This is to certify that the

dissertation entitled

To Err is Human: Cultural Orientation
As a Source of Judgment Errors
And Integrative Processes in International Negotiation

presented by

Laura Elizabeth Drake

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Communication

Major professor

Date 4/4/95

DATE DUE	DATE DUE	DATE DUE
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NOV 17 1998		
DEC 28 1998		
MAR 2 2 2000		

TO ERR IS HUMAN: CULTURAL ORIENTATION AS A SOURCE OF JUDGMENT ERRORS AND INTEGRATIVE PROCESSES IN INTERNATIONAL NEGOTIATION

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A DISSERTATION

Submitted to

Michigan State University

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

Department of Communication

1995

ABSTRACT

TO ERR IS HUMAN: CULTURAL ORIENTATION AS A SOURCE OF JUDGMENT ERRORS AND INTEGRATIVE PROCESSES IN INTERNATIONAL NEGOTIATION

By

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This study investigates the effect of cultural orientation on integrative processes in international negotiations. Cultural orientation refers to the degree to which cultural members embrace individualism or collectivism. Integrative processes are attempts to integrate the goals of both bargainers, so that each obtains optimal outcomes. Research suggests that integrative negotiating is hampered by judgment errors, but enhanced by information exchange. Based on a culture-as-shared-values approach, individualism-collectivism is predicted to affect judgment errors negatively and information exchange positively in negotiations with integrative potential. Thus, collectivistically-oriented negotiators should make fewer fixed sum errors and exchange more information than individualistically-oriented negotiators.

Results suggest that cultural orientation does affect judgment errors, but no more strongly than other contextual features of the negotiation. Similarly, cultural orientation affects information exchange, but only indirectly. These results support a culture-in-context view of international negotiations as an alternative to the culture-as-shared values view.

For Bill, the one who always knew I could do it.

ACKNOWLEDGMENTS

My thanks are extended to Professor Michael E. Roloff for his invaluable contributions to the inception of this project.

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I. INTRODUCTION

Negotiation research focusses extensively on how conflicting parties reach mutually satisfying solutions to disputes (Fisher & Ury, 1981; Lewicki & Litterer, 1985; Tutzauer & Roloff, 1988). Additionally, researchers identify major barriers to fully integrative and satisfying agreements (Kemp & Smith, 1994; Lax & Sibenius, 1986; Lewicki & Litterer, 1985; Neale & Bazerman, 1991; Pruitt & Kimmel, 1977; Pruitt & Rubin, 1986; Putnam & Wilson, 1989; Roloff & Campion, 1987; Roloff, Tutzauer & Dailey, 1989; Thompson & Hastie, 1990). For example, biased judgments are a primary source of under-achievement in negotiations and are labeled "judgment errors" (Bazerman, 1986; Bazerman & Neale, 1992; Thompson & Hastie, 1990). Judgment errors occur when negotiators employ erroneous assumptions or decision-making criteria to guide their behavior (Baron & Hershey, 1988; Bazerman, 1983; Kahneman & Tversky, 1979; Tversky & Kahneman, 1974; 1983) and thus fail to maximize outcomes for both sides.

Judgment errors may be overcome when negotiators share information about their needs and priorities (Kemp & Smith, 1994; Thompson, 1990; 1991; Thompson & Hastie, 1990). However, negotiators often fail to share such vital information (Kimmel et al., 1980; Thompson, 1991), even though information exchange is associated with more efficient, mutually beneficial agreements (Weingart, Thompson, Bazerman, & Carroll, 1990). Various explanations for the lack of information exchange in negotiation include suspicion (Pruitt, 1981; Tutzauer & Roloff, 1988) fear of placing oneself at a disadvantage (Thompson, 1991) or judgment errors (Kemp & Smith, 1994) such as the "Fixed Sum Error" (Thompson & Hastie, 1990).

Bolstering integrative outcomes by eliminating judgment errors and encouraging information exchange is especially vital to contemporary international relations. Given the expanding global marketplace, as well as increasing intercultural contact among a greater number of individuals, the ability to foster cooperative international ventures is dependent on competent, successful negotiations across cultural bounds. For example, the recent demise of North Korea's Kim Il Sung and the succession of his heir presented the frightening potentiality of violence to governments around the globe (Powell, 1994). In this and other cases, encouraging dialogue and obtaining peaceful results depends on minimizing judgment errors and encouraging integrative negotiating.

In general, judgment errors result from (1) cognitive processing limitations, (2) experience, and (3) perceptions (Kahneman & Tversky, 1979). However, specific judgment errors, such as the fixed sum error (Thompson & Hastie, 1990) are the result of particular cognitions, experiences, and perceptions (Tversky & Kahneman, 1973; 1981). Culture molds individuals' basic assumptions, or ways of experiencing and thinking about the world (Hesselgrave, 1978; Hofstede, 1980; Hui & Villareal, 1989; Levine, West, & Reis, 1980; Triandis et al., 1988; Trompenaars, 1993). Therefore, culture may be a significant force in international negotiators' tendencies to adopt particular judgment errors. For example, Neale and Bazerman (1985b) speculate that the negotiation context creates a competitive mind-set for some negotiators. Anticipated competition in turn leads to judgment errors. Because some cultures adopt a more competitive outlook than others (Harris & Moran, 1991; Triandis et al., 1988), the tendency to commit competitive judgment errors should vary to the degree that individual negotiators embrace a cultural norm

of competition.

Similarly, cultural orientation (Bierbrauer, 1992) may affect negotiators' ability to overcome judgment errors, by influencing information exchange tendencies. That is, Pruitt and his colleagues find that a problem-solving orientation to negotiation enhances integrative bargaining (for a review, see Pruitt, 1981). Thus, depending on the degree to which an individual embraces his/her cultural values, negotiators from cultures which emphasize a problem-solving approach may be more inclined to seek integrative solutions by seeking information about the opponent's priorities (Adler, Graham & Gehrke, 1987).

The present study investigates these potential relationships between cultural orientation, judgment errors, and information exchange in a negotiations of high integrative potential, in which bargainers possess moderately high aspirations. In assessing these relationships, the project pursues additional subgoals: (1) To discover whether previous findings regarding judgment errors are replicable in intercultural negotiations and (2) To refine our understanding of culture's influence on individual behavior in inter- rather than intra-cultural contexts. To address these aims, the first section of the paper defines judgment errors and reviews research regarding their effect on negotiating processes and outcomes. Next, culture and its effect on individual behavior is discussed. Third, research investigating culture's effect on judgment errors and information exchange is described. Finally, the implications of this line of research are discussed.

II. A JUDGMENT VIEW OF NEGOTIATION

Negotiation is "a process by which a joint decision is made by two or more parties. The parties first verbalize contradictory demands and then move toward agreement by a process of concession making or search for new alternatives." (Pruitt, 1981, p. 1). According to this definition, negotiation can be conceptualized as both a cooperative and competitive undertaking (Thompson, Mannix, & Bazerman, 1988). Negotiation is competitive in that opposing sides present "contradictory" or seemingly incompatible demands. Negotiation is cooperative in that opponents make strategic decisions to concede where possible and suggest alternatives which may be mutually agreeable. Through settlement each can obtain greater benefits than were possible through continued non-agreement (Lax & Sibenius, 1986; Pillar, 1983).

Integrative v. Distributive Bargaining

When the cooperative aspect of negotiation is salient, negotiation becomes integrative (Pruitt, 1983; Putnam, 1990; Walton & McKersie, 1965). Integrative bargaining allows each negotiator to gain on high-priority issues by conceding low-priority issues. That is, when negotiators prioritize the to-be-negotiated issues differently, integrative potential is high because the chance for mutually beneficial tradeoffs is high. For example, Pruitt and Lewis (1975) asked negotiators in a buyer-seller role play to agree on a price for three minerals, iron, sulfur, and coal. Negotiators were given nine possible settlement options for each mineral. Negotiators able to solve this exercise integratively were those who discovered that iron offered greater profits for the buyer, coal for the seller. Therefore, the negotiators

could "trade" iron for coal so that each obtained his or her largest possible profit. Thus, both negotiators attained their goals in this situation.

Alternatively, when the competitive aspect of negotiation is salient, distributive bargaining results (Deutsch, 1973; Putnam, 1990). Distributive bargaining involves strategic moves to make gains at the expense of the opponent (Fisher & Ury, 1981). That is, when both sides prioritize the to-be-negotiated issues identically, integrative potential is low because the possibility for mutually beneficial tradeoffs is nil. Neither negotiator has room to concede a low priority issue in return for gains on high priority issues. Continuing the example above, if iron and coal were equally important to both negotiators, each would be forced to compete for the largest portion of potential profits from both the minerals.

Often, negotiators perceive that distributive bargaining is necessary, even when integrative potential is high (Savage, Blair, & Sorenson, 1989; Thompson & Hastie, 1990). Specifically, negotiators may perceive that each side prioritizes the issues identically, when in fact, highly beneficial tradeoffs are possible. The negotiators perceive that each issue represents a fixed amount of resources which must be divided through competitive negotiating. Whatever one negotiator gains, the other must lose (Walton & McKersie, 1965). However, according to Bazerman and Neale (1983), negotiations are seldom strictly distributive. Rather, most negotiations revolve around more than one issue (Fisher & Ury, 1981). These issues are rarely of identical importance to the opponents (Greenhalgh, Neslin, & Gilkey, 1985). Therefore, integrative potential often exists but just as often goes unrecognized (Grindsted, 1990).

Judgement Errors

Failing to recognize integrative potential, or mistakenly perceiving negotiation as distributive rather than integrative constitutes a judgement error (Kahneman & Tversky, 1982; Thompson & Hastie, 1990; Tversky & Kahneman, 1979). Negotiators commit judgment errors by employing biased decision making procedures, or basing their actions on erroneous assumptions (Bazerman & Carroll, 1987; Bazerman & Neale, 1992; Kahneman, Slovic, & Tversky, 1982; Neale & Bazerman, 1985a; Wells, 1985). Mistaken perceptions and erroneous assumptions are labeled "errors" because they lead negotiators to behave out of accordance with their best interests, according to rational-economic models of negotiation and decision making (Blau, 1964; Hammond, McClelland, & Mumpower, 1980; Harsanyi, 1977; Rubin & Brown, 1975). That is, "rational" negotiating involves maximizing gains. However, negotiators committing judgment errors tend to achieve less (obtain lower profits) than possible in a given negotiation situation (Fisher & Ury, 1981; Thompson & Hastie, 1990). For example, Thompson and Loewenstein (1992) found that an error they label "ego-centric interpretations of fairness" (Thompson, 1992) hinders agreements by increasing the likelihood of walk-outs and by protracting standoffs.

Negotiators may fail to act in their best interests for other reasons as well. That is, a negotiator may have goals other than maximizing outcomes for his or her side (Wilson & Putnam, 1990). For instance, the negotiator may aim to end the negotiation as quickly as possible, even if the final settlement involves extreme concessions (Lax & Sibenius, 1986). Alternatively, the negotiator may have no strong desire for the outcomes possible in a particular negotiation situation. In cases like these, negotiators have a better B.A.T.N.A.

or "best alternative to a negotiated agreement" (Lewicki & Litterer, 1985). The B.A.T.N.A. limits a negotiator's concern for optimizing outcomes from the negotiation by increasing the attractiveness of options other than negotiating, for example, a labor strike. Finally, a negotiator may hold particular subgoals which are incompatible with a long-term goal of maximizing outcomes for self. For example, in divorce mediation, couples often use the negotiation of issues not as an opportunity to obtain desired outcomes, but rather as an opportunity to hurt the estranged spouse (Donohue, 1991; Donohue, Drake, & Roberto, 1994). According to rational-economic models of negotiation, each of these cases constitutes irrational bargaining, because the negotiator fails to maximize outcomes and thereby fails to act in his/her best interests.

Pruitt (1981) argues that in negotiations with integrative potential, extreme compromising and incompatible subgoals are less likely to occur when both negotiators hold relatively high aspirations (some minimum outcome they wish to achieve from negotiation). Because each party desires some outcome which can only be obtained through settlement, B.A.T.N.A.'s are reduced and negotiators are motivated to continue negotiating until an integrative solution emerges which allows both to achieve his or her maximum outcome.

Psychological Decision Theory

Psychological Decision Theory (Hammond, McClelland, & Mumpower, 1980), also called Behavioral Decision Theory (Neale & Bazerman, 1992) is a branch of decision making research which deals specifically with judgment errors and their origins. Psychological Decision Theory (PDT) stems from Kahneman and Tversky's (1979) Prospect Theory, an in-depth analysis of the

human decision-making process and its high potential for error. PDT explains that human memory, perception, and experience interfere with effective decision making. For instance, difficulty retrieving information from memory, as well as difficulty storing all relevant information in memory, both contribute to biased judgments (Milburn, 1978). Limited perceptions and individualized experiences also enhance the probability of biased judgments (Baron, 1990; Gabrenya & Arkin, 1979; Govindaraj, 1986; Kahneman, 1991; Neale & Bazerman, 1991; Thorngate, 1980; Wong & Weiner, 1981) and therefore lead to judgment errors.

For example, decision makers often use "availability" (Beyth-Marom & Fischhoff, 1977; Kahneman & Tversky, 1983; Lewandowsky & Smith, 1983) as a judgment criterion when estimating the probability of a particular outcome. If many instantiations of that outcome-type are available in memory, decision-makers estimate the probability of that particular outcome as high. Conversely, difficulty retrieving instantiations of an outcome-type from memory results in low probability estimates (Williams & Durso, 1986). For instance, subjects asked to estimate the number of women's and mens' names on a list of names divided evenly among male and female entries consistently overestimated the number of women's names appearing on the list when more women's names were famous (Neale & Bazerman, 1991). Fame makes women's names more easily available in memory. Availability may also account for consumers' preferences for familiar brand names when making economic decisions (Park & Lessig, 1981), or for our lasting impressions of social groups, based on our ability to recall personality types from within that group (Rothbart et al., 1978).

Judgment Errors in Negotiation

Availability and other simple rules of thumb or "heuristics" for making judgments are a functional response to complicated decision-making tasks (Baron, 1990; Nisbett, Krantz, Jepson, & Kunda, 1983). For instance, mechanics use heuristics in troubleshooting automotive problems (Morris & Rouse, 1985), thus conserving time and money. However, heuristics inappropriately applied lead to judgment errors and often, undesirable outcomes. Neale and Bazerman (1991; Bazerman & Neale, 1992) provide an excellent review of judgement errors in negotiation, including (1) framing, (2) anchoring and adjustment, (3) overconfidence, and (4) fixed sum errors.

Framing refers to the tendency to view an alternative as a loss or gain, in comparison to a subjective anchor point (Bazerman, 1984; Northcraft & Neale, 1986; Tversky & Kahneman, 1981). Negotiators frame alternatives negatively by viewing potential outcomes as losses. Naturally, the negotiator desires to minimize such losses. An option is framed positively when its consequences are viewed as a gain. Negotiators desire to maximize such gains. Neale and Bazerman (1985b) found that negotiators assigned to a negative frame (in which they were instructed to avoid losses) were more competitive, made fewer concessions, resolved fewer issues, and achieved lower profits than those who were positively framed (told to maximize gains).

Anchoring and Adjustment (Cervone & Peake, 1986; Metzger & Krass, 1988; Teigen, 1983) explains negotiators' failure to adequately adjust initial perceptions. Specifically, some arbitrary starting point operates as an anchor for the negotiator's subsequent judgments. A negotiator is biased by his or her anchor point in that subsequent estimates are consistently nearer the anchor than to the true value (Joyce & Biddle, 1981). For example, Tversky &

Kahneman (1974) found that subjects asked to estimate the number of African countries in the United Nations guessed 25 when the anchor given was 10. However, when the anchor given was 65, subjects guessed 45.

Overconfidence describes the tendency for negotiators to over-rate their own accuracy or chance of success. For instance, Neale and Bazerman (1985b) found that negotiators facing final-offer arbitration are often more than 50% certain that an arbitrator will rule in the negotiator's favor. The authors argue that because arbitration is a 50-50 probability (a choice between two options only), any estimate over 50% certainty represents overconfidence. Neale and Bazerman found that such overconfidence led to less concessionary behaviors and less successful performance than a realistic level of confidence.

Fixed Sum Errors

Fixed sum errors are assumptions that "the other party places the same importance–or has the same priorities as the self–on the to-be-negotiated issues when [in actuality] the potential for mutually beneficial trades exists." (Thompson & Hastie, 1990, p. 101). That is, negotiators committing the fixed sum error assume that each issue in a negotiation represents a fixed resource for which the opponents must compete to gain the greatest portion of that resource. The negotiator either fails to consider the possibility of mutually beneficial trade-offs, or assumes no tradeoffs are possible. Thus, the negotiator may believe that only one of the participants will achieve his/her goals through negotiation. Thompson and Hastie (1990) found that negotiators operating under the fixed sum assumption use more pressure tactics, make more demands, and achieve lower profits than those who do not assume a fixed sum. The authors engaged 180 subjects in an potentially

integrative, buyer-seller negotiation for a car. 4 issues were involved: financing, delivery date, color, and tax rate. Five potential settlement options were presented for each issue. Financing and delivery represented higher payoffs for negotiator A, while color and tax represented higher payoffs for negotiator B. Nearly all subjects committed fixed sum errors in this situation, assuming that the four issues were equally important to both buyer and seller. Therefore, the negotiators competed for the highest profit on each issue, rather than looking for integrative tradeoffs. As a result, neither buyer nor seller achieved as much profit as possible in this situation.

Thompson and Hastie (1990) measured fixed sum assumptions at the beginning, after 5 minutes, and at the end of negotiations. At each interval, negotiators were asked to estimate their opponent's payoffs for each of the five settlement options under each issue. Negotiators committing fixed sum errors were likely to guess that the opponent (a) could make the same dollar amount as the negotiator on each issue and (b) would receive dollar amounts in an order exactly opposing the negotiator's own. For example, if the seller made from zero to $4000 on financing, s/he would assume the buyer makes from $4000 to zero on the same item, in the same increments. On the other hand, negotiators not committing the fixed sum error were likely to deviate from the structure of their own payoff schedule when guessing the opponent's potential profits.

Fixed sum errors are the focus of attention in this study for two reasons. First, researchers have concluded that fixed sum errors are universal among negotiators (Thompson & Hastie, 1990). However, only American, or Western subjects have participated in these studies. As a result, little is known about the prevalence of fixed sum errors among non-western negotiators. We

do not know the extent to which culture affects judgment errors, thereby affecting integrative outcomes.

Second, judgment errors in general (Lehman, Carter, & Kahle, 1985; Nisbett et al., 1983), and fixed sum errors in particular, can be reversed through communication (Ball, Bazerman, & Carroll, 1991; Thompson & Hastie, 1990). Specifically, communication aimed at "information exchange" is presumed to be a crucial factor in this reversal (Cross, 1977; Tutzauer & Roloff, 1988). For instance, Thompson and Hastie (1990) found that negotiators who shared information about priorities and preferences were able to revise their fixed sum notions over the course of the negotiation. Fast learners were those who perceived at the end of 5 minutes that the two negotiators prioritized some issues differently. Other negotiators continued to hold fixed sum assumptions late in the negotiation. Fast learners fared better in terms of profits than did slow learners. Thompson and Hastie argued that those who shared information gained a more accurate perception of the opponent's needs and thus were able to construct beneficial agreements with high joint profits for both sides.

Information Exchange

Information exchange is defined as offering or asking for data regarding self or opponent profits, preferences, or potential outcomes (Pruitt & Lewis, 1975). It is presumed that information exchange improves chances for integrative outcomes by providing insight into an opponent's interests, thus allowing the negotiator to see integrative possibilities (Clopton, 1984; Pruitt & Lewis, 1975; Tutzauer & Roloff, 1988; Yukl, 1976). Thompson (1991) found that even when only one negotiator provided or sought information, joint

outcomes improved significantly.

Though practitioners and researchers alike stress information exchange as a route to achieving integrative outcomes (Fisher & Ury, 1981; Lewicki & Litterer, 1985), relatively little information exchange occurs in negotiation (Kemp & Smith, 1994). In her review, Thompson (1991) finds that negotiators devote less than 10% of bargaining time to information exchange. Even when explicitly told that an opponent's priorities might differ from the negotiator's own, participants did not increase information exchange rates. Similarly, Kimmel and associates (1980) found that average numerical information exchange ranged from only 1.6 to 16.2%, even under conditions of high trust and high aspirations.

Theorists explain the lack of information exchange in two ways. First, as Tutzauer and Roloff (1988) argue, negotiators may mistrust their opponents, and therefore choose less direct, less risky strategies for gaining information. Specifically, negotiators may use "heuristic trial and error," making package offers and monitoring the opponent's responses (Tutzauer, 1992). Successive package offers may gradually approximate self and opponent priority structures and allow both negotiators to achieve high outcomes. Thus, information exchange is relatively infrequent in negotiation because bargainers resort to more indirect routes to integrative agreement-building.

A second explanation is that judgment errors suppress information exchange. That is, fixed sum thinking is composed of the following beliefs: (1) the other negotiator prioritizes issues identically to the self, (2) opposing sides must compete on each issue to get the most of the perceived fixed pie, thus, (3) no integrative tradeoffs exist. Kemp and Smith (1994) argue that negotiators operating under this set of assumptions will see

information exchange as superfluous. As Thompson (1991) explains, "Negotiators who believe that their interests are completely opposed to those of the other party are unlikely to view information exchange about interests as valuable or worthwhile. After all, what is the use of telling the other person something he or she already knows or learning something about one's opponent that merely confirms one's expectation?" (p. 163-164). While intuitively appealing, the suppression theory has not been tested empirically. Therefore, the current study predicts that:

H1: Fixed sum errors will be negatively correlated with the tendency to exchange information in potentially integrative, multi-issue negotiations in which negotiators have moderately high aspirations.

III. CULTURE

Humans are valuative, as well as social beings. "Cultures" are human groups who are relatively homogeneous in their evaluation of particular phenomena, or "world view" (Samovar, Porter, & Jain, 1981). That is, culture affects individuals' valuative processes because individuals are members of groups (cultures) that advocate particular beliefs and values (Bengston, 1975; Hofstede, 1980) stemming from that culture's struggle to solve basic human problems such as feeding, clothing, and protecting its members (Macleod, 1988; Trompenaars, 1991). For example, culture is believed to affect profoundly individuals' persuasive styles (Johnstone, 1989), facework strategies (Cai, 1993; Ting-Toomey, 1988) logical argumentation styles (Svenkerud, 1993; Walker, 1990), conflict resolution styles (Drake, 1993; Lee & Rogan, 1991; Ting-Toomey et al., 1991) love styles (Ting-Toomey, 1991) uncertainty reduction strategies (Gudykunst and Nishida, 1984), and negotiating styles (Harris & Moran, 1991). Thus, reasoning and other evaluative processes are considered culturally relative phenomena (Hesselgrave, 1978).

Cultural Dimension Theory

A widely accepted approach to distinguishing cultures is a body of work which might be labeled Cultural Dimension Theory. Cultural dimension theories describe the properties universal to all cultures, then delineate systematic, culture-to-culture variations in those properties. A dimension may be represented by two extremes or endpoints forming a continuum along which any culture may be located according to its norms. For example, in his early work, Triandis (1984) proposed 4 dimensions of cultural behavior. (1) The associative v. dissociative dimension describes a society's tendency to engage

in cooperative, supportive, or helpful behaviors at one extreme, versus hostile, avoiding behaviors at the other extreme. (2) The superordinate v. subordinate dimension describes the prevalence of criticism, as opposed to advice-seeking in a culture. (3) The intimacy v. formality dimension describes the drive to either increase intimacy or engage in role-dictated behavior. (4) The overt v. covert dimension describes social behaviors based on visible muscle movement v. implicit social signals.

Two cultural dimension theorists have been particularly prolific in mapping empirically a variety of cultures along several dimensions. Specifically, Hofstede (1980; 1984) completed a 5 year study comparing work attitudes in 40 countries. Trompenaars (1993) aggregated data from 15 years of business seminars in 18 countries. The following sections review the work of each author in turn.

Hofstede

Hofstede (1980) examined four culturally-relevant dimensions: (1) Individualism - Collectivism, (2) Masculinity - Femininity, (3) High - Low Uncertainty Avoidance, and (4) High - Low Power Distance. Hofstede ranked 40 countries along these continua based on workers' responses to questionnaires and interviews. Power Distance refers to how cultures cope with inequality in wealth, power, and status. Low power distance norms exist in cultures which stress status equality and encourage people to express personal opinions. High power distance norms exist in cultures which stress hierarchy and discourage members from expressing opinions which differ from those of superiors.

Uncertainty Avoidance describes the tolerance for unpredictability. Cultures high in uncertainty avoidance rely on technology, law, or ritual to

reduce uncertainty and increase control over daily events. Cultures low in uncertainty avoidance are more likely to embrace uncertainty. For example, Hofstede (1980) found that on average, individuals from Singapore were lowest in uncertainty avoidance. They experienced lower job stress and were less hesitant to change employment.

The Masculinity - Femininity dimension measures the extent to which workers in a culture primarily endorse assertiveness versus nurturing. For example, Hofstede (1980) found that on average, workers in Japan and Austria stressed earnings and advancement while those in Norway and Sweden stressed working environment, cooperation, and relationships.

Individualism - Collectivism describes the "relationship between the individual and the collectivity which prevails in a given society." (Hofstede, 1980, p. 148). Some cultures emphasize the individual as the smallest unit of survival (individualistic). Others (collectivistic) emphasize the group (Berry, Poortinga, Segall, & Dasen 1992; Triandis, 1989). Collectivistic societies emphasize social duty and the impact of ones' actions on others (Verma, 1986). In contrast, individualistic societies emphasize autonomy, competition, and duty to oneself.

In highly individualistic cultures, persons think of the self as a single unit, self-sustaining and self-reliant (Triandis et al., 1986). "Personality" is valued because it distinguishes each person from others (Hofstede, 1980). Distinguishing persons is important because each must be recognized for his/her accomplishments. For example, Hofstede found that workers from the United States, Australia, and Great Britain scored highest in individualism and reported that they most valued (1) time for personal life, (2) challenging work from which they achieved a sense of personal accomplishment, and (3)

personal recognition for a job well done. It is this need for recognition that fosters an appreciation for competition in individualistic cultures.

Persons from cultures high in collectivism think of the "self" as a component of a larger unit or whole such as the family, community, or work group (Leung & Bond, 1982; Triandis, McCusker, & Hui, 1990). The group members are highly interdependent (Macleod, 1988) and intimate (Triandis, 1984). People are distinguished not by personality, but by their connection to a particular social and cultural environment in which individual needs and accomplishments are subordinated to the needs, views, and goals of one's group (Wheeler, Reis, & Bond, 1989). Hofstede (1980) found that workers from collectivistic cultures were more emotionally dependent upon and felt greater concern for the internal problems of organizations to which they belonged. For example, workers from Venezuela, Colombia, and Pakistan scored highest in collectivism and said they most valued (1) skill training, (2) maximum use of skills, and (3) appealing working conditions.

Trompenaars

Other theorists have defined the dimensions of culture differently. Trompenaars (1993) proposed that cultures differ on the basis of their response to three universal human problems: (1) relationships with other people, (2) relationships with nature, and (3) relationships with time. Dealing with human relationships can be described via five dimensions or "orientations." Individualism v. Collectivism is one of these. Others are Universalism v. Particularism, Neutral v. Emotional, Specific v. Diffuse, and Achievement v. Ascription.

Universalism v. Particularism describes the conflict between our obligations to society at large (universalism) and our obligations to important individuals like family and friends (particularism). Trompenaars (1993) asked executives from 38 countries what right a friend might have to expect the respondent to testify on the friend's behalf in a lawsuit in which the friend was clearly at fault. Executives from South Korea and Venezuela applied particularized values in this scenario and felt obligated to help the friend by lying in court. Those from Canada and the United States applied universalist values and felt obligated to uphold the law, refusing to lie for the friend.

Affective v. Neutral describes accepted norms for displaying human emotions (Matsumoto, 1990; Ting-Toomey, 1991). Executives from affective cultures are more likely to give immediate outlet to emotions, irrespective of context. Individuals from neutral cultures repress strong emotions until a conventionally appropriate outlet is available. For example, Trompenaars (1993) found that a show of anger in the work place was least acceptable in Japan and most acceptable in Italy or France.

Specific v. Diffuse describes the degree to which others are invited into the numerous arenas of our lives. Persons from cultures which stress specificity limit the involvement of others to only specific contexts. For example, in the United States, business associates are not typically exposed to our roles as a parent or spouse. Alternatively, diffuse cultures support involvement across a variety of contexts. Thus, a manager might invite co-workers and peers into arenas outside work, such as sports, family, and hobbies.

Achievement v. Ascription describes the basis upon which a society accords its members with status. Achievement orientations exist in cultures which confer status based on an individual's recent accomplishments. For example, in the United States, the most respected individuals in the sports world are those who score the greatest number of home runs, touchdowns, or goals in a single season. Fortune 500 magazine heralds the entrepreneur who earns the highest income in a single year. In contrast, ascription orientations exist in cultures which confer status based on an individual's age, sex, occupation, or education. For example, Trompenaars (1993) found that individuals from Egypt and Turkey scored highest in ascription and believed that status depends on family background.

Finally, Trompenaars (1993) defines Individualism v. Collectivism as a conflict between our own interests and the interests of the group(s) to which we belong (Acuff, 1993; Chu, 1991). The author's conceptualization of individualism v. collectivism differs slightly from that of Hofstede in that Trompenaars sees these orientations as different ways of reasoning about the plight of human kind. That is, should members of a culture regard themselves primarily as individuals and only secondarily as part of a group (individualism)? Or should cultural members define themselves primarily as part of a group and only secondarily as individuals (collectivism)? For example, given a choice between the two statements below:

(A) "It is obvious that if individuals have as much freedom as possible and the maximum opportunity to develop themselves, the quality of their life will improve as a result." (Individualism)

(B) "If individuals are continuously taking care of their fellow human beings the quality of life will improve for everyone, even if it obstructs individual freedom and individual development." (Collectivism) (p. 47),

Trompenaars (1993) found that Canadians, Americans, Norwegians, and Spanish were most individualistic and therefore likely to say that option "A" was the best type of reasoning to adopt. Alternatively, individuals from Nepal, Kuwait, and Egypt were more collectivistic and therefore likely to choose option "B."

Cultural dimension theory constitutes an approach to understanding culture which Janosik (1987) labels the "shared values" approach. This research perspective focuses on how the core value system in a culture affects negotiator behavior. Simply put, this approach assumes a negotiator's cultural orientation determines his/her thinking patterns, which in turn affect negotiating behaviors in predictable ways. The shared values approach minimizes "the role of individual choice for the bargaining actor. In other words, because a negotiator belongs to a culture which adheres to a particular ideology, he or she necessarily behaves in particular ways. That is, ". . . culture largely predetermines negotiating behavior." (Lewicki et al., 1985, p. 534).

Cultural Orientation

A major criticism of the shared values approach is that it cannot explain individual deviations from expected cultural behaviors (Hanks, 1974) or changes in culture-wide values over time (Ishii-Kuntz, 1989). Nevertheless, the shared values assumption maintains a prominent place in intercultural research (e.g. Adler, Graham, & Gehrke, 1987; Bierbrauer, 1992; Campbell, Graham, & Meissner, 1988; Drake, 1993; Eysenck & Yanai, 1985; Gire & Carment, 1993; Graham, 1984;

Graham & Sano, 1984; Gudykunst et al, 1992; Levine, West, & Reis, 1980; Lin, Insko, & Rusbult, 1991; McGinn, Harburg, & Ginsburg, 1973; Rankis, Biggers, & Morse, 1982; Ting-Toomey, et al, 1991; Verma, 1986).

Individualism-collectivism varies widely among cultures, but also varies (less widely) among individuals within a culture (Hanks, 1974; Hofstede, 1980). Triandis et al (1986; 1988) explain that individuals differ in the degree to which they embrace cultural values and norms (Collier & Thomas, 1988). Thus, an individual from a collectivistic culture such as China (Pye, 1982) may be more individualistically oriented than other members of his/her cultural group. Similarly, an individual from a highly individualistic culture such as the United States (Trompenaars, 1993) may be more collectivistically oriented than other members of his/her cultural group. Thus, cultural orientation describes the degree to which an individual embraces culture-wide norms.

For this reason, Triandis et al (1988; 1986) suggest that it is more convenient and less confusing to reserve the labels individualism and collectivism for cultures, and to use the corresponding labels "ideocentrism" and "allocentrism" when referring to individuals. Ideocentrism and allocentrism are in part driven by individualistic or collectivistic norms in a given culture. Triandis et al's measurement of ideocentrism-allocentrism includes the individualism-collectivism scale developed by Hui (1988). However, other factors such as personality, experience, religion, and other culture-specific elements also contribute to ideocentrism and allocentrism (Triandis et al., 1988). The current study focusses on individualism and collectivism rather than allocentrism and ideocentrism because the research hypotheses deal with the effects of general cultural orientations and do not include personality or other individual-difference factors.

Individualism - Collectivism

The present study focuses on the individualism-collectivism (I-C) dimension for three reasons. First, I-C is examined extensively in the intercultural literature and has been tied to a number of communication processes (for a review, see Wilson et al., 1995). It is therefore deemed a more valid and reliable indicator of culture than some other dimensions. For instance, Hofstede (1980) found that the uncertainty avoidance dimension was significantly affected by factors other than culture, namely, age. As the age of respondents increased, uncertainty avoidance decreased systematically. On the other hand, I-C was not affected by factors other than culture.

Second, I-C encompasses the competitive and cooperative aspects of negotiation that relate to judgment errors and information exchange. That is, in individualistic cultures, competition is valued and may therefore be the most salient aspect of negotiation for individualistically-oriented negotiators (Harris & Moran, 1991; Thompson & Hastie, 1990; Triandis et al., 1988). In collectivistic cultures, cooperation (integration of needs) is valued and may therefore be the most salient aspect of negotiation for collectivistic negotiators (Chiu, 1990; Griefat & Katriel, 1989; Wolfson & Norden, 1984; Ting-Toomey, 1988; Chu, 1991). Thus, I-C should serve particularly well as a predictor of judgment errors and information exchange in negotiation.

Third, the present study offers an opportunity to expand current knowledge about culture's influence on individuals. That is, with few exceptions (Adler & Graham, 1989; Cai, 1993; Drake, 1995), extant cross-cultural research draws conclusions about the relative frequency of behaviors within individualistic, versus collectivistic cultures (e.g. Adler, Graham, & Gehrke, 1987; Bierbrauer, 1992; Early, 1989; Eysenck & Yanai, 1985; Foster, 1992;

Gire & Carment, 1993; Graham, 1983; 1984; Gudykunst, et al., 1992; Levine et al., 1980; Lin et al., 1991; McGinn et al., 1965; Rankis et al., 1982; Verma, 1986). As such, these studies constitute intra-cultural comparisons, the findings of which may or may not be generalizable to an inter-cultural context. For example, Adler, Graham, and Gehrke (1987) found significant differences in representational v. instrumental bargaining strategies when Canadian, Mexican, and American negotiators bargained with domestic partners. However, when negotiators from various cultures face each other across the negotiating table, domestic negotiating practices change substantially (Adler & Graham, 1989; Drake, 1995). Thus, the present study extends prior research by assessing the influence of I-C in an inter-, rather than intra-cultural context.

Individualism-Collectivism and Fixed Sum Errors

Thompson and Hastie (1990) argue that fixed sum errors arise from the tendency to define negotiation as a competitive, win-lose situation (Lewicki & Litterer, 1985; Neale & Bazerman, 1991). If the competitive aspect of negotiation is most salient for individualist negotiators (Carnevale, Pruitt, & Seilheimer, 1981; Neale & Bazerman, 1991), a competent strategy for dealing with a competitive situation is indeed to strive for the largest piece of the (perceived) fixed pie (Neale & Bazerman, 1991). For example, Kelly and Stahelski (1970) found that competitive individuals assume that others they encounter will be equally competitive. Thus, the competitive individual continues to behave competitively, even when teamed opposite a highly cooperative opponent. The fixed sum error describes this persistent misperception of competing interests. Therefore, individualistically-oriented negotiators should be more likely than collectivistic negotiators to commit fixed sum errors.

On the other hand, a cooperative negotiating orientation is associated with an integrative outlook in which negotiators assume that all parties' needs can be satisfied. If the cooperative aspect of negotiation is most salient for collectivistically-oriented negotiators, a competent strategy for dealing with a cooperative situation is to strive for integration of both parties' needs. For example, Schultz and Pruitt (1978; Pruitt & Lewis, 1975) found that negotiators operating under a cooperative orientation or "problem solving approach," defined as a desire to "solve the problem of how to satisfy both parties' needs" (Pruitt & Lewis, 1975, p. 622), produced more integrative agreements and higher joint outcomes than negotiators operating under an "individualistic approach" in which they were told not to worry about the goals and needs of the opponent. Therefore, collectivistically-oriented negotiators should be less likely than individualistically-oriented negotiators to commit fixed sum errors.

H2: Collectivism will be negatively correlated with the tendency to perceive negotiation as a potentially competitive event.

H3: Collectivism will be negatively correlated with a negotiator's tendency to adopt Fixed Sum Errors in potentially integrative, multi-issue negotiations wherein negotiators have moderately high aspirations.

Individualism-Collectivism and Information Exchange

Similarly, cultural orientation should affect information exchange in negotiation. Thompson (1990) found that experience with tasks involving integrative potential increased a negotiator's ability to recognize compatible interests and integrative solutions. Socialization in a collectivistic culture might be construed as such experience. Specifically, collectivism calls for sensitivity to the needs of others and integration of those needs.

A competent approach to integration is to gather information about others' needs and provide information about one's own. Therefore, collectivistically-oriented negotiators should be more likely than individualistically-oriented negotiators to expect mutually beneficial trade-offs and thus expend energy looking for those tradeoffs, by exchanging information. Some anecdotal evidence for this assertion comes from Macleod's (1988) analysis of Chinese (collectivistic) negotiating practices: Chinese negotiators simultaneously consider each side's objectives in a complex web of interrelationships, such that achievement of one objective impacts other objectives, either positively or negatively. These objectives are prioritized so that a number of potentially conflicting objectives can be integrated.

More anecdotal support comes from Chu (1991). The author describes an Asian (particularly Samurai) dictate which says that one is more likely to achieve his or her desires by considering the desires of others. The negotiator (or warrior) should place him or herself in the shoes of all other concerned parties, anticipating the other's movements, considering what objections might be raised by the other. "...often you will be able to discover solutions that give everybody what they want, solutions that were invisible to you while you were focussed narrowly on yourself and your own agenda" (p. 240).

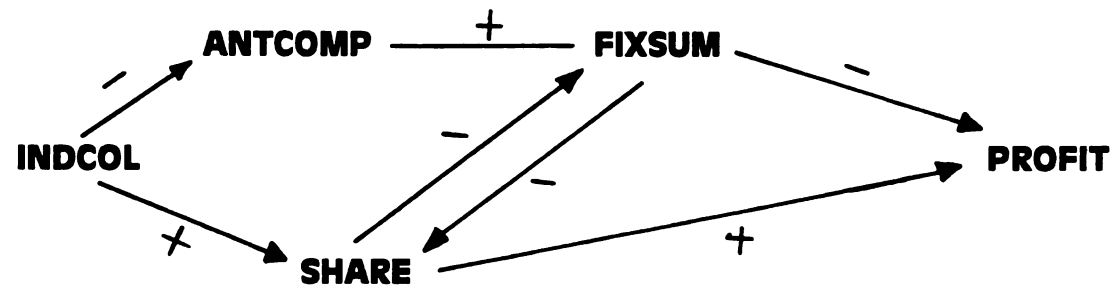
Finally, Lewicki and Litterer (1985) explain that negotiators who assume win-win solutions are possible more often search for those solutions. In turn, searchers usually find integrative outcomes. For example, Trompenaars (1993) describes collectivistic decision-making as consensus-based (Triandis & Albert, 1987). Negotiations often involve protracted efforts to "win over" dissenters by addressing their concerns and helping them see the potential benefits of a proposal. Thus, a collectivistic orientation should contribute to information

exchange in negotiation.

H4: Collectivism will be positively associated with the tendency to exchange information in potentially integrative, multi-issue negotiations wherein negotiators have moderately high aspirations.

Summary of the Research Hypotheses

The foregoing arguments suggest a measurement model in which cultural orientation (INDCOL) affects base assumptions in the form of anticipated competition (ANTCOMP). In turn, assumptions affect fixed sum errors (FIXSUM) and information exchange (SHARE) in negotiation. Specifically, as negotiators' collectivistic orientations decrease, perceived competition should increase. As perceived competition increases, so will fixed sum errors. At the same time, as negotiators' collectivistic orientations increase, information exchange should increase, as a result of the negotiator's search for integrative possibilities. It is also hypothesized that as fixed sum errors increase, the tendency to exchange information will decrease. Finally, consistent with prior research, information exchange will affect individual profits (PROFIT) positively, while fixed sum errors will affect individual profits negatively. This measurement model is represented by the structural diagram in Figure 1.



ANTCOMP = Anticipated Competition
FIXSUM = Fixed Sum Errors
INDCOL = Individualism-Collectivism
SHARE = Information Sharing (exchange)
PROFIT = Individual Profit Achieved from Negotiation

Figure 1. Proposed Structural Model

METHODS

Subjects

64 International and American graduate students (28 male, 36 female) at a large midwestern university were recruited for an "international relations study" via volunteer and course credit options (M age = 26, sd = 6.24). Table 1 presents the countries represented in the sample and their relative distribution.

Procedures

Three to four persons from different countries were scheduled for each time slot to increase the likelihood of having two persons available to take part in the study. When more than two persons appeared as scheduled, "extra" subjects were asked to either return
at an alternative time, or to complete an individualism-collectivism questionnaire for use in another portion of the study. Negotiating dyads were assigned randomly, with the criteria that both participants represent different cultural groups.

Subjects were told they would participate in a study examining intercultural communication and would be required to play the role of a buyer or seller in a video-taped negotiation over various commodities. Dyadic partners were escorted to separate rooms, so that each would feel free to ask questions privately regarding his/her instructions. Written instructions described the negotiator's role as a buyer or seller in a simulated business negotiation for three appliances (See Appendix A). The instructions informed negotiators that they would be allowed to share any desired information with the opponent, but must not show their instructions to the opponent.

Table 1. Countries Represented

Country	Frequency	Percent
Turkey	1	1.6
United States	22	34.4
India	2	3.1
Korea	5	7.8
China	5	7.8
Taiwan	8	12.5
Japan	1	1.6
Saudi Arabia	1	1.6
Indonesia	2	3.1
Spain	3	4.7
Egypt	1	1.6
Philippines	1	1.6
Germany	2	3.1
France	1	1.6
Singapore	3	4.7
Puerto Rico	1	1.6
Iceland	1	1.6
Nigeria	1	1.6
Canada	1	1.6
Bolivia	1	1.6

Participants were invited to clarify any confusing aspect of the instructions before negotiating. On average, participants used 15 minutes to read and review the instructions.

When ready, negotiating partners were introduced and escorted to a room containing a negotiating table and chairs, a clock, two timers, and an audio tape recorder. The researcher explained verbally that the timers would ring twice during the negotiation. At each ring, negotiators were to stop talking, open the sealed packet provided, and complete the work sheet inside. Subjects were told they would have thirty minutes total in which to reach an agreement. The researcher left the room and began video-taping the interaction from behind a two-way mirror. All negotiations were conducted in

English. Dyads who settled before the thirty-minute mark were asked to complete a final, written contract in which the agreed options were circled for each of the three appliances. Dyads who failed to reach agreement were stopped at the end of thirty minutes.

Manipulation Check

After reading the instructions, but before beginning the negotiation, each negotiator completed a pre-negotiation questionnaire regarding their (1) role, (2) goal in terms of profits, (3) planned opening bid, and (4) amount of profit represented by the opening bid. These questions were used as a manipulation check to be sure subjects understood the instructions and the task. Subjects responding in error to any item were asked to review the instructions and attempt the item again. Few participants failed these items. The most common mistake was a miscalculation of profits represented by the opening bid.

Negotiation Exercise

The negotiation task was a variable-sum simulation similar to that used by Pruitt and Lewis (1975) and Thompson and Hastie (1990). Negotiators were instructed to reach an agreement on the price for three appliances, (1) Big Screen Television Sets, (2) Personal Copiers, and (3) Lap-top Personal Computers. For each appliance, the negotiator received a list of nine possible prices to be paid for that item, labeled "price A," "price B," and so on, through "price I." Next to each price was listed the dollar amount of profit the negotiator would earn from settling at price "A," "B," "C," etc. (see Appendix B).

Some appliances had the potential to earn the negotiator greater profits than others. For instance, buyers could achieve a high of $2000 profit for computers, but only $800 for televisions. In addition, buyer and seller profit sheets differed such that some high-profit items for sellers were low-profit items for buyers and vise-versa. Thus, the opportunity for mutually beneficial trade-offs existed. For example, price "A" for televisions earns the seller a high profit of $2000, while the buyer earns nothing. Similarly, price "I" for lap-top computers earns the seller $2000 while the buyer earns nothing. Therefore, each may compromise on his/her least important item to maximize profits on the most profitable item.

Other appliances represented incompatible goals for buyers and sellers. That is, each negotiator stood to make exactly the same amount of profit for that item and would be forced to compete for a sizable share of that profit. For example, buyer and seller could both earn from $0 to $1200 for copying machines and must split the difference to reach an agreement.

This exercise approximates those used extensively in other buyer-seller simulations (Kimmel et al., 1980; Simons, 1993; Thompson, 1991; Thompson and Hastie, 1990; Pruitt, 1981; Pruitt & Lewis, 1975). The exercise is popular because it holds both integrative and competitive potential and usually creates about 30 minutes of substantive interaction. Pruitt (1981) argues that negotiators are more likely to look for integrative solutions to this task when they hold relatively high aspirations. Consistent with this assumption, and with the Pruitt and Lewis (1975) study, negotiators were told that their supervisor expected them to make at least $2200 profit from the negotiation. This induction was included to discourage straight "middle of the road" compromises, such as "E," "E," and "E" for all three appliances. Negotiators

were told verbally, as in the written instructions, "You may share any information you wish, but you may not show the opponent your profit sheet."

After completing the simulation, participants completed a questionnaire assessing individualism-collectivism and demographic information. Participants were then debriefed and asked not to discuss the study with others.

Independent Measures

Individualism-collectivism (INDCOL) was measured via 44 items adapted from Hui's (1988) INDCOL scale, a 66-item multidimensional Likert scale assessing attitudes toward 5 relational domains: (1) spouse, (2) parents, (3) kin, (4) neighbors, and (5) coworkers. The scale was adapted in three stages. First, items lacking face validity or clarity were dropped. Twenty-two items were removed in this stage. Second, items confounding values (attitudes, ideals) with frequency of behaviors were adapted. Specifically, if the original question asked the subject to estimate the perceived frequency of treating others in a particular way, the item was re-worded to reflect the desirability of such treatment. For example, questions such as "When making important decisions, I seldom consider the positive and negative effects my decisions have on my father" were changed to, "When making important decisions one should not consider the positive and negative effects of that decision on one's father and mother." Eight items were adapted in this step.

The remaining 44 items were pre-tested with a separate sample of 149 graduate and undergraduate, American and international students (M age = 26 sd 6.37, Male = 70, Female = 79). The combined responses from this independent sample and the study participants (N = 213) were subjected to

Confirmatory Factor Analysis procedures (Hunter & Hamilton, 1992). Items deviating significantly from internal consistency and parallelism were dropped.

Neither the "Parent" nor "Spouse" subscales met the criteria for unidimensionality. Rather, each formed a two-factor solution. Thus, the parent scale became 2 subscales, (1) parent advice-seeking, and (2) parent sharing. The spouse subscale became (1) spouse autonomy and (2) spouse involvement. Thus, seven subscales constituted the final I-C scale. These are summarized in Table 2.

Because the I-C scale taps multiple dimensions, and because a single score for each participant was desired, further factor analysis procedures were undertaken to locate a second-order uni-dimensional solution among the subscales. This method uses confirmatory factor analysis procedures, again testing for internal consistency and parallelism, treating the subscales as items. The "spouse autonomy," "neighbors," and "co-workers" subscales demonstrated sufficient internal consistency and parallelism to be treated as a single index of collectivism (Alpha = .75). Therefore, experimental subjects' responses to items on these three subscales were summed to obtain a collectivism score, such that high scores indicated greater collectivism. Responses to items on the remaining four subscales were not used in this study, but were reserved for a study looking exclusively at the meaningful dimensions of I-C.

Dependent Measures

Anticipated Competition (ANTCOMP) regarding the negotiation process was measured via 7 semantic differential items embedded within the manipulation check (See Appendix C). Specifically, respondents were asked

Table 2. Original and Adapted Versions of the INDCOL scale

	Hui (1988)	
SUBSCALE	**# ITEMS**	**AVERAGE FACTOR LOADING**
Spouse	8	.20
Parent	16	.42
Kin	8	.36
Neighbor	10	.34
Friend	10	.22
Co-worker	11	.23

	Drake (1995)		
SUBSCALE	**ALPHA**	**# ITEMS**	**AVERAGE FACTOR LOADING**
Spouse			
1 involvement	.60	2	.66
2 autonomy	.47	3	.48
Parents			
3 advice	.55	3	.56
4 sharing	.67	4	.59
5 Kin	.62	4	.55
6 Neighbors	.56	4	.49
7 Coworkers	.32	4	.33

to indicate, on a seven-point scale, whether they expected to compete or cooperate, whether a loss for one negotiator represented a gain for the other, whether solutions might exist which met the interests of both negotiators, and so on. Responses to these seven items were subjected to confirmatory factor analysis procedures (N = 64). Only the first three items demonstrated internal consistency. Thus, these items comprised the final ANTCOMP scale (alpha .77) and were summed as an index of anticipated competition, such that high scores represent highly competitive expectations.

Fixed Sum Errors (FIXSUM) were measured at three intervals. First, as a part of the manipulation check, negotiators were given a blank profit sheet, listing letters A through I for each of the three appliances. Negotiators were

asked to fill in the dollar profits for each price, as might appear on their opponent's profit sheet (Thompson & Hastie, 1990). Because fixed sum thinking is defined as the tendency to assume the opponent's interests are exactly opposed to one's own, a deviation score was assigned to each guess made about the opponent's profits. Specifically, for each letter A - I subjects were assigned a deviation score of 0 if they guessed that the opponent's profits were exactly opposite of their own (i.e. no deviations made). A deviation score of 1 was assigned each time the negotiator deviated from the opposite of his/her own profit sheet to guess the opponent's profits. With nine payoff options for each of three appliances, a total of 27 deviation points were possible. The deviation points were reverse coded so that fewer deviations indicated more fixed sum thinking.

Fixed sum errors were measured again twice during the negotiation simulation. When the timer rang after 5 minutes of negotiation interaction, buyers and sellers opened a sealed envelope containing another blank profit sheet and instructions to estimate the dollar profit their opponent would earn for each price, A through I under each appliance. The score obtained from this exercise constituted fixed sum errors at "time 1" ($FIXSUM_1$) The procedure was repeated when the second timer rang 15 minutes into the negotiation. The score obtained from this exercise constituted fixed sum errors at "time 2" ($FIXSUM_2$).

Information Exchange (SHARE) was measured via analysis and coding of the negotiation video tapes. Trained coders watched each video tape, coding instances of information exchange by buyers and sellers. The coding categories were based on those used by Pruitt and Lewis (1975; Pruitt, 1981) and Thompson and Hastie (1990), as well as a content analysis of the current

videotapes. The categories were developed along the following lines: The most direct way to obtain information regarding an opponent's priorities and potential profits is to ask for such information. Thus, the first coding category was labeled ASK. However, Pruitt and colleagues (Pruitt, 1981) suggest four types of direct requests:

(A) Numerical information, details about the opponent's profits in dollar amounts. For example, a negotiator may ask, "What do you make for T.V.'s at price D?

(B) Priority information, details about the commodities which are most important (represent the most possible profit) for the opponent. For example, a negotiator may ask, "Would you rather get a good price on T.V.'s or on computers?"

(C) Reactions, feedback regarding a proposal or offer on the floor. For example, "I was thinking more along the lines of price B. What do you think of that?"

(D) Directional information, the opponent's desires to move up or down (in price) on a particular item. For example, "You want a higher price for televisions?"

A less direct approach to obtaining information from an opponent is to offer information about own preferences and profits. This strategy is less direct because it relies on social pressures to reciprocate, so that the opponent will respond by also offering information. Thus, this second category was labeled GIVE. Pruitt and colleagues (1981) suggest three types of information-giving:

(A) Numerical information, describing own profits, in dollar amounts. For example, the negotiator may say, "I make $1200 for E."

(B) Priority information, providing details about favorable or unfavorable comparisons between commodities that offer greater or lesser profits
for the negotiator. For example, a negotiator may say, "I make my greatest profits on the personal copiers [in comparison to the other two]."

(C) Direction describes desire for a higher or lower price on a specific commodity. For example, "I need a lower price for the copiers."

Another indirect way to obtain information about the opponent's preferences and priorities is to make offers, then monitor the opponent's response (Tutzauer and Roloff, 1988). Four types of Offers were identified in the video tapes:

(A) Mutual Concessions describes a proposal that each negotiator give up something in order to reach agreement. For example, "I will give a little on televisions if you will give a little on the copiers."

(B) Mutual Tradeoff describes a proposal that each negotiator gain in order to reach agreement. For example, "You can have a high price for computers if I can have a high price for the televisions."

(C) Self-concessions describes a proposal that only one negotiator back down from his/her position on a commodity. For example, "OK, I will give in on the copiers. You can have them for price E."

(D) Make Offer describes a straightforward listing of potential settlement prices for two or more commodities. For example, "How about A for televisions, B for copiers, and C for computers?"

A final category was created especially for the current study and deals specifically with fixed sum errors. This category, labeled ASSUMPTIONS, encompasses verbal indicators that a negotiator believes the opponent's interests to be either directly opposed to, or compatible with his/her own. Making explicit one's implicit assumptions is yet another indirect route to information exchange in negotiation because it allows the opponent to identify and correct such assumptions. For example, one negotiator may expresses his/her belief that negotiators must compete for profits on particular item, "Look, only one of us can get the $1200 here." If the opponent knows this assumption to be false, given that s/he can only obtain $800 profit on that item, then the opportunity arises to correct the original negotiator's assumption: "No, you could make $1200, but I can only make $800. That item isn't as important to me as some others." Two types of assumptions were identified in the videotapes:

(A) Fixed assumptions are statements which reveal a competitive or fixed sum outlook regarding one or more commodities. For example, "Well, we want the same thing on the televisions. Both of us want the $2000."

(B) Variable assumptions are statements which reveal a variable or non-fixed sum outlook. For example, "I'm sure we can both make our minimum profit levels here."

Coding procedures

3 coders were trained to use the coding categories above. 5 negotiation sessions were transcribed and used as practice material. In addition, 4 video tapes were used for practice (9 negotiations). When coders reached 90% raw agreement, each was allowed to independently cod the remaining video-tapes, collecting information for buyers, then sellers, in separate code books.

The unit of analysis was the uninterrupted talking turn. If an utterance did not contain information exchange, it was assigned a "null" code. If the utterance did contain information exchange, the coder noted the time of the utterance on the digital tape counter and entered the following information in the buyer's or seller's code book: (1) time of behavior (2) critical words or phrases that indicated information exchange (3) category of information exchange (ASK, GIVE, OFFER, ASSUMPTION), and (4) subcode (i.e. priorities, reaction, direction, etc).

To establish coding reliabilities, a second coder watched the same video tape, following the procedures described above. Finally, a third coder followed the same procedure. Unitizing reliability was assessed by comparing the location (video tape digital counter) of information-exchange events, across the coders. Categorizing reliability was computed using Cohen's Kappa, correcting raw agreement rates by subtracting the percentage of chance agreement, given the number of coding categories (Folger, Hewes, & Poole,

1984). Table 3 summarizes unitizing and categorizing reliabilities for 25% of the total sample (216 information exchange events).

Outcome Measures

Prior research indicates that judgment errors are associated with suboptimal outcomes, in the form of lower overall profits (Neale & Bazerman, 1985a; 1985b; Thompson & Hastie, 1990). In addition, information exchange is associated with higher profits (Pruitt & Lewis, 1975; Neale & Bazerman, 1985; Thompson & Hastie, 1990). To remain consistent with prior research, the current study measured each negotiator's final profits in dollar amounts (PROFIT). That is, the profit obtained by the buyer or seller as a function of the payoff options circled in the final contract were summed. In the case of impasse, each negotiator's profits were zero.

Table 3. Coding Reliabilities

	Frequency	Kappa
Unitizing Reliability	216	.91
Interpretive Reliabilities:		
ASK	54	.88
Numerical		
Priority		
Direction		
Reaction		
GIVE	73	.84
Numerical		
Priority		
Direction		
OFFER	72	.91
Mutual Concessions		
Mutual Tradeoff		
Make offer		
Self Concession		
ASSUMPTIONS	17	.79
Fixed Sum		
Variable Sum		

RESULTS

A preliminary test of the structural model proposed in Figure 1 using path analysis procedures (Hunter & Hamilton, 1992) indicated that the model provides a poor representation of the causal relationships among the variables. Although the model as a whole was not inconsistent with the data ($\chi^2(20) = 13.65$ $p > .10$, N.S.), two of the link tests produced errors larger than might be expected by chance, given sampling error. Therefore, a series of regression analyses were undertaken to investigate alternative models. All variables were assessed at the level of the individual negotiator ($N = 64$). Regression analyses allowed the inclusion of additional predictors, namely, two demographic variables, age and sex of respondent; as well as one "dyadic level" variable, collectivism of partner (PINDCOL). Main effects and potential interactions were investigated. A single significant interaction emerged and is reported below. Table 4 summarizes the regression equations for each dependent variable, entering all relevant independent variables simultaneously. The results of these analyses suggested an alternative structural model, presented in Figure 2.

With correlations corrected for attenuation due to error of measurement, a second path analysis supported this alternative model over the model originally proposed. That is, the alternative model more accurately represented the causal relationships among the variables by reducing error in the model as a whole ($\chi_2(30) = 9.56$ $p > .10$, N.S.), as well as within each respective link test. Z scores corresponding to the error in each link test did not exceed significance levels, indicating that the new model accounted for relationships among the variables with errors which were not significantly different from zero. Table 5 presents obtained correlations and reliabilities.

Table 4: Standardized Regression Coefficients for Dependent Variables

Variable	B	SE B	Beta	T	Sig T
Dependent variable: $FIXSUM_0$					
ANTCOMP	-.310372	.339453	-.108758	-.914	.3643
AGE	.075196	.231266	.037939	.325	.7462
ROLE	-9.754498	2.844816	-.397606	-3.429	.0011
INDCOL	-.474801	.217108	-.262322	-2.187	.0328
SEX	-1.815461	2.989584	-.073420	-.607	.5460
Dependent variable: $FIXSUM_1$					
$FIXSUM_0$	.314517	.082075	.516870	3.832	.0003
AGE	.014997	.155672	.012435	.096	.9236
SEX	1.991603	1.816958	.132364	1.096	.2777
$SHARE_1$	-.292759	.351702	-.107189	-.832	.4087
PINDCOL	-.054924	.139857	-.049868	-.393	.6960
INDCOL	.098115	.141944	.089084	.691	.4923
ROLE	1.334902	1.938928	.089420	.688	.4940
Dependent variable: $FIXSUM_2$					
ROLE	1.978737	1.649118	.132506	1.200	.2352
$SHARE_2$	-.252933	.183916	-.152085	-1.375	.1745
SEX	2.256437	1.698530	.149917	1.328	.1894
PINDCOL	.176754	.127595	.160433	1.385	.1715
$FIXSUM_1$	.470261	.110978	.470111	4.237	.0001
INDCOL	-.013110	.125710	-.011899	-.104	.9173
AGE	.258212	.140865	.214026	1.833	.0721
Dependent variable: $SHARE_1$					
ANTCOMP	-.180020	.078686	-.283136	-2.288	.0259
AGE	-.092471	.055223	-.209409	-1.675	.0996
$FIXSUM_0$	.022397	.029857	.100527	.750	.4563
SEX	.040253	.674487	.007307	.060	.9526
PINDCOL	.094257	.051219	.233742	1.840	.0710
INDCOL	.058206	.051748	.144341	1.125	.2655
ROLE	-.378171	.703397	-.069189	-.538	.5930
Dependent variable: $SHARE_2$					
SEX	-.012617	1.273552	-.001394	-.010	.9921
PINDCOL	-.017865	.093764	-.026968	-.191	.8496
$FIXSUM_1$	.071091	.082751	.118194	.859	.3941
INDCOL	-.084403	.091659	-.127409	-.921	.3612
AGE	.045776	.102534	.063102	.446	.6571
Dependent variable: PROFIT					
ROLE	60.438569	226.383153	.028507	.267	.7905
$SHARE_2$	76.077173	26.149651	.322194	2.909	.0052
SEX	-69.622141	242.442147	-.032581	-.287	.7751
PINDCOL	-2.460439	18.089375	-.015730	-.136	.8923
INDCOL	11.743521	17.720766	.075077	.663	.5103
$FIXSUM_2$	-.599326	15.998495	-.004221	-.037	.9703
ANTCOMP	-79.916297	28.204466	-.324038	-2.833	.0064
AGE	-64.924208	20.000196	-.379037	-3.246	.0020

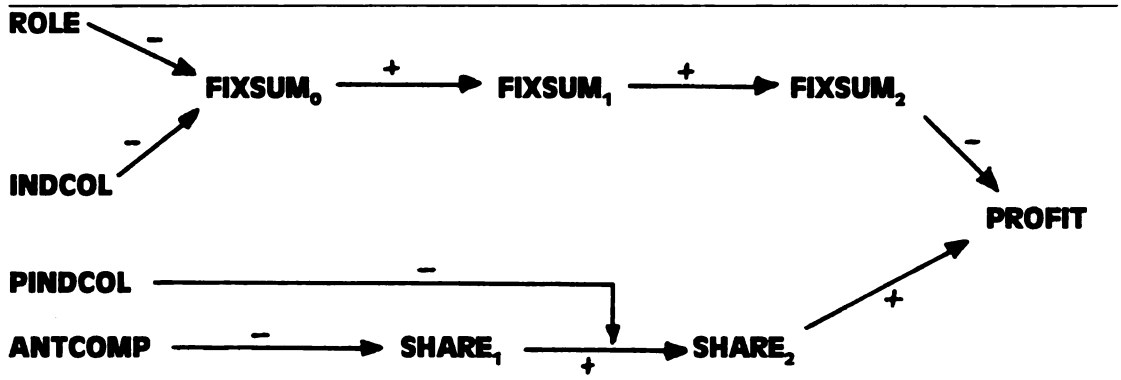
Regression Analyses

Hypothesis 1 argued that fixed sum errors would be significantly negatively related to information exchange. The data were not consistent with this hypothesis. That is, in the regression equations predicting $SHARE_1$, $FIXSUM_0$ did not emerge as a significant predictor (B = .10 t(62) = .75 p = .46). Similarly, $FIXSUM_1$ was not a significant predictor of $SHARE_2$ (B = .12, t(62) = .86 p = .39). No interactions emerged. Thus, a negotiator's tendency to share information during the first and second negotiation periods was independent of his/her fixed sum errors as the negotiation progressed. This absence of relationship between fixed sum errors and information exchange is represented in the structural model in figure 2 by no causal arrow between the two variables.

Hypothesis 2 predicted that collectivism (INDCOL) would be negatively related to competitive expectations of negotiation. The data were inconsistent with this hypothesis as well. Instead, regression analyses suggest that collectivism is unrelated to competitive expectations. Apart from a nearly-significant effect for sex of respondent (B = -.22, t(62) = -1.72 p = .09), no other main effects or interactions emerged as predictors. Thus, anticipated competition was treated as an exogenous variable in subsequent regression analyses and appears as an exogenous variable in the alternative model presented in figure 2.

Hypothesis 3 predicted that collectivism would be negatively correlated with fixed sum errors. The data are consistent with this prediction, with an important qualification. Specifically, regression analyses showed that in addition to collectivism (B = -.26 t(62) = -2.19 p < .03), role (buyer v. seller) also emerged as a significant predictor of pre-negotiation

fixed sum errors (B = -.40 t(62) = -3.43 p < .01) . Independent groups T-tests revealed that prior to negotiating, buyers (M = 19.43) committed nearly twice the fixed sum errors of sellers (M = 9.5). For both buyers and sellers, increased collectivism did reduce fixed sum errors. Thus, the two main effects were additive. No interactions emerged.



ROLE = Buyer v. Seller
INDCOL = Individualism-Collectivism
PINDCOL = Partner's Collectivism
ANTCOMP = Anticipated Competition
$FIXSUM_0$ = Fixed Sum Errors Before Negotiation
$FIXSUM_1$ = Fixed Sum Errors After 5 Minutes of Negotiation
$FIXSUM_2$ = Fixed Sum Errors After 10 Minutes of Negotiation
$SHARE_1$ = Information Exchange During First 5 Minutes of Negotiation
$SHARE_2$ = Information Exchange During Second 5 Minutes of Negotiation
PROFIT = Individual Earnings From Final Contract

Figure 2. Alternative Causal Model

Fixed sum errors prior to negotiation significantly predicted continuing fixed sum errors as the negotiation progressed. That is, in the regression equations for fixed sum errors after 5 minutes of negotiation ($FIXSUM_1$) and after 10 minutes of negotiation ($FIXSUM_2$) fixed sum errors during the immediately prior interval emerged as the only significant predictors (B = .52, t(62) = 3.83, p < .001 and B = .47, t(62) = 4.24, p < .001, respectively). No interactions emerged.

Table 5. Correlations and Reliabilities

	INDCOL	ROLE	PINDCOL	ANTCOMP	AGE	SEX	$FIXSUM_0$
INDCOL	1.00	.01[a]	.13	-.16	.14	-.23	-.28
ROLE	.01	1.00	-.01	.03	.09	.06	-.41**
PINDCOL	.10	-.01	1.00	.22	-.34*	-.08	.09
ANTCOMP	-.12	.03	.17	1.00	.03	-.21	-.08
AGE	.12	.09	-.30*	.03	1.00	-.07	-.03
SEX	-.20	.06	-.07	-.19	-.07	1.00	-.03
$FIXSUM_0$	-.23	-.41**	.08	-.07	-.03	-.03	1.00
$FIXSUM_1$	-.08	-.09	-.05	-.04	.05	.11	.44**
$FIXSUM_2$	-.01	.11	.07	-.02	.19	.19	.16
$SHARE_1$	.15	-.14	.27	-.28	-.28	.02	.14
$SHARE_2$	-.13	.01	-.07	-.20	.02	-.02	-.02
PROFIT	.03	-.01	.03	-.40**	-.36*	.04	-.06

	$FIXSUM_1$	$FIXSUM_2$	$SHARE_1$	$SHARE_2$	PROFIT	R_{xx}
INDCOL	-.09	-.02	.18	-.16	.03	.75
ROLE	-.09	.11	-.15	.01	-.03	1.00
PINDCOL	-.05	.08	.33*	-.09	.03	.75
ANTCOMP	-.05	-.02	-.34*	-.24	-.46**	.77
AGE	.05	.14	-.30	.02	-.36*	1.00
SEX	.11	.19	.02	-.02	.04	1.00
$FIXSUM_0$	.44**	.16	.15	-.02	-.06	1.00
$FIXSUM_1$	1.00	.47**	-.05	.07	-.03	1.00
$FIXSUM_2$	.47**	1.00	.22	-.14	-.12	1.00
$SHARE_1$	-.05	.20	1.00	.06	.35*	.86
$SHARE_2$	.07	-.13	.05	1.00	.39*	.86
PROFIT	-.03	-.12	.33*	.37	1.00	1.00

* Significant at $p < .01$

** Significant at $p < .001$

[a] Corrected Correlations Above the Diagonal

Contrary to prior theory (Thompson, 1991; Thompson & Hastie, 1990), information exchange did not directly impact fixed sum errors. That is, information exchange during the first five minutes of negotiation ($SHARE_1$) had no significant relationship to $FIXSUM_1$. Similarly, information exchange during the second five minutes of interaction ($SHARE_2$) had no significant relationship to $FIXSUM_2$ (see Table 4).

Hypothesis 4 predicted that INDCOL would be positively related to information exchange, such that collectivistic negotiators would give and seek more information, in an effort to uncover potentially compatible interests and forge integrative agreements. The data were inconsistent with this hypothesis. The results of the regression equation predicting $SHARE_1$ indicated that INDCOL was not a predictor. Rather, anticipated competition (ANTCOMP) was the strongest predictor of $SHARE_1$, such that negotiators who anticipated more competition shared less information ($B = -.28$, $t(62) = -2.29$, $p < .03$).

In the case of $SHARE_2$ however, an interesting interaction emerged. $SHARE_2$ was reasonably well predicted by $SHARE_1$, but these effects were contingent on the collectivism of a negotiator's partner (PINDCOL). Specifically, PINDCOL moderated the effect of $SHARE_1$ on $SHARE_2$, such that if the negotiator's partner was highly collectivistic, then higher levels of $SHARE_1$ led to continued high levels of $SHARE_2$ ($r = .25$). However, for negotiators whose partners were low in collectivism, $SHARE_1$ was negatively related to $SHARE_2$ ($r = -.09$). The T-test for the difference between regression coefficients (McNemar, 1969) showed the slope of the regression of $SHARE_2$ on $SHARE_1$ to be significantly different in conditions of low and high PINDCOL ($t(60) = 5.27$ $p < .01$).

Outcome Measures

Consistent with prior research (Pruitt & Lewis, 1975; Thompson, 1991; Thompson & Hastie, 1990), information exchange was significantly related to individual profits (PROFIT). Negotiators who shared more information regarding preferences and goals earned significantly higher profits ($B = .32$, $t(62) = 2.91$, $p < .01$). However, contrary to Thompson and Hastie's (1990) findings, fixed sum errors ($FIXSUM_0$, $FIXSUM_1$, $FIXSUM_2$) did not predict PROFIT. Other main effects or interactions did not emerge.

Supplemental Analyses

Because dependent measures were collected at intervals, information regarding the progression of fixed sum errors and information exchange over time were of interest. In the case of fixed sum errors, ANOVA results revealed a significant main effect for time ($F(2,61) = 3.93$, $p < .025$). At the end of 15 minutes of interaction mean errors dropped from 14.47 (sd 12.36) at $FIXSUM_0$ to 8.86 (sd 7.52) at $FIXSUM_1$, to 8.25 (sd 7.53) at $FIXSUM_2$. The more substantial early drop in fixed sum errors can be attributed to a substantial drop in buyers' early fixed sum errors to a level nearer that of sellers. After the first 5 minutes of interaction, buyers' ($\underline{M} = 4.38$) and sellers' ($\underline{M} = 3.63$) fixed sum errors did not differ significantly ($t(62) = 1.90$ $p = .28$, N.S.)

ANOVA produced no significant main effect for time on information exchange ($F(1,62) = 1.60$, $p = .21$, N.S.). Similar results were obtained when each information exchange category (ASK, GIVE, OFFER, ASSUMPTIONS) was examined separately. Negotiators did not significantly increase or decrease information exchange rates from $SHARE_1$ ($\underline{M} = 4.00$, sd 2.75) to $SHARE_2$

($\underline{M}$ = 5.52, sd 4.53). Consistent with Thompson's (1991) and Kimmel's et al. (1980) conclusions, these negotiators shared little in terms of total information. The maximum number of information items exchanged by a single negotiator at $SHARE_1$ was 12. The maximum number exchanged at $SHARE_2$ was 10. However, consistent with Tutzauer and Roloff's (1988) predictions, negotiators most often relied on multiple issue offers as a means to gain information about the opponent's priorities. Among the 64 negotiators, OFFERS constituted the most frequent category of information exchange at both $SHARE_1$ (Total = 136) and $SHARE_2$ (Total = 170).

Finally, an analysis of fixed sum errors associated with each of the three products over time was undertaken. ANOVA results revealed significant main effects for time and product. Specifically, for two products, big-screen television sets and lap-top computers, fixed sum errors changed significantly over time. In the case of television sets, fixed sum errors continued to drop from $FIXSUM_0$ to $FIXSUM_2$ ($F(2,61) = 3.451$, $p < .05$). In the case of computers, fixed sum errors fell from $FIXSUM_0$ to $FIXSUM_1$, then rose again from $FIXSUM_1$ to $FIXSUM_2$ ($F(2,61) = 3.848$, $p < .05$). Fixed sum errors associated with personal copiers did not change over time.

DISCUSSION

This study explores the effect of negotiators' cultural orientation on judgment errors and integrative processes in international negotiations. Cultural orientation describes the degree to which individuals embrace cultural values associated with individualism and collectivism. The individualism-collectivism (I-C) dimension assesses whether cultures prioritize autonomy and competition versus social responsibility and integration of needs. The culture-as-shared-values approach shapes the hypotheses concerning the effect of I-C on judgment errors and information exchange in international negotiation. A culture-as-shared-values view suggests that collectivist negotiators should be less likely than individualist negotiators to adopt fixed sum errors and more likely to engage in information exchange to find integrative solutions.

Based on this view of culture, several predictions were forwarded. Participants from the United States and 19 other countries completed a videotaped negotiation simulation with integrative potential, as well as an adapted measure of I-C, and periodic estimates of the opponent's priorities and potential profits. The videotapes were coded for instances of information exchange by each negotiator.

Overall, the conclusion drawn from these analyses is that the predictions cannot be supported. Specifically, cultural orientations toward individualism or collectivism are not a determining factor in intercultural negotiations, as suggested by a culture-as-shared values paradigm. Instead, the effects of cultural orientation are alternatively overshadowed, erased, or contingent upon other contextual features of negotiation interaction, such as role, competitive outlook, or information exchange. For example, a culture-as-shared-values approach suggests that judgment errors like the fixed sum error

are exacerbated by individualistic cultural orientations. However, results from the current analyses support the conclusion that a negotiator's role as buyer or seller is just as powerful in accounting for greater fixed sum errors.

Therefore, in face-to-face negotiations between representatives of varying cultural orientations, a culture-as-shared-values approach is untenable. Because few of the present findings are consistent with predictions, substantial modification of the culture-as-shared-values paradigm is in order. Future scholarship should propose and test alternative approaches to understanding the causal processes associated with intercultural communication. A review of the current findings regarding individualism-collectivism, information exchange, judgment errors, and outcomes should be suggestive in this regard.

Individualism-Collectivism

The findings concerning the effects of negotiator collectivism were not consistent with the culture-as-shared-values view in three respects. First, negotiator collectivism does impact pre-negotiation fixed sum errors ($FIXSUM_0$), but is not solely determinate of fixed sum errors. Another predictor is the negotiator's assigned role as a buyer or seller. Sellers are less likely than buyers to adopt fixed sum errors, and increased collectivism reduces fixed sum errors for negotiators in both roles. This finding may reflect a universal suspicion on the part of buyers in business negotiations, regardless of cultural orientation. Specifically, buyers may carry implicit assumptions that a seller's profit needs can be met at any of several potential prices, even those the seller claims are inadequate. On the other hand, the buyer's profits are unquestionably dependent on obtaining a minimum settlement price. If it is characteristic of

buyers to assume that sellers are less dependent on obtaining a particular outcome, then part of the "buying mind set" may be implicit assumptions that the seller is intent on gaining the larger portion of available profits at the expense of the buyer's needs. This finding is inconsistent with the culture-as-shared-values approach because buyer-seller differences are just as powerful as cultural orientation in determining pre-negotiation judgment errors.

Second, negotiator collectivism does influence information exchange, but only conditionally. That is, negotiators who share information with a highly collectivistic partner during the first five minutes of negotiation are likely to continue exchanging information as the negotiation continues. However, those who share early information with a partner who is more individualistically-oriented tend to decrease information exchange as negotiation continues. This finding may indicate that negotiators are alert for signs of mutual concern and cooperation on the part of opponents. Those who find themselves facing an uncooperative partner may assume the other is bargaining in bad faith (Lewicki & Litterer, 1985). Therefore, information exchange is abandoned when the partner fails to reciprocate or show concern for the negotiator's own needs. Additionally, although the interaction of $SHARE_1$ and PINDCOL significantly predicted $SHARE_2$, the effect size for partner's collectivism was quite small ($r = .03$). This finding is inconsistent with the culture-as-shared-values paradigm in that collectivism was conditionally related to, rather than determinate of information exchange.

Third, the findings regarding anticipated competition (ANTCOMP) indicate that collectivism is unrelated to a negotiator's perceptions that negotiation will or will not require highly competitive interaction. The range of scores for ANTCOMP reveals that some participants are merely more likely

than others to anticipate competition in negotiation (M = 11.16 sd 4.33, var. = 18.77).

Yet, ANTCOMP is a moderately reliable predictor of integrative bargaining in the form of information exchange. This finding points to the importance of factors other than cultural orientation in determining negotiation behavior. Specifically, individual differences in competitiveness make information exchange more or less likely, regardless of cultural orientation. Therefore, the findings are again inconsistent with the culture-as-shared-values approach because cooperation and competition, the cornerstones of negotiation, are the result of individual traits, not of cultural orientation.

These conclusions are not meant to dismiss the important contribution of research conducted from within the culture-as-shared-values paradigm. Comparisons of individualistic and collectivistic cultures have provided the descriptions of the rudimentary cultural differences that are crucial to our understanding of potential barriers to effective intercultural communication. However, the challenge for future research is to refine our knowledge of intercultural communication to include some understanding of culture's contribution relative to other contextual features of the communicative exchange. It is important to avoid over-estimating the role of cultural orientation in shaping intercultural encounters.

Janosik (1987) suggests one alternative paradigm that is more consistent with the data presented. Specifically, the culture-in-context perspective examines culture in relationship to other sources of individual behavior. Culture-in-context views communication as a rich tapestry of individual, contextual, emergent, and environmental factors. Among these, cultural

orientation represents merely one influence, so that in a given setting, culture can be overridden by, interact with, or suppress other contextual features of the interaction (Greenhalgh et al., 1985). For example, Wilson, Cai, and Drake (1994) found that, consistent with the culture-in-context view, profits for individual negotiators and for dyads were heavily dependent on role and partner's collectivism and less dependent on the negotiator's own cultural orientation. The findings of the current study are also consistent with this culture-in-context view because they point to the relative weakness of culture in comparison to other contextual factors affecting business negotiations.

Judgment Errors and Information Exchange

The findings for information exchange and fixed sum errors are inconsistent with prior research (Thompson, 1991; Thompson & Hastie, 1990). The current data suggest that information exchange and judgment errors are parallel, but unrelated processes (see figure 2). Specifically, the prediction that fixed sum errors suppress information exchange (Kemp & Smith, 1994) was refuted. Both negotiators with high and low fixed sum errors exchange information based on their perceptions of competitiveness. Similarly, negotiators' maintenance or reduction of fixed sum errors over time is independent of information exchange rates. Yet, negotiators' fixed sum errors did decline over time, especially regarding the first product, big-screen television sets. This finding may be a manifestation of the greater amount of negotiation time devoted to the first issue facing negotiators--big-screen television sets. If so, two important considerations for future research will be the influence of total discussion time, as well as placement of issues in the negotiation agenda in overcoming fixed sum errors. That is, error reduction

may in part be a function of discussion time, rather than direct information exchange. If such a function existed, it would suggest that negotiators use many subtle means for adjusting their perceptions of the opponent. Discussing the issues is paramount in this inference process. Again, the power of face-to-face interaction, as opposed to cultural orientation in shaping intercultural encounters is implied.

Outcomes

The findings for profit are both consistent, and inconsistent with prior research. Specifically, as in prior research, negotiators who exchange information about their priorities and preferences do achieve higher payoffs. However, contrary to prior findings, fixed sum errors do not prevent high profits. Thompson and Hastie (1990) found that reduction of fixed sum errors was significantly related to profits ($r = -.46$, $p < .01$) and furthermore, that early reduction was more beneficial to individual payoffs than late reduction. But the findings presented here suggest that negotiators can perform successfully, even while retaining relatively high fixed sum errors.

Inconsistencies between these data and prior findings may be due to procedural differences between these and prior methods. This study explicitly measures instances of information exchange, rather than the negotiators' self-reported plans to exchange information (Thompson & Hastie, 1990) or the results of experimental conditions wherein subjects are instructed to ask for or provide information (Thompson, 1991). Secondly, fixed sum errors are regressed on to these explicit measures of information exchange. Thus, the more rigorous measurement of information exchange, at the level of the individual negotiator, may be responsible for failure to replicate prior findings.

Perhaps one way to resolve this contradiction in findings is to treat fixed sum errors as conceptually distinct from what Thompson and Hastie (1990) have labeled "accuracy." That is, reducing fixed sum errors requires deviating from one's own outcome structure to predict the opponent's potential outcomes. On the other hand, accuracy requires not only deviating, but deviating such that the negotiator locates precisely the opponent's priorities and preferences. Thus, a negotiator may have low fixed sum errors by deviating, yet still fail to accurately understand the opponent's potential outcomes because s/he has deviated incorrectly. Future research might investigate the differential and combined effects of both fixed sum errors and accuracy on individual profits.

Limitations

A limitation to this study is that intervening processes between information exchange and fixed sum errors were not assessed. If the effect of such intervening variables were measured, a less equivocal understanding of the relationship between information exchange and fixed sum errors might be gleaned. That is, were a number of theoretical variables operating between fixed sum errors and information exchange, the correlation between the two target variables might indeed approach zero, as found. Yet relationships between the intervening variables might be quite high. Thus, the minimal relationship between the two target variables would be accurately representative of the causal process. For example, various categories of information exchange may differentially affect a negotiator's INSIGHT (Pruitt, 1981; Tutzauer & Roloff, 1988) into the opponent's needs. In turn, INSIGHT may affect the ACCURACY with which a negotiator predicts the opponent's

potential outcomes (Carroll, Bazerman, & Maury, 1988). Finally, ACCURACY may be strongly related to reducing fixed sum errors.

A second weakness of this study is that fixed sum errors may, in part, be an artifact of the negotiation task. That is, a payoff matrix with nine specific settlement options provides a compelling structure from which to construct estimates of the opponent's potential profits. This is especially true before negotiations have begun ($FIXSUM_0$). In an experimental role-play constructed by a researcher, suspicion and social desirability effects may make it difficult for participants to produce anything other than highly "fixed" estimates of the opponent's profits. The structure of the estimating exercise may make it difficult for participants to imagine that an opponent's profit structure differs substantially from their own. In comparison, real-world negotiations over land usage or water rights may be less structured. Disputants must more actively "build" the to-be-negotiated issues as the negotiation progresses. Therefore, negotiators may be less inclined in these situations to use their own list of preferred outcomes as a basis for predicting the opponent's priorities and desired outcomes.

Thus, it might be argued that in terms of external validity, the performance of experienced negotiators as opposed to college students enacting a negotiation role play may differ. Real world negotiators must manage a delicate web of interrelationships with constituents, opponents, opponent's constituents, the media, and interested third parties (Roloff & Campion, 1987; Turner, 1992; Wall, 1981). Therefore, the negotiator's focus is not narrowly fixed on the opponent. However, this study purposefully employed Pruitt's (1981) simulation to facilitate comparison of findings with prior research on integrative bargaining conducted with participants from

around the globe (Graham, 1993; Neale & Bazerman, 1991). Future research might benefit by analyzing judgment errors and information exchange in naturalistic settings (see, e.g., Putnam & Wilson, 1989) or by incorporating naturalistic elements, such as constituent groups, into this negotiation exercise (Roloff & Campion, 1987).

A second concern for external validity is that all participants conducted the negotiation in English, a second language for most internationals. However, this study engaged participants from a variety of cultures in an effort to reduce spurious confounds with culture-specific language barriers. Additionally, experienced international negotiators are often required to negotiate in a second or third language, especially when negotiating with Americans, who are less likely than non-Western negotiators to have learned a second language (Harris & Moran, 1991).

Implications

Despite its limitations, this study makes substantial contributions to scholarship in both negotiation and intercultural communication. These results send a strong message to international negotiators and those concerned with diplomacy and intercultural conflict. First, the findings suggest that fixed sum errors are indeed a relatively universal problem in negotiation. However, our traditional notions of competitive and cooperative, individualistic and collectivistic cultural orientations (Harris & Moran, 1991), are not a sufficient basis for predictions about who will commit judgment errors in negotiation. Rather, a more effective avenue for predicting fixed sum errors may lie in understanding the role of each negotiator in the conflict. Because some roles afford more power in negotiations, those in more

powerful roles may be less likely to assume that the opposing sides desire opposite outcomes, just as in the buyer-seller interaction discussed here. Alternatively, those in less powerful roles may more often assume the negotiators' desired outcomes are diametrically opposed. For example, the United States' recent skirmish with Haiti involved power-play through American armed forces (Thomas, 1994). While the U.S. sought peace, Haitian leaders sought to escape with their lives. The Haitian president in particular felt threatened in this regard. It appears he suspected American motives, assuming the United States sought death, rather than life, for the ousted Haitian government. Such perceptions may be pervasive among negotiators who perceive themselves to be relatively powerless.

In addition, information exchange is not a cure-all for fixed sum and other judgment errors. Exchanging information about priorities and goals will not directly reduce thoughts that negotiating sides must compete for favorable outcomes on each issue. Again, this was clear in the American-Haitian negotiations of 1994. Although former President Jimmy Carter and his entourage repeatedly explained U.S. objectives in Haiti, mistrust ran high among Haitian government officials.

Nonetheless, information exchange is directly associated with integrative outcomes. Therefore, a vital component to ending international conflicts is clear, consistent information about each side's needs and priorities. The notion that "information is power" to be jealously guarded is not helpful in international negotiations. Rather, information must be construed as a powerful tool for obtaining high joint outcomes. Competitive outlooks discourage this more helpful attitude toward information exchange. Future scholarship should focus on the means to reduce competitive expectations

and thereby enhance information exchange in international negotiations. The quality of agreements benefits substantially from honest appraisals of one's own, and the opponent's interests and priorities.

An important implication of this conclusion is that integrative outcomes are no less likely when negotiating with one cultural representative than with another. For example, notions of Japanese as "hard bargainers" are less helpful to successful agreement-building than are efforts to reduce either side's perceptions of competition and increase each side's willingness to communicate openly about desired objectives. Efforts to avoid, or at least diffuse international conflicts are likewise hampered by relying only on notions of how the Koreans, Canadians, or Iranians negotiate. Instead, diplomats must remember that an understanding of negotiation practices in any single culture should be tempered with the knowledge that obtaining reliable information about the relative needs and priorities of the parties involved in a particular case is a better defense against distributive outcomes.

Conclusion

Because this study assessed individualism-collectivism at the level of individuals, rather than groups, new insight into the strength of cultural influence in intercultural negotiations was gained. In particular, this study provides information about the influence of cultural orientation in inter-cultural, rather than intra-cultural contexts. This methodology allows researchers to move beyond generalizations about one culture's behaviors as compared with another. It begins to answer the vital question: given culture's pervasive impact on group norms, how strongly do those norms carry over into face-to-face interaction with cultural outsiders? This study illustrates the

relatively small, yet important impact of culture in international negotiations and supports a culture-in-context view. Contextual features can be as influential as cultural orientation in predicting negotiation processes and outcomes. In short, it is important to avoid over-estimating the power of cultural orientation in determining individual approaches to handling conflict. Negotiators rarely face a "culture" on the other side of the table. Rather, individuals negotiate with each other (Donohue & Ramesh, 1992). Those individuals may, to varying degrees, adhere to particular aspects of culture. As scholars and practitioners, we must look beyond cultural comparisons in our efforts to understand negotiation failure and success.

APPENDICES

Appendix A

Negotiating Instructions

Sellers

Imagine that you work as a sales representative for the small appliance division of **General Electric**. You have worked at **General Electric** for the past five years. As part of your job, you negotiate with large retail and wholesale stores concerning how much they will pay for your products. In this simulation you will be negotiating with a representative from Sam's Warehouse Club, the wholesale chain owned by the Walmart Corporation. You will be negotiating about prices for three small appliances: big-screen TV sets, personal copying machines, and lap-top computers.

Attached to these instructions you will find your profit sheet. This sheet lists nine (9) different prices (marked "A" through "I") at which you could sell each of the three appliances. Next to each price is listed the profit (in dollar amounts) associated with that price. For each appliance "A" is the most expensive price while "I" is the least expensive price. As you can see, you earn greater profits for **General Electric** if you can convince your counterpart to pay a higher price for each appliance. Consider the first item, big-screen TV sets (see column 1). If you can convince Sam's Warehouse Club to pay price "B," then your own company earns $1750 on every TV. If you and your counterpart settle on price "D," then **General Electric** earns $1250 for every TV. If you and your counterpart settle on price "I," then your company would be selling big-screen TV sets at cost and earn $0 profit per TV set.

REMEMBER, PRICES ARE LISTED AS LETTERS, SUCH AS "A," "C," OR "F." YOUR PROFITS ARE LISTED IN DOLLAR AMOUNTS, SUCH AS "$800," "$600," OR "$400."

Your counterpart from Sam's Warehouse Club also has a profit sheet which lists the same three appliances (big-screen TV sets, personal copying machines, and lap-top computers) as well as the same nine prices ("A" through "I") for each appliance. However, **your counterpart does not know how much profit you receive for each price. Similarly, you do not know how much profit your counterpart receives for each price.**

At the end of the negotiation, your own TOTAL PROFIT is determined by your settlement on all three appliances. For example, if you and your counterpart agree on price "E" for big-screen TV sets ($1000), price "G" for personal copying machines ($300), and price "B" for lap-top personal computers ($700), then your total profit would be $1000 + $300 + $700 = **$2000**. As you can see from your profit sheet, the most profitable settlement for **General Electric** is price "A," price "A," and price "A" for all three appliances, in which case your total profit is $2000 + $1200 + $800 = **$4000**. The least profitable settlement for **General Electric** is price "I," price "I," and price "I" for all three appliances, in which case your total profit is $0.

After talking with your supervisor at **General Electric**, you believe that **IT IS CRITICAL THAT YOUR TOTAL PROFITS AT THE END OF THE NEGOTIATION BE AT LEAST $2200**. Although you wish to achieve a profit, you also have incentives to reach an agreement with your counterpart from Sam's Warehouse Club. Sam's Clubs are located throughout the state of Michigan, and thousands of customers shop daily in each store. Sam's Warehouse Club currently does not sell **General Electric** appliances; hence, your company has an opportunity to increase its overall volume of sales by having its appliances sold at Sam's Warehouse Clubs. Therefore, you desire to reach an agreement with your counterpart about the three appliances, if the total profits for your company are high enough.

You have 30 minutes to negotiate an agreement. You should start by making an opening offer about the price of one or more appliances (e.g., "How about price 'D' for big-screen TV's?"). Then you can approach the task in any fashion that you choose.

YOU MAY SHARE ANY INFORMATION YOU WISH WITH YOUR COUNTERPART

BUT YOU MAY NOT TRADE WORK SHEETS.

Any Questions Before We Start?

Buyers

Imagine that you work as a purchasing agent for **Sam's Warehouse Club**, the wholesale chain owned by the Walmart Corporation. You have worked at **Sam's Warehouse Club** for the past five years. As part of your job, you negotiate with manufacturers of small appliances concerning how much your stores will pay for their products. In this simulation you will be negotiating with a representative from General Electric. You will be negotiating about prices for three small appliances: big-screen TV sets, personal copying machines, and lap-top computers.

Attached to these instructions you will find your profit sheet. This sheet lists nine (9) different prices (marked "A" through "I") at which you could buy each of the three appliances. Next to each price is listed the profit (in dollar amounts) associated with that price. As you can see, you earn greater profits for **Sam's Warehouse Club** if you can convince your counterpart to sell each appliance for a lower price. Consider the last item, Lap-top computers (see column 3). If you can convince General Electric to sell for price "I," then your company will earn $2000 profit on every computer. If you and your counterpart settle on price "F," then **Sam's Warehouse Club** earns $1250 per computer. If you and your counterpart settle on price "A," then your company would be buying computers at full price and earn $0 profit per computer.

REMEMBER, PRICES ARE LISTED AS LETTERS, SUCH AS "A," "C," OR "F." YOUR PROFITS ARE LISTED IN DOLLAR AMOUNTS, SUCH AS "$800," "$600," OR "$400."

Your counterpart from General Electric also has a profit sheet which lists the same three appliances (big-screen TV sets, personal copying machines, and lap-top computers) as well as the same nine prices ("A" through "I") for each appliance. However, **your counterpart does not know how much profit you receive for each price. Similarly, you do not know how much profit your counterpart receives for each price.**

At the end of the negotiation, your own TOTAL PROFIT is determined by your settlement on all three appliances. For example, if you and your counterpart agree on price "E" for big-screen TV sets ($400), price "B" for personal copying machines ($150), and price "G" for lap-top computers ($1500), then your total profit would be $400 + $150 + $1500 = **$2050**. As you can see from your profit sheet, the most profitable settlement for **Sam's Warehouse Club** is price "I," price "I," and price "I" for all three appliances, in which case your total profit is $800 + $1200 + $2000 = **$4000**. The least profitable settlement for **Sam's Warehouse Club** is price "A," price "A," and price "A" for all three appliances, in which case your total profits are $0.

After talking with your supervisor at **Sam's Warehouse Club**, you believe that **IT IS CRITICAL THAT YOUR TOTAL PROFITS AT THE END OF THE NEGOTIATION BE AT LEAST $2200**. Although you wish to make a profit, you also have incentives to reach an agreement with your counterpart from General Electric. GE is a respected manufacturer of appliances because they make quality products. **Sam's Warehouse Club** currently does not sell General Electric appliances; hence, your company has an opportunity to increase its overall volume of sales by offering appliances made by GE. Therefore, you desire to reach an agreement with your counterpart about the three appliances, if the total profits for your company are high enough.

You have 30 minutes to negotiate an agreement. You should start by making an opening offer about the price of one or more appliances (e.g., "How about price 'F' for big-screen TVs?"). Then you can approach the task in any fashion that you choose.

YOU MAY SHARE ANY INFORMATION YOU WISH WITH YOUR COUNTERPART

BUT YOU MAY NOT TRADE WORK SHEETS.

Any Questions Before We Start?

Appendix B

Profit Schedules

SELLER (General Electric)

Big Screen TV		Personal Copier		Lap-Top Computer	
A	$ 2000	A	$ 1200	A	$ 800
B	$ 1750	B	$ 1050	B	$ 700
C	$ 1500	C	$ 900	C	$ 600
D	$ 1250	D	$ 750	D	$ 500
E	$ 1000	E	$ 600	E	$ 400
F	$ 750	F	$ 450	F	$ 300
G	$ 500	G	$ 300	G	$ 200
H	$ 250	H	$ 150	H	$ 100
I	$ 000	I	$ 000	I	$ 000

BUYER (Sam's Warehouse Club)

Big Screen TV		Personal Copier		Lap-top Computer	
A	$ 000	A	$ 000	A	$ 000
B	$ 100	B	$ 150	B	$ 250
C	$ 200	C	$ 300	C	$ 500
D	$ 300	D	$ 450	D	$ 750
E	$ 400	E	$ 600	E	$ 1000
F	$ 500	F	$ 750	F	$ 1250
G	$ 600	G	$ 900	G	$ 1500
H	$ 700	H	$ 1050	H	$ 1750
I	$ 800	I	$ 1200	I	$ 2000

Appendix C

Manipulation Check

Before we begin, please answer the following questions as quickly as you can:

1) According to the instructions you read, what is your role?

2) According to the instructions, what is your goal in terms of profits?

3) What will be your initial opening offer in terms of the price (A - I) for each of the three appliances?

4) How much total profit does this initial opening offer represent?

Please fill in the blank profit sheet below,
AS YOU THINK IT LOOKS FOR YOUR COUNTERPART:

Big-Screen TV sets		Personal Copy Machines		Lap-top Computers	
PRICE	**PROFIT**	**PRICE**	**PROFIT**	**PRICE**	**PROFIT**
Price A =		Price A =		Price A =	
Price B =		Price B =		Price B =	
Price C =		Price C =		Price C =	
Price D =		Price D =		Price D =	
Price E =		Price E =		Price E =	
Price F =		Price F =		Price F =	
Price G =		Price G =		Price G =	
Price H =		Price H =		Price H =	
Price I =		Price I =		Price I =	

Appendix D

Individualism-Collectivism Questionnaire

PART I:
Please circle your level of agreement with each of the following statements. Please answer ALL of the questions below, even if some seem redundant.

1. If one spouse is a sports fan, the other should also cultivate an interest in sports.

Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree

2. These days, parents are too stringent with their children, stunting the development of initiative.

Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree

3. It is inappropriate for a supervisor to ask subordinates about their personal life (such as where one plans to go for the next vacation).

Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree

4. I would not let my cousin(s) use my car (if I have one).

Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree

5. It is enjoyable to meet and talk with my neighbors regularly.

Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree

6. I would not discuss newly acquired knowledge with my parents.

Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree

7. It is not appropriate for a colleague to ask me for money.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

8. If one spouse is a teacher, the other should also be aware of current issues in education.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

9. When making important decisions, I do not think it's important to consider the positive and negative effects my decisions have on my father or mother.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

10. I would not let my neighbors borrow things from me or my family.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

11. When deciding what kind of work to do, I would definitely pay attention to the views of relatives of my generation.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

12. When I am among colleagues/classmates, I think I should do my own thing without minding about them.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

13. Success and failure in my academic work and career are closely tied to the nurture provided by my parents.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

14. Married people should have some time to be alone from each other everyday, undisturbed by their spouse.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

15. Teenagers should listen to their parents' advice on dating.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

16. One needs to be cautious in talking with neighbors, otherwise others might think you are nosy.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

17. When deciding what kind of education to have, I would pay no attention to my uncles' advice.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

18. A person needs to return a favor if a colleague lends a helping hand.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

19. Young people should take into consideration their parents' advice when making education/career plans.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

20. If a person is interested in a job about which the spouse is not very enthusiastic, the person should apply for it anyway.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

21. It is reasonable for a son to continue his father's business.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

22. Neighbors should greet each other when we come across each other.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

23. Each family has its own problems unique to itself. It does not help to tell relatives about one's problems.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

24. Students ought to develop the character of independence.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

25. The bigger a family, the more family problems there are.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

26. It is better for a husband and wife to have their own bank accounts rather than to have a joint account.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

27. I would not share my ideas with my parents.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

28. If possible, I would like co-owning a car with my close friends so that it would not be necessary for them to spend much money to buy their own cars.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

29. A person should be able to count on relatives for help if in any kind of trouble.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

30. There is everything to gain and nothing to lose for classmates to group themselves for study and discussion.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

31. I would help, within my means, if a relative told me that he/she is in financial difficulty.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

32. If a person is married, the decision of where to work should be jointly made with one's spouse.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

33. A person should practice the religion of his/her parents.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

34. A person ought to help a colleague at work who has financial problems.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

35. I prefer to live close to my good friends.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

36. I am not interested in knowing what my neighbors are really like.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

37. Whether a person spends an income extravagantly or stingily is of no concern to one's relatives (cousins, uncles).

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

38. It is desirable that a husband and wife have their own sets of friends, instead of having only a common set of friends.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

39. Children should not feel honored even if the father were highly praised and given an award by an important official for his contribution and service to the community.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

40. Students should not rely on other students for help in their schoolwork.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

41. To go on a trip with friends makes one less free and mobile. As a result, there is less fun.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

42. What the neighbors say about whom one should marry is unimportant.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

43. I would confide my personal feelings and ideas with my parents.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

44. In most cases, to cooperate with a coworker whose ability is lower than one's own is not as desirable as doing the thing alone.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Part II: Demographic information

1. What is your sex? (circle one) Male Female

2. How old are you? _____

3. When did you first learn English?

4. When did you first start conversing in English?

5. How competent do you feel as an English speaker?

Not at all Competent 1 2 3 4 5 6 7 Very Competent

6. How long have you been in the United States? (Check one)

___ Less than six months ___ Seven months to one year

___ One to two years ___ Two to three years

___ Three to five years ___ More than five years

7. What is your home country? _____

8. What year are you in school?

___ Freshman/Sophomore ___ Junior/Senior

___ Masters ___ Doctorate

9. Besides going to school, are you currently working? ___ Yes ___ No

   If yes, what type of work?

   How long have you been at this job?

   What is your current position and major responsibilities?

10. Do you engage in negotiation as a part of your regular job? ___ Yes ___ No

    If so, how often?

    When?

11. Have you held a previous job which involved negotiation? ___ Yes ___ No

    If so, where did you work?

    What was your position?

    What were your responsibilities?

    What did you negotiate?

    How long did you work in that position?

12. Is there any other experience you have had which has helped to improve your negotiating skills?

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