RUNNING HEAD: THE ROLE OF CULTURAL ORIENTATION

The Role of Cultural Orientation in Bargaining under Incomplete Information: **Differences in Causal Attributions**

Ana Valenzuela College of Business, San Francisco State University

Joydeep Srivastava Robert H. Smith School of Business, University of Maryland

Seonsu Lee College of Business and Economics, Wonkwang University, Korea*

*Ana Valenzuela is Assistant Professor of Marketing, College of Business, San Francisco State University, San Francisco, CA 94132 (avalenzu@sfsu.edu). Joydeep Srivastava is Associate Professor of Marketing, Robert H. Smith School of Business, University of Maryland, College Park, MD 20742 (srivasta@rhsmith.umd.edu). Seonsu Lee is Associate Professor of Marketing, College of Business and Economics, Wonkwang University, Iksan City, Chollabuk-Do 570-749, Korea (mkslee@wonkwang.ac.kr). This research was supported in part by the Dean Contribution Fund and the Affirmative Action Research Grant awarded by San Francisco State University to the first author. The authors acknowledge the assistance of Lane Auten, Foo Nin Ho, and Diane Huang in collecting the data. The authors also thank Priya Raghubir, Sharon Shavitt, Susan Taylor, Bob Wyer, the conference participants at the Association of Marketing Science World Conference, Perth, Australia, and the Association of Consumer Research Conference, Toronto, Canada for their helpful comments on earlier versions of this paper.

The Role of Cultural Orientation in Bargaining under Incomplete Information:

Differences in Causal Attributions

Abstract

This research examines how differences in cultural orientation influence causal attributions and thus the behavioral outcomes in an incomplete information bargaining situation. Using ultimatum bargaining, three experiments demonstrate that acceptance rates differ across Western and East Asian cultures because of the differences in implicit theories of behavior. The results of experiment 1 shows that East Asians are more sensitive to both external constraints and group influences but only when there is information about the opponent's situation to discount personality traits. Experiment 2 shows that reasons for an opponent's behavior mediate the influence of cultural orientation on bargaining outcomes when situational constraints are made salient. Experiment 3 shows that reasons for an opponent's behavior based on the saliency of a group context mediate the influence of cultural orientation on behavior. The paper concludes by discussing the implications of the findings and suggesting directions for future research.

Key Words: Culture; Bargaining; Negotiations; Incomplete Information; Inferences; Causal Attributions.

With the growing trend in the globalization of business activities, there has been a significant increase in the frequency of cross-cultural business interactions (Triandis, 1994). As economies become more interconnected, it is critical to understand the influence of culture on all aspects of organizational behavior including bargaining and negotiations. Many companies depend on the outcomes of cross-cultural negotiations for their continued success and profitability in today's global economy. Much of the existing negotiations literature in organizational psychology however consists predominantly of experimental simulations investigating theoretical frameworks developed using evidence from Western cultures, predominantly the United States (cf. Graham, Kim, Lin, & Robinson, 1988). According to one estimate, about 90% of social and organizational theories have been developed and tested in Western contexts (Triandis, 1994). As such, relatively little is known about the generalizability of existing theoretical frameworks across diverse cultures and the validity of these frameworks in predicting processes and outcomes in non-Western cultures is not clear. There is therefore a pressing need to explicitly examine whether existing frameworks are universal or are laden with assumptions derived from Western cultures (Gelfand et al., 2002; Triandis, 1995).

The main purpose of this research is to examine the role of cultural orientation on bargaining outcomes. The general premise, following the recent literature in cultural psychology, is that many judgments and decisions are the result of cognitive processes that are culturally imposed (e.g., Chiu, Morris, Menon & Hong, 2000; Menon, Morris, Chiu & Hong, 1999). The rationale is that exposure to different ecological factors and social structures perpetuates different cultural values and ideals and thus certain judgment "biases" are likely to be more prevalent in one culture than another (Triandis, 1995). Specifically, this research examines how differences in cultural orientation influence behavioral outcomes due to differences in causal attributions and

inferences in an incomplete information bargaining situation. Incomplete information bargaining scenarios are particularly important because most business transactions are characterized by information asymmetry and uncertainty about the mutual gains from trade. In the absence of clearly specified referents, potential bargaining outcomes cannot be easily assessed and there is a natural inclination to search for causal explanations for others' (opponent's) behavior (Morris, Larrick, & Su, 1999; Srivastava, 2001). The nature of causal attributions may differ based on cultural orientation thereby affecting bargaining processes and outcomes (Morris & Peng, 1994).

In this research, we use ultimatum bargaining as the setting to study the role of cultural orientation (e.g., Buchan, Croson, & Johnson., 2004). In ultimatum bargaining, an agent (proposer) makes an offer to another agent (responder) that divides a specified sum of money between the two agents. The responder can then either accept or reject the offer. If the offer is accepted, the sum of money is divided as proposed and the game ends. If the offer is rejected, both agents receive nothing and the game ends. The ultimatum game provides the appropriate context as it is not only a model for basic transactions but also represents the end state of any continuous bargaining. In addition, social psychologists argue that the tendency to attribute observed behavior to individual traits is more likely to occur in interpersonal conflict situations such as ultimatum bargaining. Perhaps one of the main reasons for our choice of the ultimatum game as a means of investigating the role of culturally dependent inferences is that offer acceptance behavior has been shown to depend on the responder's evaluations of the proposer's offer and the reasons leading to making that offer (Henrich et al., 2001; Thaler, 1988). Finally, ultimatum bargaining offers a simple structure that allows isolation of the factors of interest.

Reflecting its importance as a building block for more complex bargaining, ultimatum bargaining has been extensively studied in the literature (see Camerer & Thaler, 1995). The

standard economic prediction is that since any amount of money is better than no money, a rational proposer should demand (and the responder should accept) the smallest amount over zero. Contrary to the normative prediction, proposers tend to make generous offers (averaging about 40% of the surplus) and responders often reject positive offers when they are below 20% of the total surplus (Camerer & Thaler, 1995). These systematic deviations from the normative prediction have been attributed to considerations of fairness (Thaler, 1988).

Ultimatum bargaining has also been examined in cross-cultural contexts. For instance, Roth, Prasnikar, Okuno-Fujiwara and Zamir (1991) in a four-country study found that proposer offers in Jerusalem, Ljusbljana, Pittsburgh and Tokyo all lay within the range of 20% to 50%. However, there were notable differences between the distributions of the offers as well as the distribution of acceptance rates across different countries. These differences in bargaining behavior across countries were not due to differences in language or currencies, but were tentatively attributed to cultural differences. The authors proposed that differences in bargainers' conception of what constitutes a fair (or "reasonable") offer might be an important explanatory variable. Henrich et al. (2001) compared ultimatum bargaining outcomes across 15 small scale societies and found that proposer offers among the Machiguenga tribe in Peru were about 26%, while those among the Lamelara in Indonesia were greater than 50%. They also observed zero rejection of positive offers among the Achuar (Ecuador), Aché (Paraguay) and Tsimané (Bolivia) tribes, even though some of the offers were at or below 30%. They attributed the large variations in bargaining behavior across the different cultural groups to group-specific conditions, such as social institutions or cultural norms about fairness. They further suggest that subjects use situations in their daily experience to define appropriate behavior and thus differences in the structures of social interaction, such as the necessity to cooperate or share, and in the mode of

livelihood are transferred to experimental settings making certain societies more or less predisposed to forego material payoffs in order to share with others, or to punish unfair actions.

However, both these studies, and much of the ultimatum bargaining literature, focus on complete information situations, where the agents have full information about one another's payoffs and thus inferences about the causes for an opponent's behavior are not necessary (e.g., Buchan et al., 2004; Camerer & Thaler, 1995). Arguably, incomplete information ultimatum bargaining requires a different assessment of what a reasonable offer constitutes. Because of the uncertainty about the total surplus to be split between the agents, an assessment of what constitutes a normative fair or "reasonable" offer is not possible. Instead bargainers tend to infer the reasons underlying the opponent's bargaining behavior in order to justify their own decision. Indeed, research shows that bargainers' attributions for opponents' behavior play a critical role in incomplete information bargaining (Srivastava, Chakravarti & Rapoport, 2000; Srivastava, 2001). The bargainers's culturally imposed structures for social interaction are antecedents of the tendency to attribute behavior to personal dispositions instead of contextual factors (Nisbett, 2003; Morris & Peng, 1994). The objective of this research is to examine whether differences in causal attributions that are culturally driven affect the outcomes in ultimatum bargaining under incomplete information.

Broadly, this research adds to the literature on bargaining and cross-cultural psychology by examining how cultural orientation affects bargaining behavior and outcomes in situations characterized by the absence of objective referents and standards against which to judge potential outcomes (White & Neale, 1994). The cultural psychology literature suggests that causal attributions are culturally dependent (e.g., Choi, Nisbett, & Norenzayan, 1999) and thus systematic differences in bargaining outcomes across cultures may be due to differences in the

causal attributions for opponents' behavior (Shafir, Simonson, & Tversky, 1993). This research extends this line of inquiry to a bargaining context and attempts to link causal attributions to bargaining outcomes. Three experiments show that subjects from Western cultures have a tendency to seek causal explanations for an opponent's behavior in terms of individual personality traits. In contrast, subjects from Eastern cultures are more likely to recognize that an opponent's behavior may be dictated by situational factors or by other-oriented traits but only where the external constraints are made salient.

CONCEPTUAL BACKGROUND

Conflict Resolution and Cultural Orientation

Cross-cultural psychologists have proposed explanatory models of how culture influences negotiations and researchers in this tradition explain cultural differences in terms of the stable, general characteristics of negotiators such as the degree to which their values are individualistic as opposed to collectivistic (e.g. Triandis, 1994). Individualistic versus collectivistic scores have been empirically associated with differences in negotiation behavior between Western (U.S.) versus Chinese subjects such as the extent of the *fixed pie error* (Gelfand & Christakopoulou, 1999) and rewards distribution (Leung, 1987). Similarly cultural differences in self concept such that the Chinese, believing in a relatively fixed social world, would be more likely than Americans to focus on collective duties and social conservatism, and Americans, believing in a relatively malleable social world, would be more likely than Chinese to focus on individual rights and decision autonomy, have been put forth to explain differences in negotiation styles between cultures (Chen, Mannix, & Okumura, 2003). Research has also documented that

negotiation behavior is dependent on cultural differences in theories of fairness and justice (Morris, Leung, & Ames, 1999).

However, individualistic-collectivistic value scores cannot explain when culture has a strong influence and when a weak influence on a given individual. To address this issue, researchers suggest that cultural differences in conflict resolution behavior may reflect individual knowledge structures (Morris & Fu, 2001). These knowledge structures, such as implicit theories or mental models, guide judgments and decisions and, ultimately, behavior. Social psychologists argue that negotiation contexts are particularly likely to give rise to interpretations of the counterpart's behavior (Morris, Larrick, & Su, 1999). This is even more likely when there is ambiguity in the negotiation context, such as in incomplete information bargaining (Srivastava et al., 2000; Srivastava, 2001). The knowledge structures most relevant to these judgments are the beliefs about the dominant causal explanations for behavior. These beliefs determine individuals' causal attributions of observed behavior.

Causal Attributions and Cultural Orientation

One of most commonly documented judgment bias in social psychology, labeled the fundamental attribution error (also known as correspondence bias or overattribution in the literature), is the tendency to attribute observed behavior to internal personality characteristics rather than external situational constraints (Nisbett & Ross, 1980). Does the fundamental attribution error vary across cultures? Describing the fundamental attribution error as a universal human tendency, social psychologists have traditionally assumed that principles of causal attribution are invariant across cultures (Nisbett & Ross, 1980). According to the universalist view, cultural orientation should not affect causal attributions.

In contrast, more recent research recognizes that attribution patterns reflect implicit theories acquired from induction and socialization and thus vary with the perceiver's cultural orientation (e.g., Choi et al., 1999; Menon et al., 1999; Morris & Peng, 1994). For example, research suggests that the person-centered theory that behavior is caused by stable internal personality traits is more entrenched in individualistic cultures because individuals are viewed as autonomous entities and are socialized to behave according to personal preferences. In contrast, the situation-centered theory that behavior is shaped by relationships and situational factors is more prevalent in collectivistic cultures because individuals are part of a social collective and are socialized to behave according to situational constraints and group norms (Morris & Peng, 1994; Triandis, 1995). Consistent with this idea, several studies have reported that causal explanations of behavior focus largely on the situational context in East Asian cultures whereas Western cultures prefer explanations based on individual traits (e.g., Choi et al., 1999). Other studies have added that cultures differ in implicit theories of individuals and groups so that East Asians are more likely than North Americans to focus and explain behavior using dispositions of collectives (e.g., Menon et al., 1999). According to the dispositional view, culture always affects causal attributions in one way or another.

Despite the numerous studies on cultural differences in the literature, the dispositional view that culture always matters has been undermined by studies that report no cultural differences. Further, a recent meta-analysis of cross-cultural research found no reliable cultural differences based on the individualism-collectivism dimension (Oyserman, Kemmelmeier, & Coon, 2002; Takano & Osaka, 1999). These and other related findings suggest that the role of cultural orientation may be contextually driven such that cultural differences are influential only when people are required to draw upon the implicit theories that differ across cultures (Briley,

Morris, & Simonson, 2000; Morris & Fu, 2001). Briley et al. (2000) showed that cultural differences were manifested only when decision makers were asked to provide reasons for their decisions. Providing reasons for the decisions activates knowledge structures that are different across cultures (Higgins, 1996; Morris & Fu, 2001). Briley et al. (2000) suggest that possessing an implicit theory does not imply that it will be used universally, but only when it is needed or is made accessible (Choi & Nisbett, 1998; Knowles, Morris, & Chiu, 2001).

Causal Attributions, Cultural Orientation and Ultimatum Bargaining

Does the nature of the causal attributions and, thereby, behavioral outcomes vary across cultures? The universalist view of culture predicts no difference. The dispositional view suggests that Western cultures would always be more likely to seek causal explanations based on personality traits whereas East Asian cultures would always be more sensitive to situational factors (Morris, Leung, & Iyengar, 2004). In contrast to the dispositional view, research shows that both East Asians and Westerners exhibit the fundamental attribution error (Morris & Peng, 1994; Krull et al., 1999). Further, Choi & Nisbett (1998) compared attributions across Korea and the United States and found that when situational constraints are made salient Korean subjects were more sensitive to the situational constraints than the U. S. subjects (also Krull et al., 1999). Similarly, Chiu et al. (2000) found that individual differences in need for closure (NFC) moderate the effect of culture on inference making. The authors propose that NFC leads people to interpret an ambiguous social event by increasing their reliance on implicit theories received from acculturation. These findings suggest a third and more dynamic view of culture. Taking the dynamic view of the role of cultural orientation, this research proposes that behavioral outcomes will change due to cultural differences in causal attributions only when there is a need to draw

upon the implicit theories that differ across cultures or when these theories are activated (Briley et al., 2000; Choi & Nisbett, 1998; Morris & Fu, 2001).

Three ultimatum bargaining experiments examine the dynamic role of cultural orientation in affecting behavior under incomplete information by comparing bargaining outcomes between subjects from the U. S., a highly individualistic Western culture, and Korea, a highly collectivistic East Asian culture. In an ultimatum bargaining context, rejection of a positive offer has been explained by the intent to punish a competitive and unfair proposer (Bolton & Zwick, 1995). As such, the more an opponent's behavior (the offer) is attributed to the proposer's competitive personality, the higher the probability of rejection (Srivastava, 2001). We propose that there will be no difference in the causal attributions for an opponent's behavior and thereby bargaining outcomes across cultures when there is no information available about an opponent's situation to discount personality attributions. However, when information about an opponent's situation is accessible, implicit theories that differ across cultures are activated leading to differences in behavioral outcomes across cultures. It is predicted that while Western subjects will continue to focus on internal personality traits and exhibit similar behavioral patterns, East Asian subjects will be more sensitive to the external constraints (e.g., the possibility that the available surplus could be small), thereby increasing acceptance rates.

HYPOTHESES

Individual versus Situational Attributions

Consider a one-sided incomplete information ultimatum situation where the responder is uncertain but the proposer knows the total amount available for division. Uncertain about the total amount available for division and thus unable to assess the fairness of an offer, a primary

concern of the responder is about the relative share or proportion of the total amount that a proposer's offer represents (e.g., Camerer & Thaler, 1995; Croson, 1996). In this situation, responders may use the proposer's offer to infer the total amount available and thereby the proportion of the total amount that a specific offer represents (Croson, 1996; Morris et al., 1999). Given the uncertainty, there is also a natural inclination to develop a causal explanation for an opponent's behavior (Blount, 1995) which then determines whether or not an offer is accepted.

Consider the relatively high and low offers of \$12.50 and \$7.50, respectively, when the total amount available for division is \$25, but the responder only knows that the total amount could be any whole number between \$10 and \$40 with equal probability (uniform distribution). Since \$25 represents the mean of the distribution, the likelihood is higher that an offer of \$12.50 represents a more fair and favorable division of the total amount relative to an offer of \$7.50. In fact, responders are likely to attribute the proposer's unfavorable offer to his/her personality traits such as level of competitiveness (or opportunism) rather than to the total amount available (situational constraint), even if the offer of \$7.50 were to represent an equal split of the total amount available (e.g., Morris et al., 1999; Srivastava, 2001). It is proposed that when situational constraints are not made salient or when there is no additional information about the proposer's situation to discount personality attributions, bargainers in both cultures are likely to attribute the proposer's offer to personality traits (Choi & Nisbett, 1998; Krull et al., 1999). As such, while the bargaining outcomes are likely to be different across the relatively high and low offers, there will be no difference in the outcomes (acceptance rates) across U. S. and Korean bargainers.

However, when the situational constraints are made salient, bargainers' causal attributions are likely to differ across cultures. Making the situational constraints salient or accessible allows bargainers to draw upon their implicit theories that differ across cultures.

Bargainers in Korea are more likely to recognize the power of situational constraints as they draw upon the implicit theory that an individual's behavior is shaped by situational factors. In other words, relative to U. S. bargainers, Korean bargainers are likely to be more sensitive to situational constraints in their causal attributions of an opponent's behavior. On observing a relatively low offer of \$7.50. Korean responders are more likely to reduce their tendency to attribute the offer to proposer's personality traits (e.g., competitiveness and opportunism) and take into account the possibility that the low offer is a reflection of the total amount available. As a result, when situational constraints are made salient, bargaining outcomes are likely to differ across U. S. and Korean responders. Specifically, we predict that the acceptance rates for a relatively low offer are likely to be higher for Korean bargainers than U. S. bargainers, when information that can be used to discount personality attributions is made salient or accessible.

While there will be no difference in the acceptance rates among bargainers in Korea and H1: U. S. when situational constraints are not salient, the acceptance rates for a relatively low offer will be higher among Korean bargainers relative to U. S. bargainers when situational constraints are made salient.

Our argument is that the differences in bargaining outcomes (H1) are caused by differences in causal attributions across cultures and that these differences are a function of whether information is available or accessible to discount personality traits. While East Asians become more sensitive to situational determinants of behavior when the constraints are made salient and tend to correct the extent of their attributions to personality characteristics, Westerners continue to attribute behavior to personality traits regardless of the saliency of the situational constraints (Choi & Nisbett, 1998; Krull et al., 1999). In other words, we propose a mediation account in which the accessibility of situational influences increases the strength of

bargainers' attributions of the low offer to reasons other than the proposer's personality traits, which, in turn, increases acceptance of the low offers, but only for Korean bargainers.

Specifically, we test two hypotheses:

- **H2:** When situational constraints are salient, Korean bargainers will rate situation-based reasons as a more important cause for a relatively low offer than U.S. bargainers.
- **H3:** The acceptance rates of a relatively low offer will be mediated by individuals' importance ratings of situation-based reasons.

Individual versus Group Attributions

While a majority of the research on cross-cultural differences in causal attributions has focused on implicit theories of persons (i.e., personality-based versus situational attributions), recent research argues that while Western cultures believe that individuals have stable internal traits that can cause social outcomes and groups do not, East Asian cultures hold that groups have the power to influence social outcomes (Chiu et al., 2000; Menon et al., 1999). In other words, cultural differences in causal attributions and subsequent behavior may not only be based on differential sensitivity to situational/contextual accounts but also on differences in implicit trait beliefs. Although group constraints can be conceived of as another situational constraint, in contrast to non-social situational factors that influence behavior, a group is a social entity that possesses dispositions independent of individual traits and can cause outcomes (Higgins & Bryant, 1982). Importantly, to the extent that cultures differ in their implicit theories of groups, there may be differences in behavioral outcomes across Koreans and North Americans. From a practical perspective, individuals commonly bargain on behalf of a group.

The implicit theories of the group vary across cultures because of differences in conceptions of individual versus collective autonomy. As discussed earlier, individualistic cultures consider people to be autonomous entities possessing stable internal traits, and these entities should not be influenced by collectives unless they desire (Markus & Kitayama, 1991). In other words, the prevalent thinking is that an individual's action is primarily dictated by stable personality traits and that the responsibility for his/her behavior does not disappear even with the possibility of group influence. In fact, a group consists of individuals and these individuals influence the group's outcomes. In contrast, in collectivistic cultures, individuals are perceived as part of a group and the group is believed to be autonomous and powerful. Entrenched in the notion of collectivism, individual behavior is perceived to be shaped by relationships and conformity to group norms or directives. As a result, East Asians are more likely than Westerners to attribute an individual's behavior to group influence instead of to the individual's personality (Menon et al., 1999). While cultural differences in implicit theories of the group have been documented in social settings, this research extends the inquiry to economically meaningful decision contexts such as bargaining.

In an ultimatum bargaining scenario, consider an offer of \$7.50 when the total amount available for division is \$25 and the responder only knows that the total amount available could be anywhere from \$10 to \$40. Given the high likelihood that the \$7.50 offer is low and represents an unfavorable division of the total amount, as discussed previously, we expect bargainers in both Korea and U. S. to attribute the proposer's offer to his/her personality traits (e.g., level of competitiveness). There should therefore be no differences in behavioral outcomes when the proposer is not making decisions in a group context.

In contrast, when the proposer is making the decision of how much to offer in a group context, the differences in implicit theories of the group across individualistic and collectivistic cultures should lead to differences in bargaining outcomes. Because collectivistic cultures believe that individual behavior is shaped by group norms and directives, individuals in collectivistic cultures are more likely to give the benefit of the doubt to the proposer and attribute the low offer to the group. On the other hand, individualistic cultures believe that an individual is accountable for his/her individual behavior and has the capability to influence group behavior, even when decisions are made in a group context. As a consequence, North Americans are more likely to continue attributing the low offer to the proposer's personality traits (e.g., competitiveness or opportunism) whereas Koreans are more likely to be sensitive to the group influence and the extent to which the individual had to give in to the group's priorities, therefore, is not punishable for it. A relatively low offer of \$7.50 is therefore more likely to be accepted by bargainers in Korea than in U. S., when the proposer is believed to be making his/her decision in a group context.

H4: While there will be no difference in the acceptance rates among bargainers in Korea and U. S. when the decision is made in an individual context, the acceptance rates for a relatively low offer will be higher among Korean bargainers relative to U. S. bargainers when the proposer's decision is made in a group context.

Consistent with previous research (e.g., Chiu et al., 2000), differences in implicit theories of group across the two cultures underlie the behavioral differences such as those hypothesized in H4. In Western cultures, the prevalent thinking is that individuals can shape group behavior and, thus, are primarily responsible for their decisions even in a group context. In East Asian cultures, the thinking is that individual behavior is shaped by the group and that conformity to

group norms or directives is responsible for an individual's decision-making in a group context (Menon et al., 1999). Therefore, in an incomplete information bargaining situation, Korean responders, when facing a relatively low offer, are more likely to consider the influence of the group on the individual's decision relative to U. S. responders. Further, the differences in causal reasoning mediate the influence of cultural orientation on bargaining outcomes when the decision of how much to offer is made in a group context.

- **H5:** In a group decision context, Korean bargainers' ratings of group-based reasons as a cause for a relatively low offer will be higher than U.S. bargainers' ratings.
- **H6:** Acceptance rates of a relatively low offer will be mediated by individuals' importance ratings of group-based reasons.

OVERVIEW OF EXPERIMENTAL STUDIES

In sum, we propose a model in which cultural differences in bargaining behavior arise when there are reasons for behavior that can be used to discount the effect of personality traits. In particular, we study differences in bargaining outcomes when situational constraints are made salient as well as when there is a group-based decision context. Experiment 1 compares bargaining outcomes in the form of acceptance rates for ultimatum offers across Korean and U. S. responders. We expect to find significant differences between cultures in acceptance rates for relatively low offers when we make proposers' situational constraints (i.e., total amount available for division) salient (H1). In addition, we expect to find significant differences in ultimatum bargaining outcomes when an opponent's behavior can be attributed to a collective instead of directly to the individual (H4).

We propose further that cultural differences in ultimatum bargaining outcomes are due to differences in causal attributions for the proposer's low offer. Linking attributions to outcomes, experiment 2 shows that causal attributions (i.e., relative causal ratings) that differ across cultures when situational constraints are salient mediate the influence of cultural orientation on bargaining outcomes (H2 and H3). Similarly, experiment 3 shows that cultural differences in reasons for an opponent's behavior when the group context is salient mediate the influence of cultural orientation on bargaining outcomes (H5 and H6). It is important to note that we examine both individual trait beliefs versus contextual beliefs (or non-social factors) as well as individual versus group (or other-oriented) trait beliefs in causal attributions. This research thus not only examines the differential role of cultural orientation on attributions to agents versus situations but also differences in implicit theories of the relative influence of different agents (e.g., individual versus group) in a society (e.g., Menon et al., 1999).

EXPERIMENT 1: DIFFERENCES IN BEHAVIORAL OUTCOMES

Method

Subjects and Procedure. Participants were 133 undergraduates at a university in the United States and 164 undergraduates at a university in Korea, all of whom participated in the study for partial course credit. Simultaneously run in both countries, subjects participated in a 2 (culture: Korea, United States) x 2 (offer size: \$12.50 and \$7.50) x 3 (control, situational constraints salient, group decision-making context) between-subjects design. Participants were informed that they would be taking part in a proposer-responder game with another individual.

As participants entered the session, they were randomly divided into two groups. The study was conducted in two adjacent rooms, each group being seated in a different room. All

participants were required to read the instructions, which described the proposer-responder game. Participants read that in the proposer-responder game, two individuals, the proposer and the responder have to agree on how to divide a given amount of money between them (say \$10). The proposer starts by making an offer of \$X, which is less than or equal to \$10, to the responder in any way s/he chooses to do so. The responder can then either accept the offer, in which case s/he will receive X and the proposer will get to keep the balance, (10 - X), or the responder can reject the offer, whereupon both receive nothing. The instructions emphasized that the proposer can only make one offer while the responder can accept or reject the offer. Subjects were told that they would receive the money if they accepted the offer.

Because of the one-sided incomplete information situation, participants were told that the amount that will be given to the proposer to divide was determined as follows. The instructions mentioned that the experimenter had randomly drawn a ticket from a jar that had tickets numbered from 10 to 40. The number on the ticket that the experimenter randomly picked was the amount that the proposer has to divide. The proposer knows the exact amount to be divided but the responder will only know that the amount could be any whole number between 10 and 40 with equal probability. They were also told that both parties know that the proposer knows the exact amount to be divided while the responder only knows that the amount could assume any number between 10 and 40 with equal probability.

Participants were instructed that they will be randomly paired with another student in their same class who is not in the room and the identities of all individuals will remain anonymous before, during, and after the study. Participants were assigned a number which they were led to believe would be used to match them with another individual. They were told that students had been randomly assigned the role of the proposer or responder. Based on a coin toss, students in their room had been assigned the role of the responder. To enhance the credibility of the cover story, about 10 minutes into the study, an individual was sent into each of the two rooms with a large brown envelope, purportedly containing the offers, which proposers in the other room had just made. Participants were given 10 minutes to read the instructions and seek clarification, if required. Pilot tests revealed no problem in the understanding of the task or the instructions by participants in either country. After ensuring that everyone understood the game and the task, the numbers assigned in the beginning were called out in random order. Participants were then handed a sheet with their respective offers, purportedly from another student playing the role of the proposer. The instructions emphasized that they could either accept or reject the offer. Participants had to accept or reject the offer on the same sheet that contained the assigned proposer's offer and then respond to additional measures on a separate booklet.

No communication was allowed through the duration of the study that took about 30 minutes. After completion, the participants were thoroughly debriefed. The debriefing revealed that everyone believed the cover story that they were actually playing the proposer-responder game with another individual who had been randomly assigned the role of the proposer.

Cross-cultural design. Based on previous research, we used the U. S. to represent an individualistic culture and Korea to represent a collectivistic culture (e.g., Hofstede, 1991). The fundamental premise is that because United States and Korea lie at opposite ends of the individualism-collectivism dimension, we assume that substantial variation in the implicit theories of behavior exists across these cultures (e.g., Choi & Nisbett, 1998; Morris & Peng, 1994). University students in the U. S. and Korea, matched in demographic profile, were thus recruited to participate in this study. The mean age of the participants in both countries was 21, most of the participants were mainly of middle-class social status (85% in the U. S., 89% in

Korea), and the gender distribution in both countries was similar (44% of the sample were male in the U. S. and 48% of the sample were male in Korea). Although the initial questionnaire was drafted in English, it was translated in Korea and back-translated to ensure comparability across countries. Experimenters in both countries were trained to reduce procedural disparities.

Offer size manipulation. Offer size was manipulated at two levels. In the relatively high offer condition, the proposer's offer was \$12.50 while in the relatively low offer condition, the offer was \$7.50. The offer sizes in Korea were adjusted for currency and purchase parity¹ (\$12.50 became 12,500 wons and \$7.50 became 7,500 wons). The offers were presented on a separate sheet of paper and were handwritten to be consistent with the cover story.

In another study (Srivastava & Valenzuela, 2004), we had pre-tested that subjects perceived an offer of \$7.50 as having a higher likelihood of representing an unfavorable share of the total amount than an offer of \$12.50, given the uncertainty. The pretest, conducted with 90 undergraduate business students, used procedures that were identical to those used in the control condition of this study. After ensuring that subjects understood the proposer-responder game, subjects received their respective offers (\$12.50 or \$7.50) and were asked to respond to several dependent measures. First, subjects were asked "In your estimate, how likely is it that the offer you received is half of the total amount available for division?" (1 = Very unlikely; 9 = Very likely). As expected, perceived likelihood of the offer being half of the total amount was higher in the \$12.50 condition than in the \$7.50 condition (M's = 4.05 and 3.02; F(1, 87) = 5.49, p < .02). Second, subjects were asked "How likely it is that the offer is less than half of the total amount available for division?" (1 = Very unlikely; 9 = Very likely) and "How certain are you about your assessment above?" (1 = Very certain; 9 = Very uncertain). Subjects' perceived the

likelihood of the offer to be less than half of the total to be significantly higher in the \$7.50 condition relative to the \$12.50 condition (M's = 7.34 and 6.40; F(1, 87) = 6.25, p < .01). Importantly, subjects were more certain of their assessment that the offer is less than half of the total amount in the \$7.50 versus the \$12.50 condition (M's = 3.52 and 5.03; F(1, 87) = 10.97, p <.001). The data thus provide empirical evidence that when subjects only know that the total amount available could assume any value between \$10 and \$40, they tend to consider \$12.50 a relatively high offer and \$7.50 a relatively low offer (less than half of the total amount).

Situational saliency manipulation. In the salient situational constraints condition, before receiving the offers, participants were asked to imagine themselves as playing the role of a proposer who has \$10, \$20, and \$40 dollars available to share with a responder. They were asked to write down the amount that they would offer a responder in all three situations and predict whether a responder would accept these offers or not. Participants had to complete this task before responding to the dependent measures. The idea is that responders would allocate much more cognitive effort in evaluating possible scenarios in the game and more importantly this procedure should raise the salience of situational constraints in assessing the proposer's offer (Choi & Nisbett, 1998; Krull et al., 1999). In the control condition, participants did not complete this task and were asked to respond to the dependent measures after obtaining their offers.

We pre-tested the efficacy of the situational saliency manipulation. We expect all subjects to believe that there is a stronger link between the total amount of money available and the proposer's offer when the situational constraints are made salient relative to the control condition. Specifically, 35 U.S. and 37 Korean subjects in the situational salient and control condition were asked to respond to the question "In this game, how likely is it that the proposer

¹ Offer sizes were pre-tested to make sure that students in both countries could afford to acquire similar products with these amounts. In deciding offer sizes, we also considered the psychological value of a round number as well as

will typically offer less money when the pot of money is lower" (1= Very unlikely, 9=Very likely). Overall, subjects believed that the proposer's offer and total pot of money are more likely to be related in the situational salient condition than in the control condition (M's = 6.54 and 4.97; F(1, 70) = 10.53, p < 0.01). Importantly, the perceived likelihood of the link between offer and total amount was significantly higher in the salient situational constraint condition relative to the control condition for both East Asian (M's = 6.41 and 4.70; F(1, 33) = 4.95, p < 0.03) and U.S. responders (M's = 6.65 and 5.43; F(1, 35) = 3.59, p < 0.05).

Group decision context. In the group decision-making condition, responders were informed that the individual assigned the role of the proposer had to make decisions within a group context. Responders were told that the proposer had to work in groups of six and the proposer had to work with his/her group to reach a consensus on the amount that s/he could offer the responder. Only the proposer would benefit/suffer from the responder's decision. The decision context was intended to allow attributions of behavior to the group.

A pre-test assessed the efficacy of the group saliency manipulation. Subjects (36 U.S. and 30 Korean) in both group salient and control conditions were asked "Did the proposer have to work with a group to decide how much money to offer?" Overall, 78% of the subjects confirmed that the proposer had to work with a group in the group salient condition relative to 24% of the subjects in the control condition ($\chi^2(1) = 18.57$, p < .001). The analysis conducted for each culture shows that a significantly higher percentage of the subjects confirmed that the proposer had to work with a group in the group salient than in the control condition for both Korean (75% and 40%; $\chi^2(1) = 3.52$, p < .06) and U.S. respondents (81% and 13%; $\chi^2(1) = 16.05$, p < .001).

Results

Checks. Both Korean and American students were asked to complete Triandis's (1995) individualism (cronbach's α = .68) and collectivism (cronbach's α = .72) scales. Following Triandis (1995), the scores were standardized for each participant. Consistent with the literature that individualism and collectivism are not really bipolar (e.g., Triandis, 1995; Krull et al., 1999), the correlation between individualism and collectivism was not significant (r = .18, ns). As an assessment of participant's relative individualism versus collectivism, we subtracted the collectivism score from the individualism score such that positive numbers indicate more individualism than collectivism (Triandis, 1995; Choi et al., 1999). As expected, the mean difference score was significantly higher for the U. S. participants relative to the Korean participants (M's = 1.40 and -.30, F(1, 296) = 382.01, p < .0001), suggesting that the U. S. participants are more individualistic than their Korean counterparts.

Hypothesis 1. Participants' decision to accept or reject was analyzed using a log-linear model as a function of the independent variables and their interactions. H1 suggests that when situational constraints are not salient (control condition), there should be no difference in the acceptance rates across U. S. and Korean bargainers. However, when situational constraints are made salient, Korean bargainers should be more sensitive to the situational determinants of a proposer's low offer and therefore the acceptance rates should be higher for Korean bargainers than U. S. bargainers.

Figure 1 displays the acceptance rates of both U. S. and Korean responders in the high and low offer conditions when the situational constraints are not salient (figure 1a) and when they are salient (figure 1b). Not surprisingly, acceptance rates were significantly higher in the \$12.50 offer condition relative to the \$7.50 offer condition for both U. S. (63.3% and 39.1%; $\chi^2(1) = 5.64$, p < .02) and Korean bargainers (65.7% and 33.3%; $\chi^2(1) = 5.41$, p < .05).

Importantly, in the control condition where the situational constraint was not salient, acceptance rates across Korean and American respondents in both the \$12.50 (65.7% and 63.3%; $\chi^2(1) = .12$, ns) and \$7.50 (33.3% and 39.1%; $\chi^2(1) = .40$, ns) did not vary significantly.

[Insert Figure 1 Here]

When the situational constraint was made salient, consistent with H1, acceptance rates for the relatively low \$7.50 offer were significantly higher for Korean responders than U. S. responders (55.2% and 40.9%; $\chi^2(1) = 2.75$, p < .05). There was, however, no difference across the Korean and U. S. responders in the \$12.50 condition (73.3% and 76%; $\chi^2(1) = .18$, ns). Follow-up analyses show that for the relative low \$7.50 offer, the acceptance rates for Korean responders were significantly higher when the situational constraints were made salient relative to when they were not (55.2% and 33.3%; $\chi^2(1) = 2.86$, p < .05) but the saliency of situational constraints did not affect the acceptance rates of the U. S. responders (40.9% and 39.1%; $\chi^2(1) = .02$, ns). These data support H1.

Hypothesis 4. Figure 2 displays the acceptance rates across the two cultures. As described before, there was no difference in the bargaining outcomes across Korean and U. S. responders in the control condition, which represents an individual decision making context. Specifically, responders in both cultures rejected more than half of the \$7.50 offers thereby denying profits to either party.

[Insert Figure 2 Here]

However, in contrast to the control condition, when proposers were making the decision in a group context, the acceptance rates for the low \$7.50 offer were significantly higher for Korean bargainers relative to U. S. bargainers (60% and 25.4%; χ^2 (1) = 3.80, p < .05). The acceptance rates for the \$7.50 offer were also significantly higher for Korean bargainers in the

group decision context relative to the control, individual decision context (60% and 33.3%; χ^2 (1) = 3.80, p < .05). Additional analyses reveal that in the group decision context, the acceptance rates were not significantly higher in the \$12.50 offer condition relative to the \$7.50 offer condition for Korean responders (67.1% and 60%; χ^2 (1) = .20, ns). On the other hand, for U. S. responders, the acceptance rates were significantly higher in the \$12.50 offer condition relative to the \$7.50 offer condition (64.5% and 25.5%; χ^2 (1) = 4.23, p < .05). Consistent with H4, the data clearly show that the reactions to the offers of bargainers in collectivistic cultures are not as extreme as those of bargainers in individualistic cultures in a group decision context.

Discussion

Experiment 1 demonstrates that when certain conditions arise that allow for the manifestation of cultural differences, bargaining outcomes change significantly across countries. First of all, responders' reactions to relatively low offers change across cultures if situational constraints are made salient. Specifically, we observed no differences in acceptance rates in an incomplete bargaining situation in the control condition suggesting that ultimatum bargainers in both U. S. and Korea are prone to making the fundamental attribution error. As such, both U. S. and Korean responders reacted similarly to the low \$7.50 offer and more than half of these offers were rejected. The difference between U. S. and Korean responders is however brought to the fore when the situational constraints are made salient. While U. S. responders reacted similarly to the relatively low \$7.50 offers as in the control condition, Korean responders accepted more than half of these offers. Consistent with previous findings (e.g., Choi & Nisbett, 1998), participants from East Asian cultures relative to Western cultures seem to be able to adjust their

attributions to account for the possibility of situational constraints that may have dictated a bargaining opponent's behavior.

Experiment 1 also shows that cultural differences in behavioral outcomes between bargainers in Korea and the U.S. emerge when decisions are made in a group context. While U. S. responders do not change their acceptance behavior regardless of whether proposers' decisions are made individually or in a group, Korean responders accepted relatively low \$7.50 offers significantly more often when proposers' decisions were framed in a group decision-making context. These results support the idea that implicit theories of the role of the group in explaining individuals' behavior vary across the two cultures (Menon et al., 1999). These theories influence decision making when they are activated as a guide to the interpretation of behavior (Morris & Fu, 2001). Specifically, East Asian cultures seem more likely to give the benefit of the doubt to an individual when constrained by group directives whereas Americans are not as sensitive to the group context.

EXPERIMENT 2: SITUATIONAL ATTRIBUTIONS AS MEDIATORS

Experiment 1 demonstrates the differences in bargaining outcomes across Korean and U.

S. participants when situational constraints are made salient. These differences in bargaining outcomes are presumed to be due to the differential causal inferences across cultures. While East Asians are more sensitive to situational determinants of behavior and tend to correct the extent of causal attribution to personality characteristics when the constraints are made salient, Westerners continue to attribute behavior to personality traits regardless of the saliency of the situational

constraints (Choi & Nisbett, 1998; Krull et al., 1999). Experiment 2, designed to test H2 and H3,

thus provides a more direct link between causal attributions and bargaining outcomes.

Method

Subjects and Procedure. One hundred and one undergraduates (42 U. S. students and 59 Korean students) participated in a 2 (culture: U. S. and Korea) x 2 (situational constraints: not salient and salient) between-subjects design. Participants were randomly assigned to the second factor. Offer size was always \$7.50 (or 7,500 wons)². The experimental manipulations and procedures used were identical to those used in experiment 1. After ensuring that participants understood the proposer-responder game, participants received their respective offer and indicated their decision to accept or reject. They were then asked to evaluate the underlying reasons for the offer.

Subjects were asked to evaluate the underlying reasons for the proposer's offer: "The total amount of money that was available to the proposer to split between you and him/her," "The proposer's competitiveness," and filler causes such as "The proposer did not understand the game well" and "The proposer did not put forth enough effort" (1 = Not a cause at all; 7 = Very important cause). Because of the differences in use of the scale across U. S. and Korean participants (U. S. participants tended to use the high end of the scale and Korean participants tended to use the mid-points of the scale), as an assessment of how much participants focus on the total amount of money available (situational constraint) more than the other reasons for

² We also collected ratings for \$12.50 offers. Overall, ratings of relative importance of situation-based reasons for a \$12.50 offer are higher than when the offer is \$7.50 (1.20 for \$12.50 and 0.74 for \$7.50, F(1, 139) = 2.09, p < .10). They do not differ across conditions (1.02 and 0.96 respectively for the situational saliency and control conditions F(1, 68) = 0.77, p > .70) or across cultures (1.10 and 0.95 respectively for Westerners and East Asians, F(1, 68) = .20, p > .60). However, high relative ratings of situation-based reasons did not affect acceptance rates (53.1% compared to 44.7% respectively for high and low relative ratings, $\chi^2(1) = 0.49, p > .40$).

behavior, we subtracted each participants' mean rating on the relevant causes from their ratings of total amount of money available as a cause for the offer (Triandis, 1995). Positive numbers indicate that participants believed that the total amount available was a more important cause for the offer than the other causes. These change scores provide a more meaningful measure of participants' causal beliefs as a function of the manipulation, since they adjust for participants' response styles (e.g., Gilovich, 1981; Triandis, 1995).

Results

Hypothesis 2. As expected, the mean differential ratings favoring situation-based cause (figure 3) was positive and significantly higher for Korean students when the situational constraints were salient relative to when not salient (M's = 1.3 and .74, F(1, 57) = 2.51, p < .05). In contrast, the differential ratings did not vary significantly for U. S. students across the salient and not salient conditions (M's = .70 and .82, F(1, 40) = .66, ns). Importantly, consistent with H2, the ratings in the situational salient condition were significantly higher for Korean students relative to U. S. students (M's = 1.3 and .7; F(1, 47) = 2.92, p < .05) but not when the situational constraint was not salient.

[Insert Figure 3 Here]

Hypothesis 3. We tested the mediating role of causal attributions on the effect of cultural orientation on bargaining outcomes using a series of logistic regressions (see Baron and Kenny 1986). In the situational constraint salient condition, consistent with experiment 1, the acceptance rates were significantly higher for Korean bargainers than for U. S. bargainers (58.8% and 35.7%, $\chi^2(1) = 3.33$, p < .05). Further, the mean difference score favoring situational-based reasons for the low offer was significantly higher for Korean bargainers than

for U. S. bargainers (M's = 1.30 and .70; F(1, 47) = 2.92, p < .05). When both causal difference ratings and culture are included as explanatory variables in the logistic regression, causal ratings have a significant effect on acceptance rates ($\chi^2(1) = 4.97$, p < .05), but the effect of culture on acceptance rates is not significant ($\chi^2(1) = 1.137$, p > .20). These results support H3.

Discussion

Experiment 2 provides additional support for the idea that Korean bargainers are more likely to be sensitive to situational constraints when the constraints are made salient. The results also show that differences in causal attributions when the situational constraints are made salient fully mediate the effect of culture on bargaining outcomes. The implication is that Korean bargainers are more likely to correct for the fundamental attribution error than their Western counterparts, when information is accessible to discount the personality attributions. Such correction is what drives the change in acceptance rates or, more generally, behavioral outcomes.

Together, the findings of experiments 1 and 2 are consistent with the notion that the implicit theories that differ across cultures are activated when situational constraints are made salient. These theories are then used in attributing an opponent's behavior to predominantly personality traits or situational constraints. While Western cultures emphasize that behavior is caused by stable internal personality traits, East Asian cultures are more likely to draw upon their situation-centered theory that behavior is shaped by situational factors. As such, ultimatum bargainers in East Asian cultures are more likely to give the benefit of the doubt to opponents and recognize that an opponent's low offer could be due to the amount available for division.

Although our operationalization of situational saliency in experiments 1 and 2 has been used previously (e.g. Choi & Nisbett 1998), a potential explanation of our findings is that when

asked to put themselves in the shoes of the proposer, there may be a difference in the ability to take the perspective of in-group others between individualistic and collectivistic cultures.

Specifically, individuals in collectivistic cultures may be more able to take the perspective of the in-group other and thereby account for the situational constraints better. In addition, people in individualistic cultures may not depend as much on external rewards as collectivistic cultures (Leung et al., 2002), or may be less drawn to the status quo (Briley et al., 2000), or less motivated to avoid conflict (Leung, 1987; Leung & Tjosvold, 1998). These differences between individualistic and collectivistic cultures may explain our findings. We rule out these alternative explanations by showing that in experiment 1, the collectivism (or individualism) scores do not mediate the differences in behavioral outcomes between the two cultures. By doing so, we provide more support for a dynamic rather than a dispositional model of cultural influence.

Using data from experiment 1, we tested the mediating role of collectivist values on the effect of cultural orientation on bargaining outcomes using a series of logistic regressions. As discussed in experiment 1, when the situational constraint was salient, the acceptance rates for the relatively low \$7.50 offer were significantly higher for Korean than for U. S. responders (55.2% and 40.9%, $\chi^2(1) = 2.75$, p < .05). Further, the mean difference score of these participants relative individualistic versus collectivistic values (higher difference score = more agreement with individualistic values) was significantly higher for U.S. than for Korean responders (M's = 1.51 and -.17; F(1, 50) = 73.79, p < .0001). However, when both the individualism scores and culture are included as explanatory variables in the logistic regression, the individualism scores do not have a significant effect on acceptance rates ($\chi^2(1) = 0.232$, p > .60), which is a requirement for full or partial mediation. Accordingly, we rule out alternative explanations.

EXPERIMENT 3: GROUP-BASED ATTRIBUTIONS AS MEDIATORS

Experiment 1 clearly demonstrated the differences in behavioral outcomes across Korean and U. S. responders when decisions are made in a group context. Our contention is that the observed differences are due to cultural divergence in assigning causality to either individuals or groups. Experiment 3 provides a test of H5 and H6 by examining the differences in causal inferences that underlie behavioral outcomes across cultures when the proposer is making the decision of how much to offer in a group context.

Method

Subjects and Procedure. Ninety-one undergraduate students (33 in U. S. and 58 in Korea) participated in a 2 (culture: United States and Korea) x 2 (conditions: group context and individual context) between-subjects design. The experimental manipulations and procedures used were identical to those used in experiment 1 in the group decision context, except that the offer was always \$7.50 (7,500 wons).³ After ensuring that participants understood the proposer-responder game, participants received their respective offers, accepted or rejected their offer, and were asked to evaluate the underlying reasons for the proposer's offer: "The influence of the group on the proposer's decision, "The total amount of money that was available to the proposer to split between you and him/her," "The proposer's competitiveness," and filler causes

³ In terms of ratings for \$12.50 offers, relative importance of group-based reasons for a \$12.50 offer are higher than when the offer is \$7.50 (-0.37 and -0.76; F(1, 102) = 2.47, p < .10). They do not differ across the control and group context conditions (-.31 and -0.45; F(1, 48) = 0.16, p > .60) or across Korean and U. S. responders (-0.26 and -0.62; F(1, 48) = 0.95, p > .30). However, high relative ratings of group-based reasons did not have an effect on acceptance rates (44.4% compared to 34.4% respectively for high and low relative ratings, $\chi^2(1) = 0.50, p > .40$). ⁴ There is no mention of a group decision-making context in the control condition. However, we use the same question in the control condition to measure other possible group-based attributions such as behavior caused by mere group identity (i.e., accepting smaller offers from an in-group or a suspected in-group). Any increase in ratings

such as "The proposer did not understand the game well," "The proposer did not put forth enough effort" (1 = Not a cause at all; 7 = Very important cause). As in experiment 2, as an assessment of how much participants focused on group influence on the proposer's decision more than any other reason for behavior, we subtracted each participants' mean rating on the relevant causes from their rating of group as an important cause for the low offer.

Results

Hypothesis 5. Consistent with H5, the mean differential rating for group as the underlying cause (see figure 4) was higher for Koreans in the group context versus the control condition (M's = -.17 and -.72; F(1, 56) = 3.07, p < .05). However, the mean rating did not vary significantly for U. S. bargainers across the group context and control conditions (M's = -1.20 and -.64; F(1, 31) = 1.23, ns). Importantly, the scores were significantly higher for Korean bargainers relative to U. S. bargainers in the group context (M's = -.17 and -1.20; F(1, 37) =5.58, p < .02) but not in the control condition.

[Insert Figure 4 Here]

Hypothesis 6. We tested the mediating role of causal attributions on the effect of cultural orientation on bargaining outcomes using a series of logistic regressions. As in experiment 1, when the proposer's decision is made in a group context, culture has a significant effect on bargaining outcomes such that acceptance rates are significantly higher for Korean responders relative to U. S. responders (60% and 31%; $\chi^2(1) = 5.06$, p < .02). In the group decision context, the mean difference score favoring group as a reason for the low offer are also significantly higher for Korean bargainers relative to American bargainers (M's = -.17 and -1.20; F(1, 37) =

5.58, p < .02). However, when both causal difference ratings and culture are included as explanatory variables in the logistic regression, causal ratings have a significant effect on acceptance rates ($\chi^2(1) = 5.96$, p < .02), and the effect of culture on acceptance rates is not significant ($\chi^2(1) = .51$, ns).

Discussion

These results show that the differences in causal attributions to group influences fully mediate the differences in behavioral outcomes between Korean and U. S. bargainers, when the decision is made in a group context. Said differently, attribution of causality to different agents appears to explain the difference in ultimatum bargaining outcomes across Korean and U.S. bargainers. However, as outlined earlier, subjects' differential ability to take the perspective of in-group others may also account for the differences in behavioral outcomes between cultures when a decision is made in a group context. Using data from experiment 1, we tested whether collectivism scores mediate the effect of cultural orientation on bargaining outcomes. In experiment 1, in the group context, acceptance rates for the relatively low \$7.50 offer were significantly higher for Korean responders relative to U. S. responders (60% and 24.4%; $\chi^2(1) =$ 3.80, p < .05). Further, the mean difference score of these participants (individualistic – collectivistic; higher difference score implies more agreement with individualistic values) was significantly higher for U.S. bargainers relative to Korean bargainers (M's = 1.25 and -.68; F(1, 22) = 47.21, p < .0001). When both individualism score and culture are included as explanatory variables in the logistic regression, the individualism scores do not have a significant effect on acceptance rates ($\chi^2(1) = 1.65$, p > .20). The alternative explanation that individuals from

collectivistic cultures are better able to take the perspective of the in-group other is therefore ruled out for our results.

In sum, experiment 3 provides strong support for the contention that in a group decision context, Korean bargainers are less likely to assign causality to personality traits and thus are more likely to accept unfavorable offers. In contrast, U. S. bargainers are prone to assigning causality to personality traits and thus exhibit no difference in acceptance behavior even when other possible reasons for such behavior are available or accessible. These findings are consistent with the dynamic view of culture where the role of cultural orientation is contextually driven such that cultural differences are influential only when people are required to draw upon the implicit theories that differ across cultures (Briley et al., 2000; Choi & Nisbett, 1998).

Accordingly, in our experiments, only Koreans were sensitive to the constraints that both situations and groups pose on behavior. However, such knowledge structures need to be activated or made accessible for use in the decision processes.

GENERAL DISCUSSION

Spurred by the economic and theoretical importance of cross-cultural business interactions in an organizational context, the purpose of this research was to examine how differences in cultural orientation influence causal attributions and thereby transactional outcomes in an incomplete information situation. This is particularly important because most business transactions are characterized by incomplete information and causal attributions for an opponent's behavior play a particularly important role in these situations. Although social psychologists argue that interpersonal conflicts are particularly likely to lead to the fundamental attribution error or the tendency to interpret and evaluate an opponent's behavior in terms of

personality traits rather than situational constraints, the question as to when such an attributional process generalizes to other cultures remains largely unanswered. This research thus examines the influence of cultural orientation on participants' sensitivity to internal personality traits versus external constraints in their causal attributions, which in turn, affect their decisions and outcomes. Towards this objective, we use ultimatum bargaining as a means of investigating these effects. We consider the ultimatum bargaining game as an appropriate context because culturally imposed beliefs, which influence player's perceptions of what constitutes a reasonable offer, have been found to lead to rejection of offered amounts sometimes as large as someone's monthly salary (e.g., Henrich et al., 2001). However, most of this literature focuses on complete information situations where bargainers have full information about one another's payoffs.

Three experiments are reported that were conducted simultaneously in the U. S. and Korea. Experiment 1 showed that in an incomplete information setting, there was no difference in behavioral outcomes across Western and East Asian cultures as ultimatum bargainers from both U. S. and Korea were equally likely to attribute a low offer to opponent's personality traits. However, when situational constraints were made salient, Korean bargainers were more likely to accept a low offer relative to U.S. bargainers. Experiment 2 links the causal attributions to the behavior outcomes and, consistent with earlier work (e.g., Choi & Nisbett, 1998), our results suggest that East Asian cultures are more likely to correct for the fundamental attribution error when situational constraints are made salient. In other words, when there is no accessible information to discount personality trait attributions, both Western and East Asian cultures are prone to the fundamental attribution error. These results also suggest that cultures perhaps differ in their implicit theories of the influence of external constraints rather than in their implicit theories of personality dispositions (Chiu et al., 2000; Krull et al., 1999).

Based on the assumption that the group is a natural unit of agency for East Asians and the individual is the unit of agency for Western cultures (Choi et al., 1999; Menon et al., 1999), experiment 1 also supports that Korean bargainers are more sensitive to the potential group influence in affecting an opponent's behavior. Specifically, while there was no difference in bargaining outcomes between U. S. and Korean bargainers in an individual decision context, Korean bargainers were more likely to accept low offers when the proposer was supposedly making the decision in a group context. It is important to note that groups occupy the physical space surrounding individual actors and, in some cases, can be considered merely an additional situational constraint (Menon et al., 1999). However, groups may also be more than just a passive non-social situational constraint. Rather, the group may be perceived as a social entity that can direct action. As with individual dispositions, groups may also be perceived as possessing unique dispositions (Higgins & Bryant, 1982). Experiment 3 unambiguously shows that differences in causal attributions to group dispositions mediate the influence of cultural orientation on bargaining outcomes when the group context is salient.

Together, the results indicate that there are boundary conditions to the influence of culture on judgment and decision-making. In other words, there are certain conditions under which cultural differences are manifested supporting the more recent, dynamic view of the influence of cultural orientation (Briley et al., 2000; Choi & Nisbett, 1998). In our context, penalization of apparent competitive (or unfair) intent seems to be a universal phenomenon as ultimatum bargainers from both U. S. and Korea exhibit the fundamental attribution error. However, when there is accessible information that can be used to discount the personality based attributions, cultural difference emerge. In particular, Korean bargainers are more likely to

recognize and acknowledge alternative reasons for observed behavior, which tend to correct the initial tendency to seek causal explanations in terms of personality dispositions.

Implications for Bargaining Theory and Practice

Given that research exploring the psychological processes that create behavioral mismatches or misunderstandings is still in its infancy, our findings not only have implications for cross-cultural bargaining but also for cross-cultural social interactions in general. It is clear that inferential sources of misunderstanding could occur every time two individuals from different cultures try to explain opponents' behavior under incomplete information. An opponent's behavior can be attributed to the situation, to the personality of the individual, or to the collective forces potentially influencing the individual. In incomplete information situations, unwarranted perceptions of unfairness and competitiveness could lead to sub-optimal agreements, disagreements, or impasses. This research examines whether there is preference for explanations in terms of personality dispositions in Western cultures relative to East Asian cultures and importantly the conditions under which cultural differences in causal attributions are manifested. Although the tendency for causal attributions to be based on personality dispositions seems to be universal, we identify the conditions under which East Asians are more likely than Westerns to correct their dispositional tendencies. These attributional corrections may enhance the cooperative stance of East Asians resulting in potentially more efficient outcomes, fewer disagreements and impasses (e.g., Gelfand et al., 2002; Morris et al., 2004). Improving the level of cooperativeness benefits both parties. Our results clearly suggest that the cultural context in which the interpersonal conflict is embedded plays an important role in determining resolution outcomes, and directing attention to the conditions that facilitate attributional corrections, at least in East Asian cultures, would render judgments and decisions less prone to the overattribution bias, thereby, improving final outcomes.

Implications for Cross-Cultural Research

There are many mechanisms by which cultural orientation may affect bargaining outcomes. As discussed earlier, cultural differences in subjects' rights versus duty orientation (Hong et al., 2001) or in the beliefs about fairness and justice (Morris et al., 1999) may affect responses to ultimatum bargaining. Additionally, individualistic societies such as the U.S. may not depend as much on external rewards as collectivistic societies (Leung et al., 2002) and, therefore, may be more comfortable rejecting a relatively small offer. A collectivistic orientation may also produce more agreements to positive, albeit small offers, because of a higher likelihood to compromise (Briley et al., 2000). Finally, collectivist societies may accept relatively small offers because of their stronger motivation to avoid conflict (Leung, 1987; Leung & Tjosvold, 1998). These mechanisms may concurrently affect differences in ultimatum bargaining outcomes. In this paper, we test the hypothesis that differences in ultimatum outcomes are due to cultural differences in the tendency to attribute ambiguous behavior to personality traits

Our results are worth discussing in the context of the prevailing model of social inference. The cross-cultural psychology literature suggests that attribution styles results from culturally conferred schemas or knowledge structures (e.g., Gelfand & Christakopoulou, 1999; Morris et al., 2004). Such schemas may take the form of either declarative knowledge or procedural knowledge. In other words, differences in attribution styles may be due to culturally specific beliefs about the relative importance of possible reasons for behavior (e.g., Church et al., 2003; Leung et al., 2002) or to differences in the process by which information is encoded and

adjusted to judge the cause for behavior (e.g., Knowles at al., 2001; Krull et al., 1999).

Disentangling the sources behind our reported differences in attributional patterns is offered as a direction for future research.

Our findings are, however, consistent with a two-stage model in which behavior is first interpreted drawing an initial inference which is later revised to arrive at the final judgment (e.g., Krull et al., 1999). Our results suggest that both cultures draw inferences initially based on personality dispositions and fail to revise their initial inferences. However, when information is salient that allows discounting of the personality dispositions, East Asian cultures are better able to revise their initial inferences to take into account situational constraints. In other words, in East Asian cultures, there seems to be a dual system of cultural beliefs entailing both automatic reasons, which may be revised, and interpretative reasons, which seem to require cognitive resources or, at least, a very explicit applicability to the stimuli. In contrast, Western cultures have a belief system that makes it difficult to incorporate situational reasons for behavior both at the initial (more automatic) level and at the interpretational level.

Our findings also qualify the automatized situational correction model of person perception (Knowles et al., 2001). This model posits that whereas automatic dispositional inference is universal, situational correction may be relatively resource-independent for holders of a situation-based theory (i.e., for East Asians). Our results are consistent with the model that in the initial stage, Korean and U. S. subjects behave similarly. However, even though Koreans could be deploying certain extent of automatic situational correction, our findings suggest that cognitive and motivational factors, such as the presence and/or need to explain behavior, may even further enhance the situational correction. Future research should focus on the conditions

under which cultures differ in the level of automatic versus controlled processing of the causal attributions and inferences drawn based on observed behavior.

Limitations and Future Research

Although a major attraction of ultimatum bargaining is that it allows isolation of the factors of interest, a limitation of our studies is that actual bargaining may involve multiple rounds and these rounds provide information that is invaluable in decision making.

Notwithstanding the simplicity of ultimatum bargaining, this research is perhaps one of few that examines cross-cultural differences in incomplete information bargaining. This research thus provides the backdrop for future cultural inquiries into interpersonal conflict outcomes from both a practical and theoretical perspective.

As discussed earlier in the paper, cultural differences in causal attributions may be due to both differences in beliefs of what is a relevant cause for behavior and differences in the inferential processes. This is an important topic for future research to provide a better understanding of the underlying mechanism of social inferences. Future research should address the question of whether cultures differ just in the content of their social judgments and/or in the process by which these judgments are made. Future research should also examine how cultural patterns of attributions for group-based acts depend on the type of group under consideration. For example, the literature differentiates between intimacy groups, task groups, or temporary loose associations (Yzerbyt, Rogier, & Fisk, 1998). Dispositions to groups should be stronger in the case of groups that are more of an entity (i.e., intimacy group and task group). We suggest conducting a more systematic study of group dispositions to further examine their prevalence both within Western and East Asian causal reasoning.

REFERENCES

- Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51 (6), 1173-1182.
- Blount, S. (1995). When social outcomes aren't fair: The effect of causal attributions on preferences. *Organizational Behavior and Human Decision Processes*, 63 (August), 131-144.
- Bolton, G. & Zwick, R. (1995). Anonymity versus punishment in ultimatum bargaining. *Games and Economic Behavior*, 10, 95-121.
- Briley, D., Morris, M.W. & Simonson, I. (2000). Reasons as carriers of culture: Dynamic versus dispositional models of cultural influence on decision making. *Journal of Consumer Research*, 27 (September), 157-178.
- Buchan, N. R., Croson, R. T. A. & Johnson, E. J. (2004). When do fair beliefs influence bargaining behavior? Experimental bargaining in Japan and the United States. *Journal of Consumer Research*, 31 (June), 181-190.
- Camerer, C. & Thaler R. H. (1995). Anomalies: Ultimatums, dictators, and manners. *Journal of Economic Perspectives*, 9 (2), 209-219.
- Chen, Y., Mannix, E. A. & Okumura, T. (2003), The importance of who you meet: Effects of self- versus other- concerns among negotiators in the United States, the People's Republic of China, and Japan. *Journal of Experimental Social Psychology*, 39 (January), 1-15.

- Chiu, C., Morris, M. W., Menon, T. & Hong, Y. (2000). Motivated cultural cognition: The impact of implicit cultural theories on dispositional attribution varies as a function of need for closure. *Journal of Personality and Social Psychology*, 78 (2), 247-259.
- Choi, I. & Nisbett, R. E. (1998). Situational salience and cultural differences in the correspondence bias and actor-observer bias. *Personality and Social Psychology Bulletin*, 24 (9), 949-960.
- Choi, I., Nisbett, R. E. & Norenzayan, A. (1999). Causal attribution across cultures: Variation and universality. *Psychological Bulletin*, 125 (1), 47-63.
- Church, T. A., Ortiz, F. A., Katigbak, M. S., Avdeyeva, T.V., Emerson, A. M., Vargas Flores, J.
 & Ibanez Reyes, J. (2003). Measuring individual and cultural differences in implicit trait theories. *Journal of Personality and Social Psychology*, 85 (2), 332-347.
- Croson, R. T. A. (1996). Information in ultimatum games: An experimental study. *Journal of Economic Behavior and Organization*, 30 (August), 197-212.
- Gelfand, M. J., Higgins, M., Nishii, L. H., Raver, J. L., Dominguez, A., Murakami, F., Yamaguchi, S. & Toyoma, M. (2002). Culture and egocentric perceptions of fairness in conflict and negotiation. *Journal of Applied Psychology*, 87 (October), 833-845.
- Gelfand, M. J. & Christakopoulou, S. (1999). Culture and negotiator cognition: Judgment accuracy and negotiation processes in individualistic and collectivistic cultures.

 Organizational Behavior and Human Decision Processes, 79 (3), 248-269.
- Gilovich, T. (1981). Seeing the past in the present: The effect of associations to familiar events on judgments and decisions. *Journal of Personality and Social Psychology*, 40 (May), 797-808.

- Graham, J. L., Kim, D. K., Lin, C. & Robinson, M. (1988). Buyer-seller negotiations around the Pacific Rim: Differences in fundamental exchange processes. *Journal of Consumer Research*, 15 (June), 48-54.
- Henrich, J., Boyd, R., Bowles, S., Camerer, C., Fehr, E., Gintis, H. & McElreath, R. (2001). In Search of Homo Economicus: Behavioral experiments in 15 small-scale societies. *American Economic Review*, 91 (May), 73-78.
- Higgins, T. E. & Bryant, S. L. (1982). Consensus information and fundamental attribution error:

 The role of development and in-group versus out-group knowledge. *Journal of Personality and Social Psychology*, 43 (5), 889-900.
- Higgins, T. E. (1996). Knowledge activation: accessibility, applicability, and salience. In Tory

 Higgins & Arie W. Kruglanski (Eds.), *Social Psychology: Handbook of Basic Principles*(pp.133-168). New York: Guilford.
- Hofstede, G. (1991). Cultures and Organizations: Software of the Mind. London, McGraw-Hill.\
- Hong, Y., Ip, G., Chiu, C., Morris, M. and Menon, T. (2001). Cultural identity and dynamic construction of the self: Collective duties and individual rights in Chinese and American Cultures. *Social Cognition*, 19 (3), 251-268.
- Knowles, E. D., Morris, M. W. & Chiu, C. (2001). Culture and the process of person perception: Evidence for automaticity among East Asians in correcting for situational influences on behavior. *Personality and Social Psychology Bulletin*, 27 (10), 1344-1356.
- Krull, D. S., Loy, M. H., Lin, J., Wang, C., Chen, S. & Zhao, X. (1999). The fundamental fundamental attribution error: Correpondence bias in individualistic and collectivistic cultures. *Personality and Social Psychology Bulletin*, 25 (10), 1208-1219.

- Leung, K., Bond, M. H., Reimel de Carrasquel, S., Muñoz, C., Hernández, M., Murakami, F., Yamaguchi, S., Bierbrauer, G., & Singelis, T. M. (2002). Social axioms: The search for universal dimensions of general beliefs about how the world functions. *Journal of Cross-Cultural Psychology*, 33, 286-302.
- Leung, K. & Tjosvold, D. W. (Eds.) (1998). *Conflict Management in Asia Pacific Rim.* Wiley: Singapore.
- Leung, K. (1987). Some determinants of reaction to procedural models for conflict resolution: A cross-national study. *Journal of Personality and Social Psychology*, 53, 898-908.
- Markus, H. & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion and motivation. *Psychological Review*, 98 (April), 224-253.
- Menon, T., Morris, M. W., Chiu, C. & Hong, Y. (1999). Culture and the construal of agency:

 Attribution to individual versus group dispositions. *Journal of Personality and Social Psychology*, 76 (5), 701-717.
- Morris, M. W. & Peng, K. (1994). Culture and cause: American and Chinese attributions for social and physical events. *Journal of Personality and Social Psychology*, 67, 949-971.
- Morris, M. W., Larrick, R. P. & Su, S. K. (1999). Misperceiving negotiation counterparts: When situationally determined bargaining behaviors are attributed to personality traits. *Journal of Personality and Social Psychology*, 77 (1), 52-67.
- Morris, M. W., Leung, K., & Ames, D. (1999). View from the inside and outside: Integrating emic and etic insights about culture and justice judgment. *Academy of Management Review*, 24 (4), 781-796.
- Morris, M. W. & Fu, H. (2001). How does culture influence conflict resolution? A dynamic constructivist analysis. *Social Cognition*, 19 (July), 324-349.

- Morris, M. W., Leung, K. & Iyengar, S. S. (2004). Person perception in the heat of conflict:

 Negative trait attributions affect procedural preferences and account for situational and cultural differences. *Asian Journal of Social Psychology*, 7, 127-147.
- Nisbett, R.E. & Ross, L. (1980), *Human Inference: Strategies and Shortcomings for Social Judgment*, Englewood Cliffs, NJ: Prentice-Hall.
- Nisbett, R. (2003). The Georgraphy of thought How Asians and Westerners think differently and why. NY: Simon & Schuster Adult Publishing Group.
- Oyserman, D., Kemmelmeier, M. & Coon, H. M. (2002). Cultural psychology, a new look:

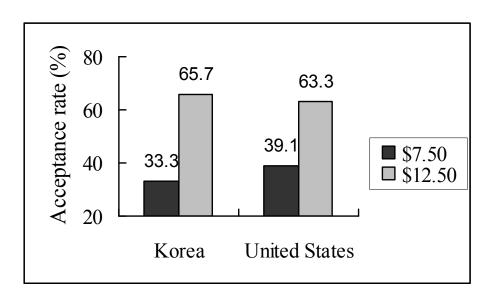
 Reply to Bond (2002), Fiske (2002), Kitayama (2002), and Miller (2002). *Psychological Bulletin*, 128 (1), 110-117.
- Roth, A. E., Prasnikar, V., Okuno-Fujiwara, M. & Zamir, S. (1991). Bargaining and market behavior in Jerusalem, Ljubljana, Pittsburgh and Tokio: An experimental study.

 American Economic Review, 81 (5), 1068-1095.
- Shafir, E., Simonson, I. & Tversky, A. (1993). Reason-based choice. Cognition, 49, 11-36.
- Srivastava, J. (2001). The role of inferences in sequential bargaining with one-sided incomplete information: Some experimental evidence. *Organizational Behavior and Human Decision Processes*, 85 (1), 166-187.
- Srivastava, J., Chakravarti, D. & Rapoport, A. (2000). Price and margin negotiations in marketing channels: An experimental study of sequential bargaining under one-sided uncertainty and opportunity cost of delay. *Marketing Science*, 19, 163-184.
- Srivastava, J. & Valenzuela, A. (2004). Role of social identity and information in facilitating exchange: Effects on fairness perceptions, attribution, and behavior. Working paper, University of Maryland, College Park, MD.

- Takano, Y. & Osaka, E. (1999). An unsupported common view: Comparing Japan and the U. S. on individualism/collectivism. *Asian Journal of Social Psychology*, 2 (December), 311-341.
- Triandis, H. C. (1994), *Culture and Social Behavior*. New York: Simon & Schuster. (1995), *Individualism and Collectivism*. Boulder, CO: Westview Press.
- Thaler, R.H. (1988). The ultimatum game. *Journal of Economic Perspectives*, 2 (Autumn), 195-206.
- White, S. B. & Neale, M. A. (1994). The role of negotiator aspirations and settlement expectancies in bargaining outcomes. *Organizational Behavior and Human Decision Processes*, 57 (February), 303-317.
- Yzerbyt, V. Y., Rogier, A. & Fiske, S. T. (1998). Group entitativity and social attribution: On translating situational constraints into stereotypes. *Personality and Social Psychology Bulletin*, 24 (10), 1090-1104.

FIGURE 1
EXPERIMENT 1: ACCEPTANCE RATES

A. Situational Constraints Not Salient (Control)



B. Situational Constraints Salient

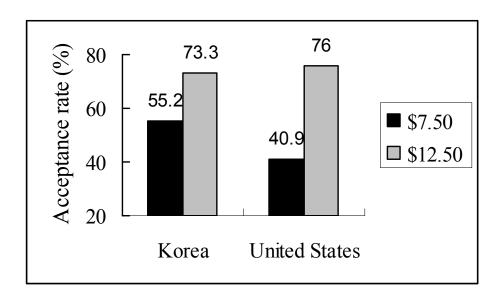
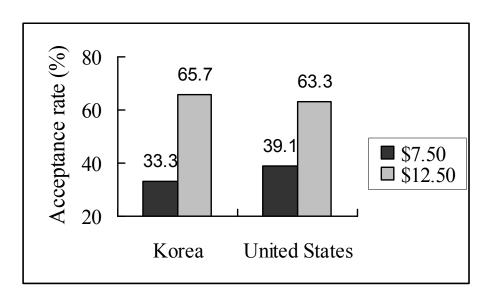


FIGURE 2
EXPERIMENT 3: ACCEPTANCE RATES

A. Individual Context (Control)



B. Group Decision Context

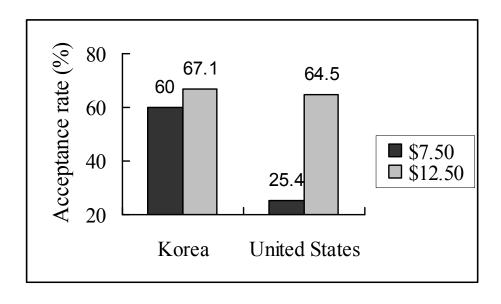


FIGURE 3

EXPERIMENT 2: RATINGS SITUATION-BASED REASONS

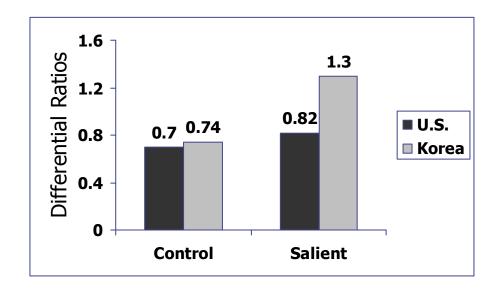


FIGURE 4
EXPERIMENT 4: RATINGS GROUP-BASED REASONS

