Deniz agrees to sit on her terrace and not use the patio at all. Points: 400
2. Deniz agrees to only use the patio for one hour every other night. Points: 300
3. Deniz agrees to only use the patio for one hour per night. Points: 200
4. Deniz agrees to only use the patio for two hours per night. Points: 100
5. Deniz continues to relax on the patio whenever she wants. Points: 0

Access in and out of the parking area: Deniz and her stupid friends are so selfish! You noticed that since Deniz moved in, you were frequently blocked into or out of the complex parking area. You suspect that many of the drivers parking illegally in the parking area’s entrance are Deniz’s guests. You have been unable to either enter or leave the complex on several occasions. One time you even missed a special celebratory dinner with your friends because you couldn’t get your car out of the parking lot. After you missed the dinner, you asked Deniz to tell her guests to keep the entrance to the parking area clear. She said that it wasn’t her guests, and then had the nerve to complain that she had seen your guests blocking the entrance. It’s definitely not your friends blocking the parking area, and you wouldn’t be surprised if Deniz was telling her friends to block the parking just to be annoying. You’ve heard that Deniz has been lying to the other residents and saying it is really your friends that are blocking the parking area. You have threatened to call the local police department to ask them to ticket any cars blocking the entrance, to ask other neighbors to help move the offending vehicles, or to place “no parking” signs at the entrance. You want
to Deniz to help you to deter people from parking illegally, but she seems to be very resistant.

Solutions
1. Deniz agrees that you and other residents can call the local police department to ticket or tow any cars blocking the entrance. Points: 120
2. You both agree to recruit other residents to help you move the car out of the entrance. Points: 90
3. You both agree to donate some money to install “no parking” signs at the entrance of the parking area. Points: 60
4. You both agree to go to the building manager and owner to complain about being blocked in. Points: 30
5. Deniz does nothing. Points: 0
## Summary of Solutions to Issues for Alex Watkins

<table>
<thead>
<tr>
<th>Garbage:</th>
<th>Points:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. You continue to put your trash in the stairwell in the morning.</td>
<td>200</td>
</tr>
<tr>
<td>2. You agree to buy a special can for your trash so it doesn’t smell.</td>
<td>150</td>
</tr>
<tr>
<td>3. You agree to put your trash out at 5:00 pm or later.</td>
<td>100</td>
</tr>
<tr>
<td>4. You agree to pay the doorman to make another trip to pick up your trash when you get home.</td>
<td>50</td>
</tr>
<tr>
<td>5. You agree to always put your trash out only at 8:00 pm or later.</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basketball Court Use:</th>
<th>Points:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. You get to continue to use the court for as long as your want on Saturday afternoons.</td>
<td>80</td>
</tr>
<tr>
<td>2. You agree to use the court for only two hours on Saturday afternoons.</td>
<td>60</td>
</tr>
<tr>
<td>3. You agree to use the court for only one hour on Saturday afternoons.</td>
<td>40</td>
</tr>
<tr>
<td>4. You agree to leave the court when Deniz and her friends want to use it.</td>
<td>20</td>
</tr>
<tr>
<td>5. You agree not to use the court to practice on Saturday afternoons.</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Noise:</th>
<th>Points:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Deniz agrees to be quiet after 11:00 pm.</td>
<td>200</td>
</tr>
<tr>
<td>2. Deniz agrees to be quiet after 11:30 pm.</td>
<td>150</td>
</tr>
<tr>
<td>3. Deniz agrees to be quiet after 12:00 am.</td>
<td>100</td>
</tr>
<tr>
<td>4. Deniz agrees to quiet down if you call and ask for less noise.</td>
<td>50</td>
</tr>
<tr>
<td>5. Deniz gets to continue to be loud late into the morning on weeknights.</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patio Use:</th>
<th>Points:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Deniz agrees to sit on her terrace and not use the patio at all.</td>
<td>400</td>
</tr>
<tr>
<td>2. Deniz agrees to only use the patio for one hour every other night.</td>
<td>300</td>
</tr>
<tr>
<td>3. Deniz agrees to only use the patio for one hour per night.</td>
<td>200</td>
</tr>
<tr>
<td>4. Deniz agrees to only use the patio for two hours per night.</td>
<td>100</td>
</tr>
<tr>
<td>5. Deniz continues to relax on the patio whenever she wants.</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parking Lot Access:</th>
<th>Points:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Deniz agrees that you and other residents can call the local police department to ticket or tow any cars blocking the entrance.</td>
<td>120</td>
</tr>
<tr>
<td>2. You both agree to recruit other residents to help you move the car out of the entrance.</td>
<td>90</td>
</tr>
<tr>
<td>3. You both agree to donate some money to install “no parking” signs at the entrance of the parking area.</td>
<td>60</td>
</tr>
<tr>
<td>4. You both agree to go to the building manager and owner to complain about being blocked in.</td>
<td>30</td>
</tr>
<tr>
<td>5. Deniz does nothing</td>
<td>0</td>
</tr>
</tbody>
</table>

PLEASE DO NOT SHOW THIS SOLUTION CHART TO YOUR PARTNER!
Additional passage for the manipulative mediation condition:

The conflict with Deniz has continued for several weeks. Since the two of you cannot seem to resolve your differences and your arguments have been negatively affecting other tenants at Oakland Apartments, the building manager, Jordan Smith, has stepped in to try to help solve the conflict. In the past, Jordan has tried to treat disputing tenants fairly while also trying to find an appropriate solution. However, he does have some power over the tenants because of his close relationship with the owners of the apartments, the Oakland Company. In the past he has had to use several methods to encourage disputing tenants to settle their arguments. The following options are available to Jordan as he tries to help you and Deniz resolve your disagreements. If Jordan chooses to use any of these methods, which he can do at any time, points will be taken away from the points you or Deniz earn during the negotiation. To show the cost of each of Jordan’s actions, we have created a points system.

Options:

1. Jordan can put you on probation, so that if you cause more problems, you'll be kicked out of the complex. This would embarrass you in front of your friends in the complex, since Jordan would have to let everyone living in the apartments know that you are on probation and that they should report you if you cause any problems. Points: -60

2. Jordan can inform the Oakland Company that you are creating a problem for the community. This would embarrass you in front of your subordinates, colleagues, and superiors at work. It could even damage your reputation as a team player on the job, and possibly put your job in danger. Points: -90

3. Jordan can advise the Oakland Company to evict you. The rent at Oakland Apartments is significantly lower than it is for other apartments in the area. If you are evicted, you will either have to find a new apartment, which will likely cost more than you can afford on your current salary, or you will have to leave the area and your job. Points: -130
Player 2 Materials

**Directions: Deniz Yenisu**

In this study, you are going to read about a dispute going on between two neighbors. Your role in this situation is that of Deniz Yenisu. The other study participant will be taking on the role of the opposing neighbor, Alex Watkins. **It is very important that you take your role seriously. After you read what is happening in the dispute, imagine how you would feel and act if the situation were really happening to you.** Your goal is to try to come up with a solution to this conflict with your partner while also protecting your own interests. As you will read, the dispute has become very intense.

Additional passage used in both mediated conditions:

Because the dispute has been impossible to resolve up to this point, a mediator has stepped in to help you and your partner come to a solution. It is very common for mediators to try to help people in difficult conflicts such as the one you will read about. In this study, an expert mediator will try to help you and your partner find the best solution. The mediator will watch as you and your partner exchange offers during the negotiation. When he thinks of an offer that might interest you and your partner, he will send it to you. Even if you and your partner think you may have come to an agreement, the mediator might send you another offer if he thinks that you could improve your agreement. The mediator will likely contact you every 3-4 minutes during your negotiation. Though the mediator is here to help you, you are under no obligation to accept his offers. The mediator cannot force you to accept a final agreement.
Oakland Apartments
Deniz Yenisu

You have been selected to take the role of Deniz Yenisu in the conflict in Oakland Apartments. You have five major issues with the neighbor living in the adjacent apartment, Alex Watkins. Each issue has potential solutions that have been assigned a point value. To show the value of each solution to you, we have created a point system. Each solution has been assigned a point value. (Additional passage used in both mediated conditions): An expert mediator will take on the role of the building manager, Jordan Smith, and will try to help you and Alex come to the best possible solution. This mediator will monitor your discussion with Alex and send you text messages with suggestions.

Objective: Your objective is to negotiate a solution with Alex that gives you the highest number of points possible. To earn points, you and Alex must agree on the same solution. While you should try to maximize the number of points you earn, you should try to get at least 500 points during the negotiation. There will be a lottery for a $200 gift certificate at the end of this study, and you can earn lottery tickets based on your performance during the negotiation. If you earn 500 points or less, you will receive one lottery ticket. For every 50 points you earn over this 500 point benchmark, you will receive an additional ticket to a lottery for a gift certificate. If you do not agree on a solution for every issue with Alex, you will both be subject to a costly and time-consuming company dispute resolution process and you will only earn 280 points.

The issues: garbage, noise, basketball court use, patio use, and access in and out of the parking area

Explanation of Issues and Solutions:

Garbage: Alex is just lazy! The doorman picks up the residents’ garbage from the complex stairwell every evening at 9:00 pm, and most residents put their garbage in the stairwell around 8:00 pm. Alex puts her garbage out early every morning and just leaves it in the stairwell all day. You told Alex that not only does her trash stink and create a dangerous obstacle in the stairway, but you're also worried that it will attract bugs or mice that will infest the surrounding apartments. You don’t understand how Alex can be so disgusting, putting out her trash so that everyone has to look at it and smell it. She’s just gross! You’ve gotten so sick of it that you’ve been taking her trash and putting it in front of her door, just so she realizes how revolting it is when she leaves her trash in the stairwell. You would like her to put her trash out as close to pickup time as possible, and she definitely needs to stop putting it out in the morning.

Solutions:
1. Alex agrees to always put her trash out at 8:00 pm or later. Points: 200
2. Alex agrees to pay the doorman to make another trip to pick up her trash when she gets home. Points: 150
3. Alex agrees to put her trash out at 5:00 pm or later. Points: 100
4. Alex agrees to buy a special trash can for the hallway so her garbage doesn’t smell when she puts it out in the morning. Points: 50
5. Alex continues to put her trash in the stairwell in the morning. Points: 0

**Basketball court use:** You have loved playing basketball since you were a child. You’ve found a group of young Turks in your new city that like to play on Saturday afternoons. You invited everyone to play on the court at Oakland Apartments. Unfortunately, Alex wants to use the court at the same time. She’s usually on the court for a long time, but most of the time she’s just messing around or “taking a break,” as she calls it. You asked if she wanted to play with your group, but she sneered at you and turned you down. After that, you started asking her to leave the court when your group wants to play, but she refuses and argues that she has a right to practice for as long as she wants. She’s being ridiculous. She calls it “practicing” but really she’s just standing around trying to take up the court so you and your friends can’t use it. You and your group have just started to play even when she’s on the court – usually, you can annoy her enough to make her leave. You think Alex should leave the court open on Saturday afternoons, or at least give it up when you and your friends want to play basketball. After all, it’s silly for one person to take up the court to practice when several other people want to play a game.

**Solutions:**
1. Alex agrees not to use the court to practice on Saturday afternoons. Points: 400
2. Alex agrees to leave the court when you and your friends want to use it. Points: 300
3. Alex agrees to use the court for only one hour on Saturday afternoons. Points: 200
4. Alex agrees to use the court for only two hours on Saturday afternoons. Points: 100
5. Alex continues to use the court for as long as she wants on Saturday afternoons. Points: 0

**Noise:** Alex constantly complains that you are loud late at night on weeknights. You have been very lonely since you moved for work, and having friends over always makes you feel better. You usually like to have your friends over later in the evening, after you’ve had some time to relax. You always try to keep the noise to a reasonable level, but Alex has been whining about the noise since you moved in. Alex wants you to be quiet after 11:00 pm, but you think that’s absurd. Who even goes to bed that early? Alex even called the police one night when you had your friends over, but they just told you to try to get along with your neighbors. The police didn’t think you were being so loud, so clearly Alex is just being a brat. She’s even spreading lies about you and your friends to other residents, claiming that you’re immature and that you and your friends stay up all night partying. This is just humiliating. If she can’t handle a reasonable amount of noise, she should just grow up and get some headphones or earplugs. You refuse to change your behavior because there’s nothing wrong with it. You have a right to have friends over, and you and your guests aren’t that loud.

**Solutions:**
1. You get to continue to be loud late into the morning on weeknights. Points: 200
2. You agree to quiet down if Alex calls and asks for less noise. Points: 150
3. You agree to be quiet after 12:00 am. Points: 100
4. You agree to be quiet after 11:30 pm. Points: 50
5. You agree to be quiet after 11:00 pm. Points: 0

**Patio use:** Alex is such a jerk! You enjoy sitting on the patio in the evenings when the weather is nice. However, Alex has ruined your ability to enjoy your relaxation. She is a member of some small group of young Americans who get together to socialize and play cards or chess. Alex’s friends are rowdy, loud, and inappropriate. They get together just to argue and shout about things, and they have even tried to get you to abandon your chair so that they can all sit around the tables to play cards. One time, they stole your chair after you got up to get a cup of tea, even though you left your book on it. They refused to give it back once you returned. Alex has told you that you are only entitled to a certain amount of time using the patio and that you should just sit on your terrace. You refuse to give in. The patio is for everyone in the complex to use, and your terrace isn’t big enough for a table and chair. You think Alex is being unfair, and you’re going to take a stand to make her and her friends should respect your desire to relax on the patio.

**Solutions:**
1. You continue to relax on the patio when you want. Points: 80
2. You agree to only use the patio for two hours per night. Points: 60
3. You agree to only use the patio for one hour per night. Points: 40
4. You agree to only use the patio for one hour every other night. Points: 20
5. You agree to sit on your terrace and not use the patio at all. Points: 0

**Access in and out of the parking area:** Alex and her stupid friends are so selfish! You noticed that since Alex moved in, you were frequently blocked into or out of the complex parking area. You suspect that many of the drivers parking illegally in the parking area’s entrance are Alex’s guests. You have been unable to either enter or leave the complex on several occasions. One time you even missed an important work dinner because you couldn’t get your car out of the parking lot. After you missed the dinner, you asked Alex to tell her guests to keep the entrance to the parking area clear. She said that it wasn’t her guests, and then had the nerve to complain that she had seen your guests blocking the entrance. It’s definitely not your friends blocking the parking area, and you wouldn’t be surprised if Alex was telling her friends to block the parking just to be annoying. You’ve heard that Alex has been lying to the other residents and saying it is really your friends that are blocking the parking area. You have threatened to call the local police department to ask them to ticket any cars blocking the entrance, to ask other neighbors to help move the offending vehicles, or to place “no parking” signs at the entrance. You want to Alex to help you to deter people from parking illegally, but she seems to be very resistant.

**Solutions:**
1. Alex agrees that you and other residents can call the local police department to ticket or tow any cars blocking the entrance. Points: 120
2. You both agree to recruit other residents to help you move the car out of the entrance. Points: 90
3. You both agree to donate some money to install “no parking” signs at the entrance of the parking area. Points: 60
4. You both agree to go to the building manager and owner to complain about being blocked in. Points: 30
5. Alex does nothing. Points: 0
Summary of Solutions to Issues for Deniz Yenisu

<table>
<thead>
<tr>
<th>Garbage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alex agrees to always put her trash out at 8:00 pm or later.</td>
<td>200</td>
</tr>
<tr>
<td>2. Alex agrees to pay the doorman to make another trip to pick up her trash when she gets home.</td>
<td>150</td>
</tr>
<tr>
<td>3. Alex agrees to put her trash out at 5:00 pm or later.</td>
<td>100</td>
</tr>
<tr>
<td>4. Alex agrees to buy a special can for her trash so it doesn’t smell.</td>
<td>50</td>
</tr>
<tr>
<td>5. Alex continues to put her trash in the stairwell in the morning.</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basketball Court Use:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alex agrees not to use the court to practice on Saturday afternoons.</td>
<td>400</td>
</tr>
<tr>
<td>2. Alex agrees to leave the court when you and your friends want to use it.</td>
<td>300</td>
</tr>
<tr>
<td>3. Alex agrees to use the court for only one hour on Saturday afternoons.</td>
<td>200</td>
</tr>
<tr>
<td>4. Alex agrees to use the court for only two hours on Saturday afternoons.</td>
<td>100</td>
</tr>
<tr>
<td>5. Alex continues to use the court for as long as she wants on Saturday afternoons.</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Noise:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. You get to continue to be loud late into the morning on weekends.</td>
<td>200</td>
</tr>
<tr>
<td>2. You agree to quiet down if Alex calls and asks for less noise.</td>
<td>150</td>
</tr>
<tr>
<td>3. You agree to be quiet after 12:00 am.</td>
<td>100</td>
</tr>
<tr>
<td>4. You agree to be quiet after 11:30 pm.</td>
<td>50</td>
</tr>
<tr>
<td>5. You agree to be quiet after 11:00 pm.</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patio Use:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. You continue to relax on the patio when you want.</td>
<td>80</td>
</tr>
<tr>
<td>2. You agree to only use the patio for two hours per night.</td>
<td>60</td>
</tr>
<tr>
<td>3. You agree to only use the patio for one hour per night.</td>
<td>40</td>
</tr>
<tr>
<td>4. You agree to only use the patio for one hour every other night.</td>
<td>20</td>
</tr>
<tr>
<td>5. You agree to sit on your terrace and not use the patio at all.</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parking Lot Access:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alex agrees that you and other residents can call the local police department to ticket or tow any cars blocking the entrance.</td>
<td>120</td>
</tr>
<tr>
<td>2. You both agree to recruit other residents to help you move the car out of the entrance.</td>
<td>90</td>
</tr>
<tr>
<td>3. You both agree to donate some money to install “no parking” signs at the entrance of the parking area.</td>
<td>60</td>
</tr>
<tr>
<td>4. You both agree to go to the building manager and owner to complain about being blocked in.</td>
<td>30</td>
</tr>
<tr>
<td>5. Alex does nothing.</td>
<td>0</td>
</tr>
</tbody>
</table>

PLEASE DO NOT SHOW THIS SOLUTION CHART TO YOUR PARTNER!
Additional passage for the manipulative mediation condition:

The conflict with Alex has continued for several weeks. Since the two of you cannot seem to resolve your differences and your arguments have been negatively affecting other tenants at Oakland Apartments, the building manager, Jordan Smith, has stepped in to try to help solve the conflict. In the past, Jordan has tried to treat disputing tenants fairly while also trying to find an appropriate solution. However, he does have some power over the tenants because of his close relationship with the owners of the apartments, the Oakland Company. In the past he has had to use several methods to encourage disputing tenants to settle their arguments. The following options are available to Jordan as he tries to help you and Alex resolve your disagreements. If Jordan chooses to use any of these methods, which he can do at any time, points will be taken away from the points you or Alex earn during the negotiation. To show the cost of each of Jordan’s actions, we have created a points system.

Options:

1. Jordan can put you on probation, so that if you cause more problems, you'll be kicked out of the complex. This would embarrass you in front of your friends in the complex, since Jordan would have to let everyone living in the apartments know that you are on probation and that they should report you if you cause any problems. Points: -60

2. Jordan can inform the Oakland Company that you are creating a problem for the community. This would embarrass you in front of your subordinates, colleagues, and superiors at work. It could even damage your reputation as a team player on the job, and possibly put your job in danger. Points: -90

3. Jordan can advise the Oakland Company to evict you. The rent at Oakland Apartments is significantly lower than it is for other apartments in the area. If you are evicted, you will either have to find a new apartment, which will likely cost more than you can afford on your current salary, or you will have to leave the area and your job. Points: -130

Appendix B

Part I Survey

Generalized Trust Scale (Yamagishi & Yamagishi, 1994)

Cultural Intelligence Scale (Ang, Van Dyne, Koh, Ng, Templer, & Tay, 2007)

Demographics:

1. What is your gender? (Please circle)  Male  Female
2. What is your age? _______

3. What is your nationality? ____________________________

4. What is your marital status? (please circle one)
   _____Single   _____Engaged   _____Married   _____Separated   _____Divorced   _____Widowed

5. In your opinion, what socio-economic class do you belong to? (Please circle one)

   Upper upper   (e.g., rich, influential, highly educated)
   Lower upper   (e.g., professionals, such as physicians, lawyers; owner of a major business)
   Upper middle  (e.g., professionals, such as teachers, social workers; owner of a good
                  business; owner of a large farm)
   Lower middle  (e.g., clerical, small entrepreneurs; farmer)
   Upper lower   (e.g., skilled worker, small farmer)
   Lower        (e.g., unskilled, unemployed)
   lower
Appendix C

Pre-Negotiation Questionnaire

Planned behavior scale

**INSTRUCTIONS:**
For the following questions, please place an X on the line that best corresponds to your opinion.

**I plan to be __________ in the game:**

<table>
<thead>
<tr>
<th></th>
<th>Cooperative</th>
<th>Untrustworthy</th>
<th>Fair</th>
<th>Tough</th>
<th>Emotional</th>
<th>Unwilling to make concessions</th>
<th>Concerned about my own outcomes</th>
<th>Concerned about the other’s outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>extremely</td>
<td>extremely</td>
<td>extremely</td>
<td>extremely</td>
<td>extremely</td>
<td>extremely</td>
<td>extremely</td>
<td>extremely</td>
</tr>
<tr>
<td></td>
<td>Quite</td>
<td>Quite</td>
<td>Quite</td>
<td>Quite</td>
<td>Quite</td>
<td>Quite</td>
<td>Quite</td>
<td>Quite</td>
</tr>
<tr>
<td></td>
<td>Slightly</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Slightly</td>
</tr>
<tr>
<td></td>
<td>Neither</td>
<td>Neither</td>
<td>Neither</td>
<td>Neither</td>
<td>Neither</td>
<td>Neither</td>
<td>Neither</td>
<td>Neither</td>
</tr>
<tr>
<td></td>
<td>slightly</td>
<td>slightly</td>
<td>slightly</td>
<td>slightly</td>
<td>slightly</td>
<td>slightly</td>
<td>slightly</td>
<td>slightly</td>
</tr>
<tr>
<td></td>
<td>Quite</td>
<td>Quite</td>
<td>Quite</td>
<td>Quite</td>
<td>Quite</td>
<td>Quite</td>
<td>Quite</td>
<td>Quite</td>
</tr>
<tr>
<td></td>
<td>extremely</td>
<td>extremely</td>
<td>extremely</td>
<td>extremely</td>
<td>extremely</td>
<td>extremely</td>
<td>extremely</td>
<td>extremely</td>
</tr>
</tbody>
</table>

Trustworthy

Unfair

Soft

Unemotional

Willing to make concessions

Unconcerned about my own outcomes

Unconcerned about the other’s outcomes
Scale measuring reactions to the disputing case

Please indicate your agreement with the following statements, using the scale below:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Neither agree nor disagree</td>
<td>Strongly agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I want the mediator to get involved in this dispute. 1 2 3 4 5 6 7
2. I identify with role of Tyler in this dispute. 1 2 3 4 5 6 7
3. I think the issues in this case are realistic. 1 2 3 4 5 6 7
4. This negotiation is important to me. 1 2 3 4 5 6 7
5. I feel that I can depend on Alex to have my best interests at heart during this negotiation. 1 2 3 4 5 6 7
6. I feel like my honor has been violated in this situation. 1 2 3 4 5 6 7
7. I feel like my reputation has been damaged in this situation. 1 2 3 4 5 6 7
8. I feel like my rights have been violated in this situation. 1 2 3 4 5 6 7
Appendix D

Post-Negotiation Questionnaire

Mediation Condition Manipulation Check Items

Did a mediator send you messages during your negotiation?  Yes  No

Please think about what the mediator did during the negotiation, and indicate the extent to which you think the mediator engaged in the following behaviors using the scale provided.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Neither agree nor disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**During the negotiation, the mediator...**

1. Suggested offers for Alex and I to consider  
   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

2. Tried to push Alex and I to accept his proposals  
   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

3. Threatened to punish Alex and I  
   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Modified Subjective Value Inventory (Curhan, Elfenbein, & Xu,. 2006)
Appendix E

Screenshot of Dispute Interface

<table>
<thead>
<tr>
<th>Issue</th>
<th>Your offer</th>
<th>Agreed so far (not binding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garbage</td>
<td>Alex will buy a special trash can (150)</td>
<td></td>
</tr>
<tr>
<td>Basketball court</td>
<td>- (0)</td>
<td></td>
</tr>
<tr>
<td>Noise</td>
<td>- (0)</td>
<td></td>
</tr>
<tr>
<td>Patio</td>
<td>- (0)</td>
<td></td>
</tr>
<tr>
<td>Parking lot</td>
<td>- (0)</td>
<td></td>
</tr>
<tr>
<td>Your score:</td>
<td>150</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Issue</th>
<th>Chosen offer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garbage</td>
<td>Alex will pay the doorman to take trash</td>
</tr>
<tr>
<td>Basketball court</td>
<td>-</td>
</tr>
<tr>
<td>Noise</td>
<td>-</td>
</tr>
<tr>
<td>Patio</td>
<td>-</td>
</tr>
<tr>
<td>Parking lot</td>
<td>-</td>
</tr>
<tr>
<td>Your score:</td>
<td>50</td>
</tr>
</tbody>
</table>

History of actions

<table>
<thead>
<tr>
<th>Session</th>
<th>Proposer</th>
<th>Action</th>
<th>Offer</th>
<th>Your score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mediator</td>
<td>Message</td>
<td>Hello, my name is Jordan. I understand that</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the two of you have been having a conflict</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>and have been unable to resolve it. I am</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the building manager and will try to help</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>facilitate an agreement between the two of</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>you today. Please go ahead and begin</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>discussing the situation. I will send</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>suggestions throughout your discussion.</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>You</td>
<td>offer</td>
<td>Alex will buy a special trash can</td>
<td>150</td>
</tr>
<tr>
<td>2</td>
<td>Other party</td>
<td>reject</td>
<td>Alex will buy a special trash can</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Other party</td>
<td>offer</td>
<td>Alex will pay the doorman to take trash</td>
<td>50</td>
</tr>
</tbody>
</table>
Appendix F

Mediator Introductions and Messages

Formulative Mediator Introduction:
Hello, my name is Jordan. I understand that the two of you have been having a conflict and have been unable to resolve it. I am the building manager and will try to help facilitate an agreement between the two of you today. Please go ahead and begin discussing the situation. I will send suggestions throughout your discussion.

Manipulative Mediator Introduction:
Hello, I'm taking the role of Jordan Smith, the building manager of Oakland Apartments. I am going to try to help the two of you find a solution to the conflict that you are having. I'm going to be watching as the two of you discuss potential solutions. If I can think of a solution that I think would work for the two of you, I'll send you a message. If I think that one or both of you are not cooperating, I have several options to push you to come to an agreement. I can put you on probation, tell my friends at the Oakland Company that you are a troublemaker, or advise the Oakland Company to evict you from the Oakland Apartments. If I decide to use any of these tactics, points will be taken away from your final score. I hope there will be no need for me to impose these sanctions.

Sample Mediator Proposal Message:
I believe you could achieve a high score on the Patio issue, if you would be willing to compromise on the Basketball Court issue. Please look at the following solution:
Noise:
Patio: Tyler will not use the patio.
Garbage:
Basketball: Alex will not use the court on Saturday.
Parking:

Sample Manipulative Mediator Threat Message:
You are not cooperative. You made too many bad offers. I can put you on probation, so that if you cause more problems, you'll be kicked out of the complex. This would embarrass you in front of your friends in the complex, since I would have to let everyone living in the apartments know that you are on probation and that they should report you if you cause any problems. Points: -60

Sample Manipulative Mediator Punishment Message:
You are not cooperative. You made too many bad offers. Your penalty is: -60
References


