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# Individualism/Collectivism, Psychological Processes, and Styles of Conflict Resolution

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Individualism/Collectivism, Psychological Processes, and
Styles of Conflict Resolution

by

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Master of Arts in Experimental Psychology

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Each person whose signature appears below certifies that this thesis in his/her opinion is adequate, in scope and quality, as a dissertation for the degree Master of Art in Experimental Psychology.
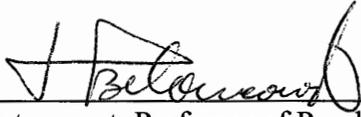
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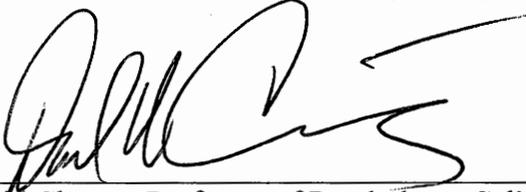
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# ACKNOWLEDGEMENTS

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ABSTRACT OF THE THESIS

Individualism/Collectivism, Psychological Processes, and
Styles of Conflict Resolution

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Conflict resolution styles in relation to Individualist (IND) and Collectivist (COL) value orientations were examined in the present study. Past research (Ting-Toomey et al., 1991, Pearson et al., 1998) has focused on cultural groups in order to explain conflict resolution styles. The current study analyzed conflict resolution styles (using the ROCI-II) in relation to antecedent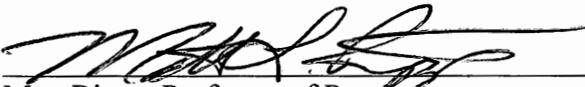 variables of culture, measured by the Collectivism and Individualism scale (Triandis et. al. 1993) as well as attribution processes and related emotions. Psychological factors such as causal attributions (the belief to which other's actions are attributed) and interpersonal emotions such as anger and empathic feelings were examined in relation to both the individualism/collectivism value orientation and the conflict resolution style. In addition, the in-group and out-group distinction was expected to relate to the cultural variable, attributions & emotions, and conflict resolution styles. According to results of EQS causal models incorporating the hypotheses of the study as well as other theoretically relevant paths showed excellent fit of the data. The fit indices for two models of conflict resolution styles (dominating and compromising) revealed a CFI= .96, and CFI= .94 respectively. Specifically, in support of the hypotheses, it was found that the dominating form of conflict resolution was a function of the individualist value orientation as well as the perception of controllability, while the compromising style of conflict resolution was a function of the collectivist value orientation as well as empathic emotions.

Individualism/Collectivism, Psychological Processes
And Styles of Conflict Resolution

Conflict is a natural aspect of social interaction. It can occur at various levels ranging from interpersonal, between two people, to inter-group, and even more global international disputes. In recent years many studies have focused on cultural variations in handling conflicts (for example Gabrieldis, Ybarra, Pearson, and Villareal (1997), Itoi, Ohbuchi, and Fukuno, 1996, Pearson & Stephan, 1998, Ting-Toomey, Gao, Trubisky, Yang, Kim, Lin, & Nishida, 1991). Understanding conflict resolution behaviors between cultures is important because it is not always the content that can escalate the dispute. Sometimes, cultural differences and related psychological factors may create uncertainty or tension that can intensify or reduce hostility between the conflicting parties.

Among the various elements of culture that may be relevant to conflict, the styles of handling conflicts are likely to be affected by the socialization patterns fostered in individualistic and collectivist societies. In the past, researchers primarily referred to differences in cultural groups to explain conflict resolution styles. However, they failed to measure and quantify the specific aspect of culture such as norms, values, and beliefs to which they attributed differences among groups that may show variations in such behaviors. The current study will focus on and directly measure individualistic and collectivistic value orientation in conflict resolution. The cultural orientation however may not be sufficient to predict conflict resolution styles. Research by Betancourt, Hardin, & Manzi (1992) have examined psychological processes that may mediate the relationship between culture and conflict resolution.

Among the psychological processes that appear to play a role in conflict, attributions of intentionality concerning a negative actions and controllability of its cause have been identified as determinants of responses to conflict, particularly violent responding in conflict environments (e.g. Betancourt, 1991; Betancourt and Blair, 1992).

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One aspect that appears to be relevant to both, value orientation and attribution processes is the in-group versus out-group distinction. This aspect is particularly important when conflict arises in a multi-group environment. For example, in-group biases have been found to influence attributions individuals make for antisocial behavior of in-group versus out-group members (Betancourt, 1997; Betancourt & Guthrie, submitted). In the case of collectivism and individualism, collectivists have demonstrated to respond to conflict differently, depending on whether the other party is a perceived in-group member or an out-group member (Itoi et.al, 1996).

The main objective of this research is to examine the extent to which value orientation (e.g. individualism and collectivism), as well as attribution processes are determinant of conflict resolution styles.

*Conflict Resolution Styles and Culture*

A study by Gabrieldis, Ybarra, Pearson, and Villareal (1997) compared Mexican and U.S. subjects in handling conflict. They found that the scores of Mexican subjects for styles of conflict resolution reflected a higher concern for others' outcomes than did those of the U.S. subjects. Further analysis revealed that Mexican subjects scored significantly higher than their American counterparts on accommodation and collaboration styles in resolution. The styles of conflict resolution were based on the Dual Concern Model of conflict resolution (Gabrieldis et al.1997; Pruitt & Rubin, 1986)

Other studies comparing individualism and collectivism based on ethnicity looked at "face" concern and conflict resolution preference. Conflict resolution styles were based on the dual-concern model measured by the Rahim Organizational Conflict Inventory-II (ROCI-II) (Rahim, 1983; Ting-Toomey et al. 1991). The authors postulated that culture influenced face maintenance and in turn influenced conflict resolution behaviors. They found that US subjects reported preferring more dominating tactics than Japanese and Korean respondents. Chinese and Taiwanese respondents showed higher tendencies to

use obliging and avoiding styles (Ting-Toomey et.al., 1991).

Pearson and Stephan (1998) also found similar results among cultural groups using the dual-concern theory of conflict resolution. Their results revealed that U.S. subjects preferred styles reflecting a higher concern for the self, particularly competition. Further analysis revealed that when Brazilians had to negotiate with members from an in-group (a close friend), they preferred strategies showing concern for the other by making accommodations. However, when they had to make decisions concerning out-group members such as dealing with a stranger in a business transaction, they were more willing to act in their own self-interests, and withdrew from the conflict. In situations that involved their close friends however, the Brazilians showed more concern for the other person than themselves. Americans tended to use the same style with both groups (Pearson & Stephan, 1998). This article further found that the results for the individualism and collectivism variables paralleled the results for the comparison groups. The pattern of results in their study suggests that the differences between the U.S. students and Brazilians students in reference to styles of negotiation are due in part by the two country's differences in individualism and collectivism.

According to Betancourt and Lopez (1993), to understand cultural differences, it is important to identify the dimensions of cultural variations. It is common to find cultural group differences in many behaviors but few studies have actually measured the specific cultural elements that are predicted to influence behavior. "Comparative studies of cultures are insufficient if the aspects of culture responsible for the observed differences are not identified or measured, nor are the relationships between these and the corresponding psychological phenomena demonstrated" (p. 633, Betancourt and Lopez, 1993). The purpose of this research is to identify and measure COL/IND and the mediating psychological processes as predictors of variations in preference for conflict resolution styles observed between ethnic groups.

*Individualism and Collectivism*

Societies in Western Europe and the United States have been found to be individualistic while societies such as those in Asia and Latin America have been associated with being more collectivistic (Triandis, Betancourt, Iwao, Leung, Salazar, Setiadi, Sinha, Touzard, Zaleski 1993). The antecedents to each society are very different. The backgrounds for collectivist societies were resource scarcity, presence of large families, and agricultural activities that required cooperation (Triandis et al., 1993). Some of the current features of the collectivistic construct include conformity, interdependence within a group, sacrificing individual goals for the collective good and maintaining social harmony. There is also acceptance of authority from the homogeneous "in-groups" (Triandis et.al, 1993).

In-groups can be defined as "sets of individuals with whom a person feels similar" (p. 43, Triandis, 1994). These groups of individuals are bound together by a common fate or another attribute. In collectivist cultures, in-groups are ascribed, strictly bound by its kinship, tribe, religion, village, and or nation (Triandis, 1994). Collectivist societies are considered "cultures of relatedness" where there is a strong maintenance of cohesive in-groups (Kim, 1994). This process perpetuates in-group favoritism, ethnocentrism, factionalism, regionalism, and particularism. The strong emphasis on in-group loyalty often fosters out-group derogation and competition with members of out-groups. The most important distinction about an individual made in collectivist societies is whether the individual is part of the in-group or not. Collectivist societies have firm group boundaries. An internal structure of this society can be described by the "relational mode" (Kim, 1994). This is exemplified by the fluid boundaries among individuals that allow thoughts, ideas, and emotions to flow freely. There is an unspoken understanding of what others in their group need, feel, and thinks without it stated openly. The characteristics of an individualistic society are converse to these collectivist themes.

The discriminating factor of individualism is separation from the in-group (Triandis, Bontempo, Betancourt, Bond, Leung, Brenes, Georgas, Hui, Marin, Setiadi, Sinha, Verma, Spangenberg, Touzard, and Montmollin, 1986). In individualist cultures in-group membership is achieved whereby the set of individuals are bound together by similar beliefs, attitudes, values, action programs, and occupation (Triandis, 1994). Individualists have been socialized to be autonomous and to care for their own needs. In this society, a firm boundary separates the individual from others and the environment. There are no strong emotional ties to any one group because the relationships tend to be contractual-- since beliefs, attitudes, and occupations can shift. A common feature of the internal structure on an individualist society illustrates the "aggregate mode". A distinct and independent individual that is detached from family, relatives, and community depicts this model. The laws and rules generated by a democratic government is one mechanism for unrelated individuals to interact with one another. Anyone within an individualistic culture is encouraged to express his or her needs without a concern to save the face of their opponent. However, there is greater concern to save one's own face in an individualistic society to protect the bounded self (Ting-Toomey et al., 1991). According to Ting-Toomey and colleagues (1991) "'face'" is defined generally as the projected and claimed sense of self-image and self respect in a relational situation" (p. 278).

The individualism and collectivism constructs are not opposite poles of the same dimension. Instead each construct is uni-dimensional and aspects of both can coexist in the other. Higher levels of individualism do not necessarily imply lower levels of collectivism (Oyserman, Coon, & Kemmelmeier 2002). Even though it may sound contradictory, individualism can still be exhibited in a collectivist culture and vice versa. For example within an individualist culture (e.g. U.S), a person may be high on collectivism with his family than at work, where he may be more likely to be

individualistic. Because of the within cultural variations on the two constructs, Triandis and colleagues (1993) have used different terms to describe the within cultural variations at the individual levels. Corresponding to the collectivists is allocentrism in that there is a personal tendency to define oneself in relation to others. An allocentric is more likely to downplay their personal goals for the goals of the collective. The individualistic construct corresponds to the personality attribute called idiocentrism, which is the tendency to define oneself through self-attributes.

The values of collectivist and individualist cultures are likely to influence many social behaviors, including conflict resolution, and the attributions about conflicts. In most Western cultures conflict is viewed as a normal, useful process whereby almost anything is negotiable. Individualist cultures value direct confrontation and conciliation as means to gain new opportunities. Conflict situations are a chance to release tension and to breed renewal of relationships (Augsburger, 1992). On the other hand, collectivistic societies perceive conflict as a disturbance to the peaceful harmony within their society. Members within the community are expected to adjust to the system rather than the system adjusting to the individual (Augsburger, 1992).

A study conducted by Itoi, Ohbuchi, and Fukuno (1996) found that collectivist subjects used more mitigating styles for resolving disputes. They demonstrated that Japanese subjects preferred making apologies to making justifications about their situation. However when these same subjects had to assess the conflict resolution for people from out-groups, they tended to use more denial tactics (such as not recognizing the conflict situation). This finding indicated that collectivism might be associated with tendencies to avoid social interactions with members from out-groups in conflict situation.

The Anglo-American subjects, representing individualists, showed no difference in approach to conflict based on perceptions of the relationships between the two parties.

The individualist subjects preferred to make justifications for their actions regardless of the situation. They either denied their responsibility for the act or overlooked the damage done in the conflict.

The consideration of value orientation is not sufficient to explain conflict resolution behaviors. Past researchers did not only fail to directly identify and measure aspects of culture known to influence behaviors but they also did not consider relevant psychological processes that may mediate value orientation and behaviors.

*Psychological Processes in Intergroup Context*

Culture is only one of the factors that may explain the differences in conflict resolution. Betancourt and Blair (1992) found attribution processes and interpersonal emotions to be determinants of violent responding in conflict situations. Specifically, they found that the attribution of intentionality and controllability for the negative actions influenced violent responding directly through anger and empathic emotions. The authors suggested that these structural relationships might account for other social behaviors, in this case preference for conflict resolution.

Betancourt and Guthrie (submitted) found that the attributions made about a situation involving in and out groups contributed to violent behaviors in 3$^{rd}$ and 6$^{th}$ grade children. Children tended to attribute more intentions to the aggressor's action of an out-group member than an in-group member (which in this study was another child from their own class or another class). This study showed that if a simple manipulation for in and out-group identification can influence attributions, more significant effects would be expected between groups that differ in culture, ethnicity, nationality, race, or social class. The current study attempts to explore the extent to which the in-group/ out-group biases relate to the differences observed in the individualism and collectivism value orientations as determinants of preferences for conflict resolution styles.

*Culture, Psychological Processes, and Inter-group Conflict Resolution*

As reported earlier, individualists and collectivists use different strategies for conflict resolution (Gabrieldis et.al., 1997; Pearson & Stephan, 1998; Itoi et al., 1996). It was also reported that various attributions of intentionality and controllability concerning conflict, influenced violent reactions in conflict (Betancourt and Blair, 1992). If value orientation influences attributional processes, it is possible that collectivists and individualists may make different attributions of intentionality and controllability in a conflict situation. These attributions may in turn influence the preferences for resolution tactics. Moreover, since the in-group and out-group distinction has been shown to influence both attributions concerning the behaviors of the parties in conflict, and preferences for resolution styles, it may also relate to these variables as determinants of preferences for conflict resolution tactics. This is particularly relevant considering the findings on different ways in which individualists and collectivists approach conflict, depending on whether the party is an in-group member or an out-group member.

*Objectives and Propositions*

This study was designed to examine the role of the individualism and collectivism value orientations and mediating psychological attribution-emotion processes and inter-group biases in preference for styles of conflict resolution. The first objective of the study is to examine the extent to which differences in the individualism and collectivism value orientations may relate to attribution processes and emotions as determinants of conflict resolution styles. A second objective is to understand how the attribution processes may at least in part mediate the effect of culture on conflict resolution tactics. A final and exploratory objective is to examine the potential variations in the effects of cultural orientations and psychological processes on preferences for resolution styles in conflicts involving in-group versus out-group members.

Specifically it is expected that:

*Hypothesis 1*: Participants that score higher on individualism will tend to use more tactics that reflect a concern for self (e.g. dominating style) described in ROCI-II while those scoring higher on collectivism will tend to use tactics that reflect a concern for the other (e.g. compromising).

*Hypothesis 2*: Differences in individualism and collectivism will result in differences in measures of the attribution processes and emotions concerning the conflict situation.

*Hypothesis 3*: Causal model integrating all the propositions of the study will yield a good fit of the data.

*(Exploratory Hypothesis 4)*: It is expected that there may be an interaction effect between the cultural value orientation and the perception of in-group versus out-group toward the other party on conflict resolution styles as well as on the mediating attribution processes, and interpersonal emotions.

Methods

*Participants*

Subjects were college students from California State University San Bernardino

and California State Polytechnic University, Pomona who participated as part of course

fulfillment. There were a total of 184 participants. Male subjects made up 23% (n= 42),

while females totaled 77% (n=142) of the sample. The mean age was 26 with a range of

18-66. Ethnic backgrounds of participants were distributed as follows. It was reported by

each as follows: White/Anglo Americans = 79, African-Americans =11, Asian

Americans=29, Latino-Americans= 48, and 6 students reported their ethnic backgrounds

as "Other". There were 11 participants who did not indicate their ethnic background.

Although data were collected from various ethnic groups, the in-group/out-group analysis

was based on data from Anglo-Americans and Latino-Americans subjects (n= 127).

*Instruments*

A consent form in a cover letter format was distributed to each participant. This

described the nature and the general purpose of the study. Participant signatures were not

required, however they were required to check a box indicating their consent.

For those who agreed to participate, an instrument in the form of a booklet was

distributed (see Appendix A). The booklet consisted of a vignette describing a modified

version of the conflict episode developed by Ting-Toomey and colleagues (1991). The

vignette was modified to create two different forms. In one form, the reason for not

completing a part of the group assignment on the part of the individual creating the

conflict (target) was that his grandparents were visiting from Mexico. The other form

indicated that the grandparents were visiting from Washington State.

The vignette was followed by the ROCI-II (Rahim, 1983) to assess conflict

resolution preferences. This scale identifies 5 conflict resolution styles on a two

dimensional scale (The Dual-Concern Model). The vertical dimension explains the

degree to which a person is concerned with his/her own outcomes while the horizontal dimension explains the degrees to which a person prefers to satisfy the other's needs. The five styles are characterized by: (1) high self—low other, dominating style; (2) high self—high other, integrating; (3) high self—low other, compromising; (4) low self—low other, avoiding; (5) low self—high other, obliging.

A second scale using the Causal Dimension Scale-II (CDS-II) measured the attribution of controllability by the instigator (McAuley, Duncan, & Russell, 1992). In addition, several items from scales developed by Betancourt and associates in previous studies (Betancourt, 1991; 1997) were used to measure attribution of intentionality and interpersonal emotions. On a 1-5 Likert items, subjects had to indicate their perception of intentionality of the action and the extent to which they experienced negative emotions (such as anger, frustration, disappointment, compassion, sympathy, and pity) was felt toward the instigator.

The last section of the booklet included items to obtain the demographic information of the participants. After participants completed and turned in their booklets to the experimenter, they were given a separate closing statement explaining the nature of the study.

*Procedure*

Approximately three to four weeks prior to data collection, students were given an announcement for the opportunity to participate in a study. Each professor making the announcement provided an opportunity to gain extra credit toward their total course grade if they decided to participate. Students were notified that full points would still be granted even if they did not finish the survey, in order to prevent any feelings of coercion to participate and complete the study.

On the day of the study, the experimenter entered the classroom during class time. Thirty minutes toward the end of the class was allotted to distribute and collect the

questionnaires. The experimenter made a brief introduction and handed out the cover letter. Next, a blank sheet of paper for students to write their names or student numbers for participation followed the introduction. These names or student numbers were collected in order for their professors to have a list of participants. Then participants were handed a booklet. Careful attention was given to ensure an even distribution of the two forms of the vignettes. Approximately 20 minutes were given for all students to complete the survey. After the participants finished, they were asked to turn in their booklets and obtain a copy of a closing statement. Approximately 184 booklets were completed and collected.

Results

The univariate test of normalcy for all of the variables suggests that the variables are normally distributed for levels of individualism and collectivism (see Figure 1). Figure 2 illustrating the distribution of individualism and collectivism for the different ethnic groups shows that subjects were similar in their levels of individualism as well as collectivism. There were no extreme cases of outliers that had to be adjusted in the analysis of the data. ANOVA statistics did not indicate any interaction effects of gender on collectivism and individualism as well as on conflict preferences (see Figures 3-6). Three cases with missing data were deleted from the analyses. Final tests of the models included a total of 181 subjects.

A correlation matrix is provided in Table 1. This correlation table consists of the relationships among all variables involved in the analyses. One can observe that the collectivist value orientation showed the highest association to the integrative approach ($r$= .228, $p$=. 01) and the compromising approach to conflict ($r$= .180, $p$=. 01). The individualist value orientation showed the highest positive association to the dominating form of conflict resolution compared to other styles ($r$= .318, $p$= .01), and a negative significant association to the compromising style ($r$= -.191, $p$= .01). The compromising style and the dominating styles were the two styles included in the Structural Equation Modeling since it would be over inclusive to incorporate preferences for all possible conflict resolution styles.

Collectivist Parcel

Std. Dev = 8.05
Mean = 62.3
N = 182.00



Individualist Parcel

Std. Dev = 7.79
Mean = 51.5
N = 183.00
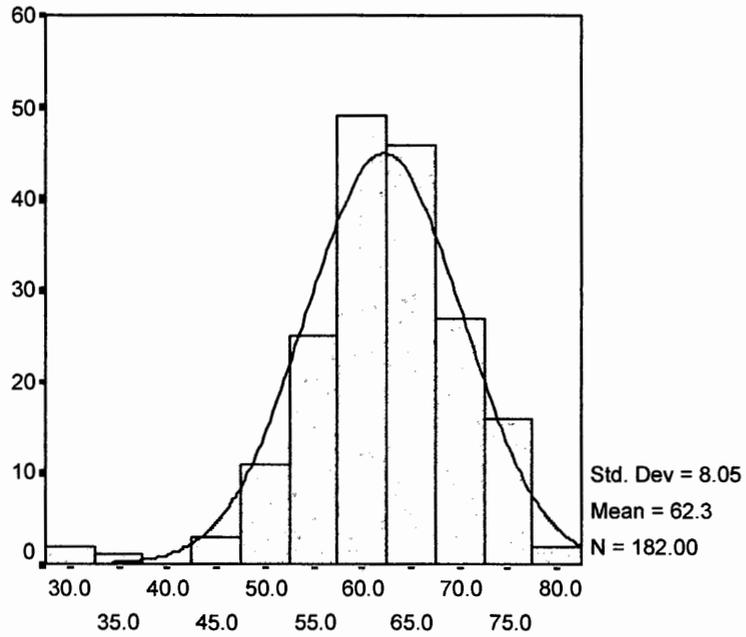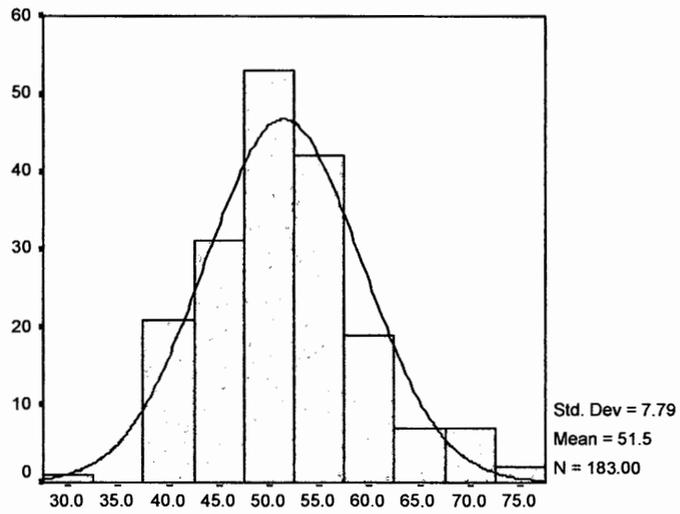
Figure 1: Histogram for Individualism and Collectivism
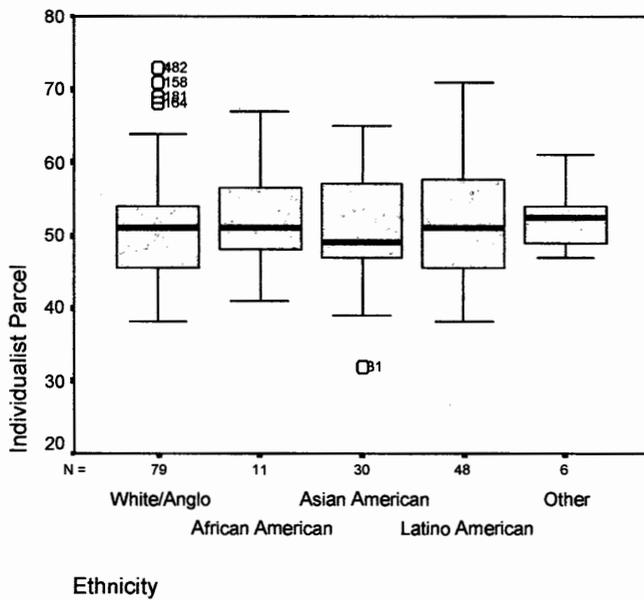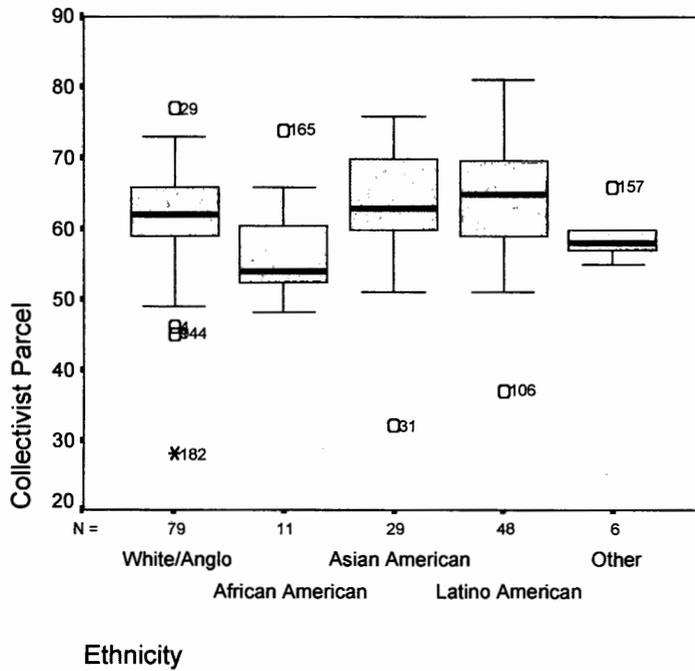
Figure 2: Box plots for collectivism and individualism by ethnicity.
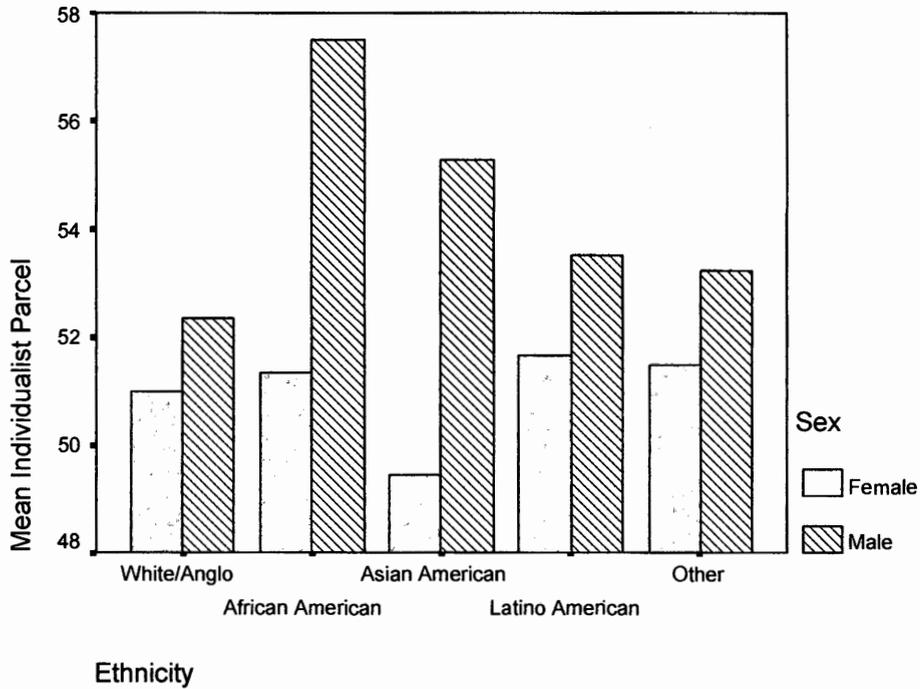
Figure 3: Individualism scores by Ethnicity and Sex
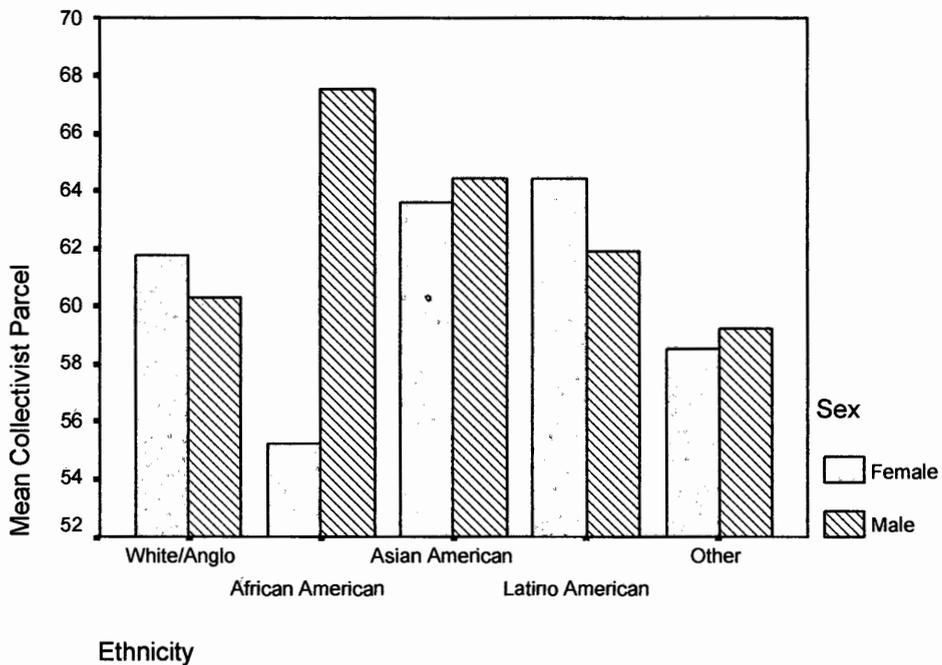


Figure 4: Collectivism scores by Ethnicity and Sex
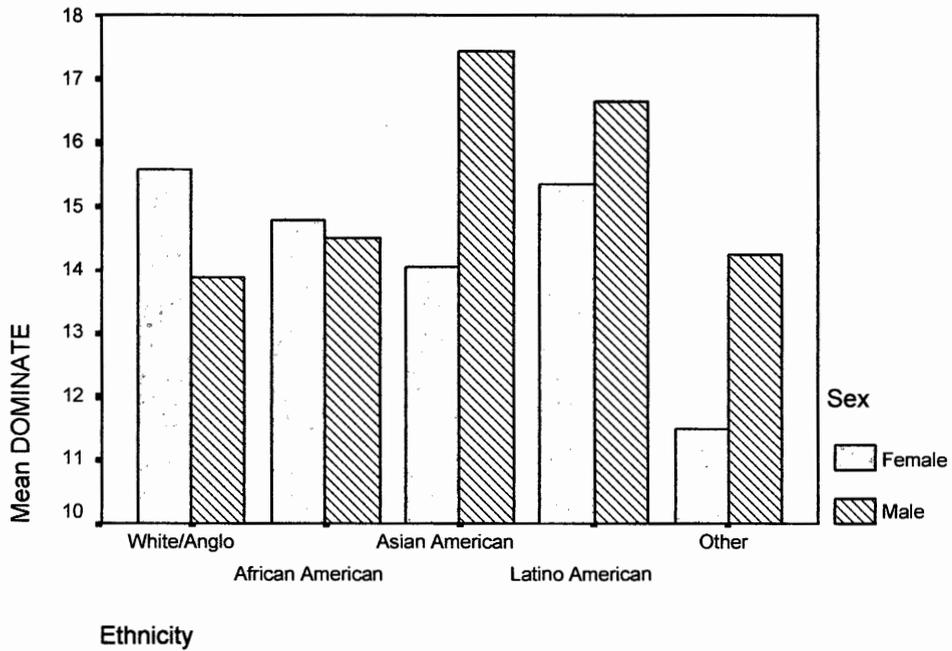
Figure 5: Dominating Preference by Ethnicity and Sex
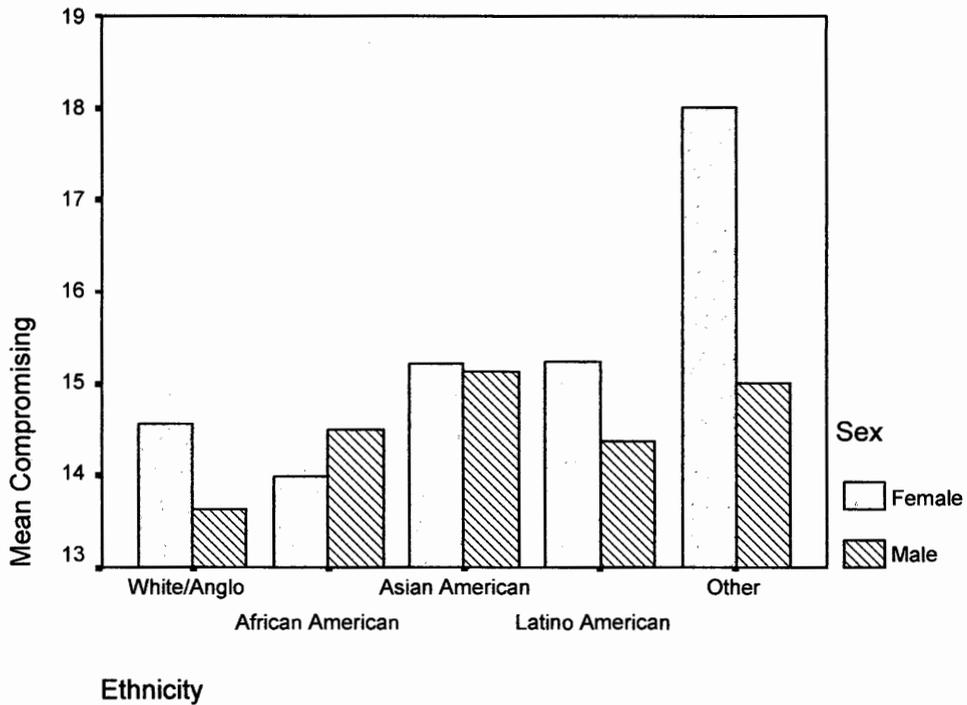


Figure 6: Compromising Preference by Ethnicity and Sex

| Variable Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Total Culture | | | | | | | | | | | | | | | | | |
| 2. Collectivist | -.716** | | | | | | | | | | | | | | | | |
| 3. Individualism | .695** | .003 | | | | | | | | | | | | | | | |
| 4. Intentionality | -.030 | 148* | .109 | | | | | | | | | | | | | | |
| 5. Personal control | .063 | .059 | .154* | .078 | | | | | | | | | | | | | |
| 6. External Control | .032 | -.065 | -.024 | -.040 | -.331** | | | | | | | | | | | | |
| 7. Stability | .023 | .061 | .095 | .292** | -.085 | -.032 | | | | | | | | | | | |
| 8. Locus | -.014 | .185* | .174* | .281* | .538** | -.322** | .166* | | | | | | | | | | |
| 9. Anger | .161* | .004 | .236** | .347 | .048 | -.080 | .156* | .147* | | | | | | | | | |
| 10. Frustration | .055 | .068 | .152* | .260** | .060 | -.077 | .060 | .247** | .537** | | | | | | | | |
| 11. Disappointment | -.139 | .194** | .002 | .224** | .166* | -.023 | .046 | .160* | .388** | .398** | | | | | | | |
| 12. Compassion | -.213** | .126 | -.177* | -.249** | -.224** | .063 | -.149* | -.200** | -.206** | -.200** | -.186* | | | | | | |
| 13. Sympathy | -.037 | -.071 | -.129 | -.232** | -.215** | .096 | -.056 | -.231** | -.207** | -.238** | -.154* | .581** | | | | | |
| 14. Pity | -.039 | .100 | .044 | .051 | -.120 | .041 | .111 | -.113 | -.045 | -.180* | -.041 | .233** | .366** | | | | |
| 15. Integrate | -.234** | .228** | -.099 | -.120 | .042 | -.099 | -.047 | -.009 | -.100 | -.046 | .101 | .196** | .115 | -.063 | | | |
| 16. Dominate | .280** | -.021 | .380** | .184* | .228** | -.082 | .210** | .105 | .272** | .132 | .245** | -.181* | -.072 | .067 | -.254** | | |
| 17. Oblige | -.122 | .085 | -.087 | -.002 | -.286** | .081 | .087 | -.136 | -.161* | -.244** | -.091 | .320** | .328** | .155* | .323** | -.194** | |
| 18. Avoid | -.140 | .088 | -.111 | -.078 | -.129 | .068 | -.030 | -.074 | -.091 | .074 | -.055 | .084 | .042 | -.109 | .205** | -.193** | .275** |
| 19. Compromise | -.262** | .180* | -.191** | -.118 | -.094 | -.108 | -.014 | -.109 | -.096 | -.093 | .011 | .297** | .249** | -.039 | .660** | -.271** | .366** |
| 20. Ethnicity | -.049 | .108 | .040 | .072 | -.074 | -.015 | .121 | -.097 | .066 | .101 | .052 | -.135 | .002 | .073 | .078 | -.002 | .015 |
| 21. Sex | .123 | -.032 | .145 | -.109 | .026 | -.036 | -.032 | -.079 | -.188* | -.277** | -.153* | .036 | .079 | .114 | -.042 | .038 | .029 |

| Variable Name | 18 | 19 | 20 |
|---|---|---|---|
| 18. Avoid | | | |
| 19. Compromise | .355** | | |
| 20. Ethnicity | .083 | .126 | |
| 21. Sex | -.028 | -.079 | .100 |

*Correlation Matrix Continued

**Table 1: Correlation Matrix: * Correlation is significant at the 0.05 level (2-tailed), ** Correlation is significant at the 0.01 level (2-tailed)**

*Conceptual Model*

The conceptual model incorporating the hypotheses and the theoretically relevant paths is presented in Figure 7. This model represents the causal relationships of the construct of culture (Individualism and Collectivism), attributions of control and intentionality, interpersonal emotions, such as empathic emotions and anger, and styles of conflict resolution. According to this figure, preference for conflict resolution style is a function of collectivism/individualism, both directly and indirectly, through the proposed effects of value orientation on the attribution processes and the interpersonal emotions.
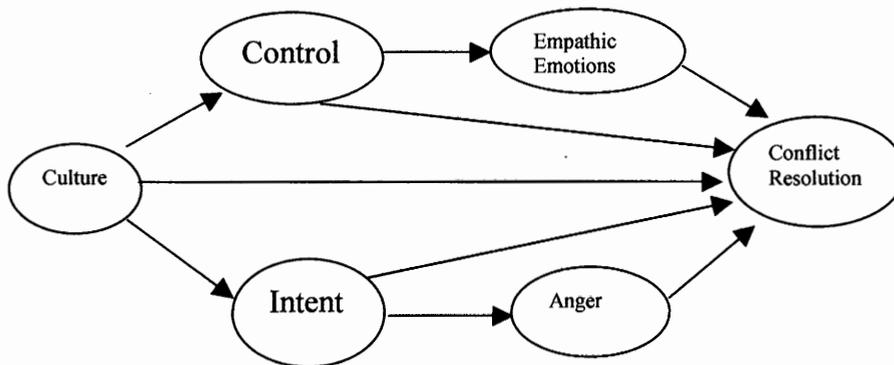


Figure 7: Conceptual Model incorporating the hypotheses and theory related paths.

*Structural Equation Modeling*

The culture construct was parceled into two separate measured variables. This was performed for a couple of reasons; first according to authors in this area (e.g. Triandis et. al., 1993) individualism and collectivism are not opposite ends of one dimension. Second, the total items of the scale exceeded 30 items. For the sake of parsimony, only two of the five-conflict resolution styles were included in the model as the outcome variable (see Figure 8). The latent variable for the compromising style of conflict resolution was measured by four items from the ROCI=II. Another five items from this scale comprised the dominating style.

The attribution of controllability was indicated by the latent variable measured by

three items obtained from the CDS-II (McAuley et.al, 1998). A single variable item assessed the perception of intentionality as well as anger. Empathic emotions were indicated by a latent factor with three indicators. Confirmatory Factor Analysis was conducted for the conflict resolution latent variables. Results of these tests showed that the indicators for each of the factors were good fitting. Specifically, two similar models were tested; one to predict preference for the dominating style and one for compromising styles of conflict resolution.
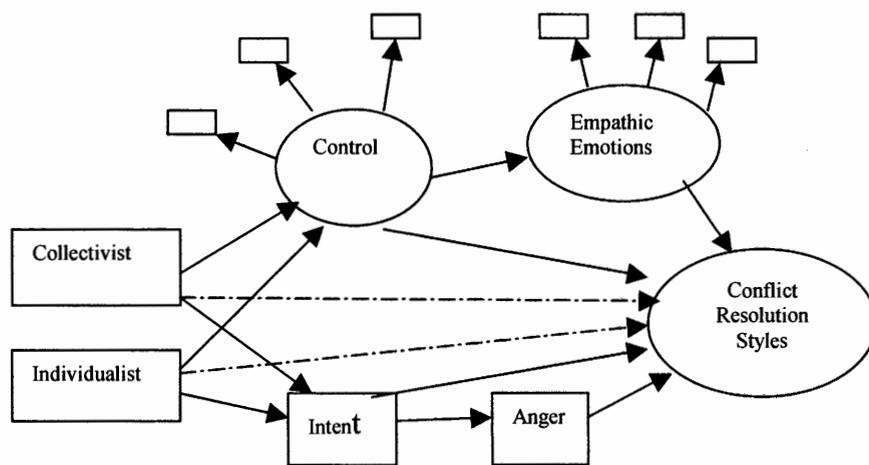


Figure 8: Hypothesized Structural Model

Figure 9 showing the final analyses of the model for the dominating style illustrate that the model fit the data well, CFI= .967. Figure 10, a model for the compromising style also shows a good fit, CFI= .942. Details related to the tests of the models are described in the following section.

*Tests of Hypotheses*

*Hypothesis 1.* Hypothesis 1 proposed that Individualism would be associated with

tactics that reflect a concern for self (e.g. dominating style) as described in ROCI-II while

collectivism would be associated with tactics that reflect a concern for the other (e.g.

compromising). Figure 9 provided support for this hypothesis. Results from the EQS

test showed the dominating style is a function of the individualist value orientation to be

(F3, V2) .318, p= .01.

Figure 10 indicates that the collectivist value orientation influences the

compromising form of resolution [standardized solution F3, V1= .205, p= .001]. Figure

10 also shows that the compromising form of conflict resolution is negatively influenced

by the individualist value orientation [standardized solution (F3, V2) = -.157, p= .004]

*Hypothesis 2.* This hypothesis proposed that individualism and collectivism would

be associated with differences in the attribution processes concerning intentionality of the

actions leading to the conflict and controllability of its cause, as well as on the related

emotions. Results support this hypothesis. Figure 9, representing the dominating form of

conflict resolution, shows evidence that the collectivist value orientation influences the

dominating approach through the perception of intentionality [standardized solution (V6,

V1)= .147, p= .025]. The perception of higher intentionality resulted in higher levels of

anger, and less preference for a compromising approach with an opponent (Figure 10).

For the individualist value orientation, the perception of controllability was more

salient in showing a significant effect on the dominating style. The standardized solution

for individualism to controllability is (F1, V2) .197, p= .01 and from controllability to the

dominating style is (F3, F1) .189,p= .05. Moreover, the feeling of anger was directly

influenced by individualism, which influenced the preference for dominating approach to

the conflict situation. As can be seen in Figure 10 however it appears that the empathic

emotions (e.g. sympathy, compassion, and pity) also predicts the compromising

preference.

*Hypothesis 3.* This hypothesis stated that a causal model integrating all of the

propositions of the study would result in a good fit of the data. The Comparative Fit

Index for the dominating and compromising approach to conflict showed a good fit of the

data, when both the collectivist and the individualist value orientations were included in

the tests of the models. As indicated previously, there were two models tested that are

variations of Figure 8, one accounted for the dominating style, while the other accounted

for the compromising style. However results from testing these models, based on the

Lagrange Multiplier and Wald tests, suggest that there were theory-consistent

modifications that would improve the model. Hence, a number of modifications were

performed and the corresponding models tested.

*Model Estimation*

*Dominating Style.* Based on the Goodness of Fit Summary, the hypothesized

model is a significant improvement over the independence model; the difference in $\chi^2$ is

(782.920- 112.454)= 670.47 with (df 105-82)= 22 degrees of freedom, $\chi^2_{\text{diff}}(2, n= 184)=$

670.47, p<. 001. The hypothesized model reflected an adequate fit in terms of the $\chi^2$ test

statistic and the Comparative Fit Index. The $\chi^2 = (82, n= 184)= 112.454$, p< .05. The

CFI was .955. The Lowest standardized residual was r= .240.

Post hoc modifications were performed according to those suggestions of the

Lagrange Multiplier (LM) and Wald tests that were consistent with theory. A direct path

from individualism to anger was added. The difference in $\chi^2$ between the resulting model

and the previous one is significant for one degree of freedom [$\chi^2_{diff}$=(112.454- 105.612)=

7, with DF=(82- 83= -1) p= .01]. Hence this parameter is retained. In addition the path

from collectivism to perception of control was removed. The difference in $\chi^2$ resulting

from dropping this parameter is not significant ($\chi^2_{diff}$ = 0, DF= 1). The final model

including the effects of individualism on anger and eliminating the collectivism-

controllability path (see Figure 3), provides a very good fit for the data, $\chi^2$ (83, n= 184)=

105.612, p< .047, CFI= .967. The largest standardized residual remaining was r= -.242.

This was retained as the best fitting model.

*Compromising Style.* According to the Goodness of Fit Summary for the

compromising style, the independence model showed a significant improvement over the

hypothesized model, $\chi^2$= (593.411- 109.120)= 484.291, DF (91-70)= 21, $\chi^2_{diff}$(21, n=

184)= 484.291, p<. 001. The hypothesized model reflected an adequate fit in terms of the

Comparative Fit Index (CFI)=. 922, $\chi^2$ (70, n= 184)= 109.120, p=. 001. However, the

significant $\chi^2$ indicates that there is significant variance not accounted for.

Post-hoc modifications were performed in order to add and delete paths according

to those of LM and Wald tests, which are theoretically based. Again, a direct path from

the individualist variable to the negative emotion, anger, was added (standardized

solution V7, V2 = .201, p=. 01). The difference in the resulting model and the previous

model yielded a $\chi^2_{diff}$ = 6, DF= 2 p= .05. In addition a path from individualism to the

compromising style was added (standardized solution F3, V2 = -.157, p= .004). The

difference in $\chi^2$ between the new model and the original model is again significant for one

degree of freedom [$\chi^2_{diff}$=(109.120- 100.063)= 9, with DF=(70- 71= -1) p= .01]. The LM

test also suggested a path from empathic emotions to intentionality, which would have

improved the $\chi^2$ test statistic as well as the overall fit of the model. This path was not included since it has not been theoretically supported. If this path had been added, it would provide various implications for theory, which will be explored in the discussion section.

According to the Wald test, three paths were removed from the original model, which did not result in significant $\chi^2$ changes. The path from the collectivist variable to control was removed. In addition the path from the individualist variable to the perception of intentionality was also deleted, $\chi^2_{diff}= 1$, DF= 1, p > .10. Since the perception of controllability did not appear to be a function of the compromising form of conflict resolution, this path was also eliminated. The difference in $\chi^2$ between the resulting model and the previous model revealed a $\chi^2_{diff}= 0$, DF= 1, p > .10. The final model is presented in Figure 4. This model including the effects of the additions and deletions provided a good fit for the data, $\chi^2 = 100.06$, DF= 71, p= .013, CFI= .942.

**Figure 9: Collectivism/ Individualism and Dominating Style**
**CFI= .967, $X^2$ = 105.61, DF= 83, p= .05: Largest standardized residual= .242**
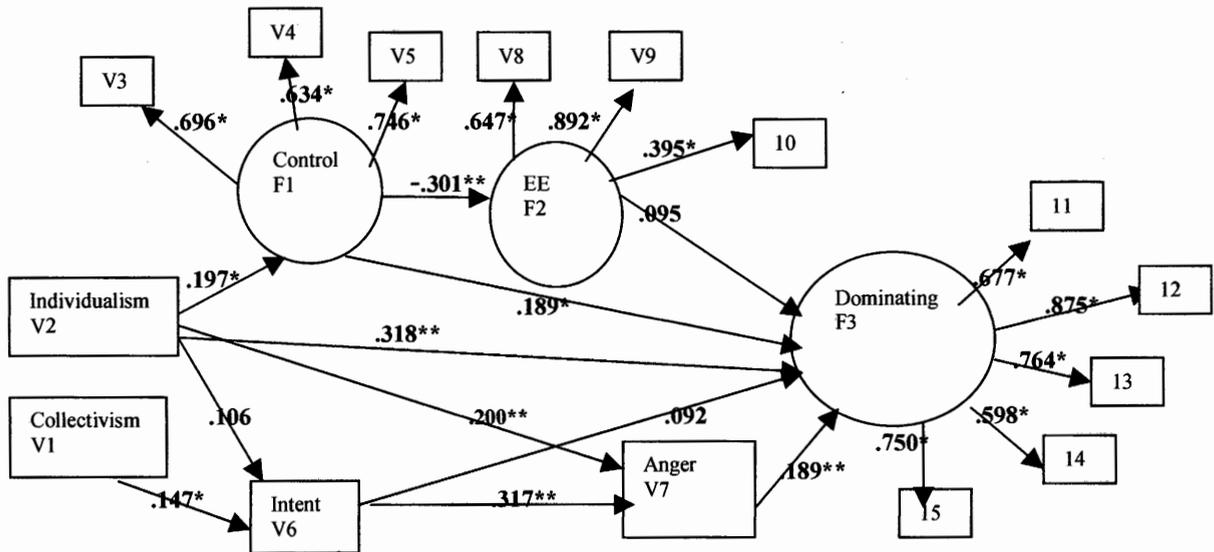


**Figure 10: Collectivism/Individualism and Compromising Style**
**CFI= .942, $X^2$ = 100.06 Df= 71, p= .013, Largest standardized residual= -.246**
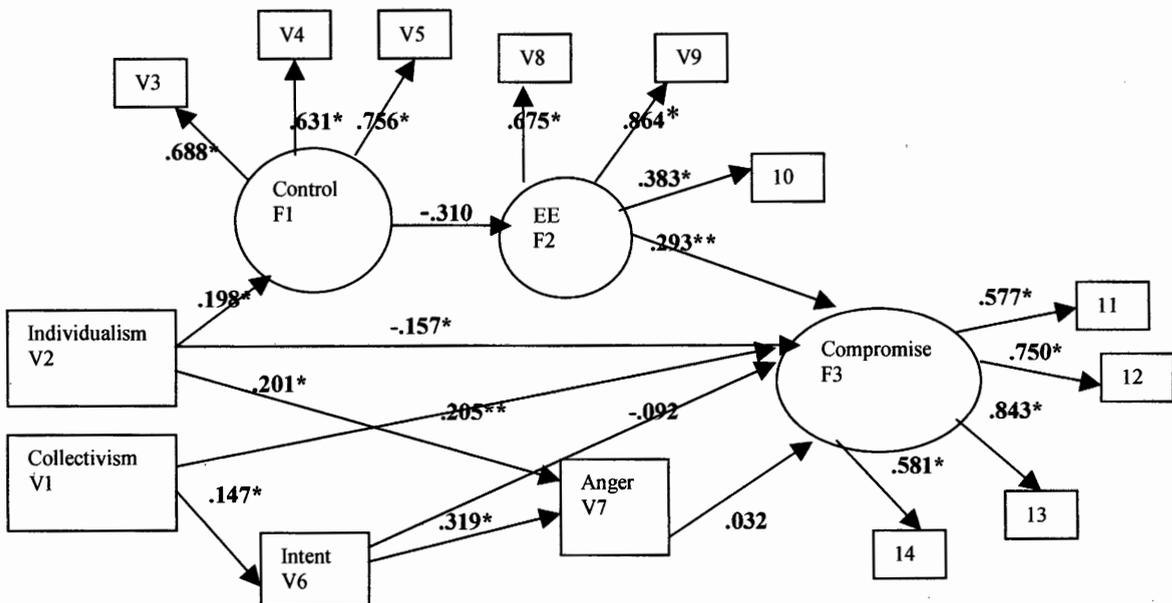
*Exploratory Hypothesis 4.* It is expected that there may be an interaction effect between ethnicity/culture and the perception of in-group versus out-group target on conflict resolution styles as well as the attributions, and interpersonal emotions. In order to test this hypothesis, factorial ANOVAs were performed for the conflict resolution styles, the attribution of controllability and intentionality for the Anglo and Latino subjects' judgment of an in-group versus an out-group opponent. The target individual (whose grandparents were from Mexico or Washington State) vignette identified the in-group and out-group distinction. Based on the results of factorial ANOVA, the current study did not show any significant interaction effects between the in-group and out-group biases and the ethnicity of the subject on the conflict resolution styles.

Discussion

The purpose of this study was to examine the way in which cultural value orientations such as individualism and collectivism influenced styles of conflict resolution directly and through the attribution-emotion processes and the interpersonal emotions that mediate preferences. Based on previous research (Pearson & Stephan, 1998) it was proposed that cultural orientation would be related to certain styles of conflict resolution. This hypothesis was supported. However understanding the role of the mediating effects of attributions and interpersonal emotions on conflict resolution styles seemed to be more complex—although not unexpected when theory is considered. Specifically, the finding that higher scores on one of the value orientations were related to one of the attribution processes but not the other has important implications theoretically. Thus when predicting how people prefer to handle conflict, this study showed that it is important to consider both the value orientations of the individual as well as the attributional properties and emotional processes that are most relevant for the corresponding value orientation.

Results from this study support the view that the compromising and the dominating approach to conflict resolution are determined partly by differences in value orientation. It was found that the compromising style of resolution was a positive function of the collectivist value orientation and a negative function of the individualist value orientation. The dominating style was significantly influenced by the individualist value orientation. The way in which the attribution processes mediated these relationships were not only complex but also challenged previous theories in attribution research. Consistent with theory, (Betancourt & Blair, 1992) this study suggested that the perception of controllability did not necessarily imply intentionality. However among other differences to previous studies, the present research revealed that controllability and intentionality are influenced by different anteceding variables. For instance the

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perception of intentionality was a significant function of the collectivist value orientation, but not necessarily the individualist value orientation. For individualism, the perception of controllability was more salient in determining the dominating style of resolution.

Moreover, the dominating approach to handling conflict seemed to be a function of individualism both directly and indirectly, as well as collectivism indirectly. For instance collectivism indirectly influenced the dominating style through the attribution of intentionality toward their opponent. Intentionality was significantly associated with anger, resulting in a preference for a dominating approach to conflict. On the other hand, the perception of controllability was a better mediator between individualism and the dominating approach.

The direct and indirect predictors of the compromising approach were not exactly the same (see Figure 10). As discussed earlier the compromising style was a negative function of individualism and a positive function of collectivism. Although collectivism has traditionally been associated with empathic emotions, the results of this study did not show a strong support for this relationship. However consistent with past studies, controllability negatively influenced empathic emotions (see Betancourt & Guthrie, submitted). Furthermore, empathic emotions influenced the compromising style of resolution. To clarify, it appears that the compromising style of resolution is directly influenced by collectivism and directly and indirectly by individualism through the perceptions of controllability, and empathic emotions.

In this study the way the mediating variables (e.g. attribution-emotion processes) work in reference to the theoretical construct of the collectivist value orientation was somewhat unexpected, however it also sheds light into unexplored theoretical aspects of this value orientation. These findings that the value orientations may relate to one form of the attribution processes and not the other has various implications for theory and future research.

Traditionally (Betancourt & Blair, 1992) controllability and intentionality has been highly correlated. Essentially the more intent is attributed; the more control is perceived, leading to violence in responding. In the current study, controllability and intentionality are correlated, however only intentionality is affected by collectivism, while controllability is more affected by individualism. One question it may raise is that it seems paradoxical that collectivists who have been traditionally seen as having and perceiving lower levels of personal controllability in their environments, would be more likely to make attributions of intentionality. Stated differently, how could subjects with higher scores on collectivism perceive more intentionality toward an opponent when in general they may not attribute much personal control to the individual? There may be several explanations, but two main possibilities stand out.

First it has been observed that the internal structure of the collectivist value orientation is the "relational mode" (Kim, 1994). In this structure, there are fluid boundaries between individuals. Each individual is responsible for perceiving the needs of the people around him or her without the other having to utter the need. Collectivism tends to be more field dependent in the sense that there is an unspoken assumption that others are as aware of the social environment just as much as one is. Theoretically, they may be more likely to believe that every individual has the responsibility to be aware of their context in order to maintain social harmony. When the other engages in something that is discordant to the social harmony, a person high on collectivism may be more likely to assume that the other acted out with intent because he or she if in that situation would be more sensitive to the social situation. Collectivism, which is relationally oriented values the awareness, concern and the fulfilling the needs, feelings, and thoughts of others in their environment.

Another aspect of the collectivist structure provides additional explanation for the paradoxical results. For example there is evidence that collectivists take into account the

social context and the social roles ascribed to each individual when making judgments and forming attributions of the other (Menon, Morris, Chiu, & Hong, 1999). In the current study, subjects scoring higher on collectivism may have understood his or her role as the group leader in the context of a hierarchical relationship that ascribed authority to the subject. Within the collectivist culture, deference to authority is essential to achieve the common goals of the group. The fact that the target individual neglected the needs of the group may have prompted the belief that the target's behaviors are intentional, since he is not conforming to the interests or expectations of the group or the group leader.

Although the relationships among the attribution processes, culture, and preference for conflict resolution strategies appear to be more complex than expected, this study found support for the importance of directly identifying what it is about culture and how is that it influences psychological processes and behaviors. This study showed that the ethnicity of the subject did not make a significant difference in the attribution processes, or conflict resolution styles. Betancourt and Lopez (1993) have strongly argued for directly measuring *what* it is about culture that contributes to the differences in traditional psychological processes. This study directly measured the dimensions of collectivism and individualism to account for differences in attribution processes and conflict resolution styles. It will be noted next, however, that there are several limitations to this study.

Although the results in this particular study are consistent theoretically, several limitations must be considered. First, the participants in the study were a selective sample of college students and not representative of the larger population. Second the paper and pencil method was not an ideal condition to gain accurate responses by the subjects. Oyserman, Coon, & Kemmelmeier (2002) have made some criticisms of the direct assessment approach to the individualism and collectivism dimensions. First they stated that the direct measure approach assumes that the cultural frame is something

respondents can report, a form of "declarative knowledge (e.g. beliefs, attitudes, beliefs, and values)" rather than implicit social practices that respondents engage in daily life that may not always be reported by the subject. Second, the authors criticized that the vague qualifiers on the Likert scales assume the anchors (e.g. strongly agree or strongly disagree) means the same for all respondents.

Another limitation of the study not directly relevant to the main hypotheses involved the in-group out-group manipulation, in this context the origins of the grandparents. The effects of this manipulation may not have been a strong enough distinction for students to consider their classmates an in-group or an out-group member. This distinction of in-group an out-group may have also been undermined by the fact that the opponent in the conflict is still technically the "in-group" with the subject.

Future directions in this research area should consider the role of culture in conflict, as well as the relevant psychological processes, especially in an increasing multicultural environment such as the U.S. One situation in which these results may be most applicable is in schools. The current mediation programs operating in the school systems mainly focus on teaching techniques in conflict situations that may enhance children's self-esteem as well as self-concept (Webster, 1991). They have ignored or minimized the role of culture in conflict situations that may lead to differences in handling conflicts, as well as the escalation or de-escalation of the conflict.

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Imagine that you are involved in a group project worth two-thirds of your course grade in a class you very much want a high grade. The Instructor will give the grade on this project to the group as a whole. Your instructor has designated you as the group's leader and it is your responsibility to make sure the project is completed by the deadline. All of the group member's except one have done very well. This one member is so behind that the group's grade is in jeopardy. It has been difficult to get this member to complete his part of the project and the remaining time is extremely limited. This person's explanation for not completing the work is that his grandparents from Washington *(or Mexico)* were visiting and he had to spend time with them and the family. At this point it is not clear how the group project can be completed and submitted in time. This has created a difficult conflict between you, the group leader, and this individual. Your expectation for a high grade in the class is at risk. The group cannot get a good grade despite everyone else's efforts unless this person does his job. For this member to complete his part, he would have to do a term's worth of work in three days, which is virtually impossible without the help of the rest of the group.

**Instructions**

*After reading this episode, please keep this person in mind as you answer the following questions. Circle the number that best represents how you are likely to respond as the group leader to the situation with your classmate. Please think about the conflict situation with your classmate as you answer each questions.*

**Directions:** Circle the number that best represents how you are likely to respond as the group leader to the situation with your classmate. Please think about the conflict situation with your classmate as you answer each questions.

*In this situation, I would:*                    *1= Very Unlikely        5= Very Likely*

1.  Try to investigate the issue with this individual to find a          1    2    3    4    5
    solution acceptable to us.

2.  Try to satisfy the needs of the group member.          1    2    3    4    5

3.  Attempt to avoid being "put on the spot" and try to          1    2    3    4    5
    keep my conflict with this person to myself.

4.  Try to integrate my ideas with the group member
    to come up with a decision jointly.          1    2    3    4    5

5.  Try to work with this person to find a solution to the
    problem that satisfy our expectations.          1    2    3    4    5

6.  Avoid an open discussion of my differences with this          1    2    3    4    5
    individual.

7.  Try to find a middle course to resolve the impasse.          1    2    3    4    5

8.  Use my influences as the group leader
    to get my ideas accepted.          1    2    3    4    5

9.  Use my authority to make a decision in my favor.          1    2    3    4    5

10. Accommodate to the wishes of the group member.          1    2    3    4    5

11. Give into the wishes of the group member.          1    2    3    4    5

12. Exchange accurate information with the group member          1    2    3    4    5
    to solve the problem together.

13. Allow concessions to the group member.          1    2    3    4    5

14. Propose a middle ground for breaking any deadlocks
    with this individual.          1    2    3    4    5

15. Negotiate with the individual so that a compromise
    can be reached.          1    2    3    4    5

16. Try to stay away from disagreements with the group
    member.          1    2    3    4    5

17. Avoid an open encounter with this person.          1    2    3    4    5

18. Use my expertise to make a decision in my favor.          1    2    3    4    5

19. Go along with propositions this group
    member could make.          1    2    3    4    5

| | | | | | | |
|---|---|---|---|---|---|---|
| 20. Use "give and take" so that a compromise can be made. | 1 | 2 | 3 | 4 | 5 |
| 21. Be firm in pursuing my side of the issue. | 1 | 2 | 3 | 4 | 5 |
| 22. Try to bring all our concerns out in the open so that the issues can be resolved in the best possible way. | 1 | 2 | 3 | 4 | 5 |
| 23. Collaborate with the group member to come up with a decision acceptable to us. | 1 | 2 | 3 | 4 | 5 |
| 24. Try to satisfy the expectations of the group member. | 1 | 2 | 3 | 4 | 5 |
| 25. Use my power as group leader to win the situation. | 1 | 2 | 3 | 4 | 5 |
| 26. Try to keep my disagreement with this individual to myself in order to avoid hard feelings. | 1 | 2 | 3 | 4 | 5 |
| 27. Try to avoid unpleasant exchanges with this individual. | 1 | 2 | 3 | 4 | 5 |
| 28. Try to work with the group member for a proper understanding of a problem. | 1 | 2 | 3 | 4 | 5 |

*Please continue completing the questionnaire.*

PLEASE ANSWER THE FOLLOWING QUESTION BASED ON THE EPISODE YOU READ

*QUESTION:*
** **In your opinion, why did this individual not complete his assignment? Please write down what you think may be the cause for what he did.**

Now, having in mind what you just wrote concerning the reason for what this person did, answer the following questions by circling your answers in the 1-5 scale presented below.

***Is the cause you indicated above something that...***

1. Reflects an aspect of the person    5------4------3------2-------1   Reflects an aspect of the situation

2. Manageable by him                   5-------4------3------2------1    Not manageable by him

3. Permanent                           5------4------3------2-----1      Temporary

4. He can regulate                     5------4------3------2------1     He cannot regulate

5. Over which others have control      5------4------3------2------1     Over which others have no control

6. Inside of him                       5------4------3------2------1     Outside of him

7. Stable over time                    5------4------3------2------1     Variable over time

8. Under the power of other people     5------4------3------2------1     Not under the power of other people

9. Something about him                 5------4------3------2------1     Something about others

10. Over which he has power            5------4------3------2------1     Over which he has no power

11. Unchangeable                       5------4------3------2------1     Changeable

12. Other people can regulate          5------4------3------2------1     Other people cannot regulate

***Please continue the questionnaire starting on the next page.***

Please answer the following questions using the corresponding 1-5 scales by circling the numbers.

1. How appropriate do you think this individual's behavior was?

1------------------------2--------------------3--------------------4-----------------5

*Very Inappropriate*                                                    *Very Appropriate*

2. How much at fault do you think this individual was for not completing his work?

1--------------------2--------------------3--------------------4-----------------5

*Completely at fault*                                                    *No fault at all*

3. To what extent do you think this individual should be held responsible for what has happened?

1------------------2--------------------3--------------------4-----------------5

*Definitely responsible*                                            *Definitely Not Responsible*

4. Do you think this individual meant to cause a problem to the group?

1------------------------2--------------------3--------------------4-----------------5

*Definitely intended*                                                *Definitely unintentional*

5. In your opinion, do you think he could have anticipated for foreseen the situation?

1------------------------2--------------------3--------------------4-----------------5

*Definitely Foreseeable*                                            *Definitely Unforeseeable*

Now, as the group leader, indicate how much you would experience the following feelings toward this individual:

1. Anger

1--------------2---------------3------------4-------------5

*Very Much*         *Much*              *Some*           *Little*              *None*

2. Frustration

1--------------2---------------3------------4-------------5

*Very Much*         *Much*              *Some*           *Little*              *None*

3. Disappointment

1--------------2---------------3------------4-------------5

*Very Much*         *Much*              *Some*           *Little*              *None*

## 4. Compassion

1------------2---------------3------------4------------5
*Very Much*          *Much*                    *Some*                    *Little*                    *None*

## 5. Sympathy

1------------2---------------3------------4------------5
*Very Much*          *Much*                    *Some*                    *Little*                    *None*

## 6. Pity

1------------2---------------3------------4------------5
*Very Much*          *Much*                    *Some*                    *Little*                    *None*

***Please continue**

Directions:  Answer the Following Questions

1.  What would you do if the group did poorly because of the problem related to this individual's part of the job? Please write down what you would do.

2.  What do you think the other members of the group would do?

*******Please Continue and Finish the Questionnaire starting on the next page.**

## RATE EACH OF THE FOLLOWING STATEMENTS USING THE SCALE PRESENTED. CIRCLE YOUR ANSWER

1. My happiness depends very much on the happiness of those around me.

1--------------------2--------------------------3-----------------------------4------------------------------5
**Strongly Disagree**                                                                                    **Strongly Agree**

2. Winning is everything.

1--------------------2--------------------------3-----------------------------4------------------------------5
**Strongly Disagree**                                                                                    **Strongly Agree**

3. I usually sacrifice my self-interest for the benefit of my group.

1--------------------2--------------------------3-----------------------------4------------------------------5
**Strongly Disagree**                                                                                    **Strongly Agree**

4. It annoys me when other people perform better than I do.

1--------------------2--------------------------3-----------------------------4------------------------------5
**Strongly Disagree**                                                                                    **Strongly Agree**

5. It is important for me to maintain harmony within my group.

1--------------------2--------------------------3-----------------------------4------------------------------5
**Strongly Disagree**                                                                                    **Strongly Agree**

6. It is important to me that I do my job better than others.

1--------------------2--------------------------3-----------------------------4------------------------------5
**Strongly Disagree**                                                                                    **Strongly Agree**

7. I like sharing little things with my neighbor.

1--------------------2--------------------------3-----------------------------4------------------------------5
**Strongly Disagree**                                                                                    **Strongly Agree**

8. I enjoy working in situations involving competition.

1--------------------2--------------------------3-----------------------------4------------------------------5
**Strongly Disagree**                                                                                    **Strongly Agree**

9. The well being of my co-workers is important to me.

1--------------------2--------------------------3-----------------------------4------------------------------5
**Strongly Disagree**                                                                                    **Strongly Agree**

10. I often do my "own-thing".

1--------------------2--------------------------3-----------------------------4------------------------------5
**Strongly Disagree**                                                                                    **Strongly Agree**

11. If a relative were in financial difficulty, I would help within my means.

1--------------------2--------------------------3-----------------------------4------------------------------5
**Strongly Disagree**                                                                                    **Strongly Agree**

12. Competition is the law of nature.

1--------------------2------------------------3---------------------------4-----------------------------5
*Strongly Disagree*                                                          *Strongly Agree*

13. If a co-worker gets a prize I would feel proud.

1--------------------2------------------------3---------------------------4-----------------------------5
*Strongly Disagree*                                                          *Strongly Agree*

14. Being a unique individual is important to me.

1--------------------2------------------------3---------------------------4-----------------------------5
*Strongly Disagree*                                                          *Strongly Agree*

15. To me, pleasure is spending time with others.

1--------------------2------------------------3---------------------------4-----------------------------5
*Strongly Disagree*                                                          *Strongly Agree*

16. When another student does better than I do, I get tense and aroused.

1--------------------2------------------------3---------------------------4-----------------------------5
*Strongly Disagree*                                                          *Strongly Agree*

17. Children should be taught to place duty before pleasure.

1--------------------2------------------------3---------------------------4-----------------------------5
*Strongly Disagree*                                                          *Strongly Agree*

18. Without competition it is not possible to have a good society.

1--------------------2------------------------3---------------------------4-----------------------------5
*Strongly Disagree*                                                          *Strongly Agree*

19. I feel good when I cooperate with others.

1--------------------2------------------------3---------------------------4-----------------------------5
*Strongly Disagree*                                                          *Strongly Agree*

20. Some people emphasize winning; I am not one of them.

1--------------------2------------------------3---------------------------4-----------------------------5
*Strongly Disagree*                                                          *Strongly Agree*

21. It is important to me that I respect decisions made by my group.

1--------------------2------------------------3---------------------------4-----------------------------5
*Strongly Disagree*                                                          *Strongly Agree*

22. I rather depend on myself than others.

1--------------------2------------------------3---------------------------4-----------------------------5
*Strongly Disagree*                                                          *Strongly Agree*

23. Family members should stick together, no matter what sacrifices are required.

1--------------------2-------------------------3---------------------------------4------------------------------5
*Strongly Disagree*                                                    *Strongly Agree*

24. I rely on myself most of the time; I rarely rely on others.

1--------------------2-------------------------3---------------------------------4------------------------------5
*Strongly Disagree*                                                    *Strongly Agree*

25. Parents and children must stay together, as much as possible.

1--------------------2-------------------------3---------------------------------4------------------------------5
*Strongly Disagree*                                                    *Strongly Agree*

26. My personal identity independent from others is very important to me.

1--------------------2-------------------------3---------------------------------4------------------------------5
*Strongly Disagree*                                                    *Strongly Agree*

27. It is my duty to take care of my family, even when I have to sacrifice what I want.

1--------------------2-------------------------3---------------------------------4------------------------------5
*Strongly Disagree*                                                    *Strongly Agree*

28. My personal identity is very important to me.

1--------------------2-------------------------3---------------------------------4------------------------------5
*Strongly Disagree*                                                    *Strongly Agree*

29. I am a unique person, separate from others.

1--------------------2-------------------------3---------------------------------4------------------------------5
*Strongly Disagree*                                                    *Strongly Agree*

30. I respect the majority's wishes in groups of which I am a member.

1--------------------2-------------------------3---------------------------------4------------------------------5
*Strongly Disagree*                                                    *Strongly Agree*

31. I enjoy being unique and different from others.

1--------------------2-------------------------3---------------------------------4------------------------------5
*Strongly Disagree*                                                    *Strongly Agree*

32. It is important to consult close friends and get their ideas before making a decision.

1--------------------2-------------------------3---------------------------------4------------------------------5
*Strongly Disagree*                                                    *Strongly Agree*

**PLEASE ANSWER THE FOLLOWING QUESTIONS AND MARK YOUR RESPONSE.**

1.) _____ Male _____ Female

2.) Age _____

3.) What is your highest level of education your ethnic completed?

     _____ High School Diploma Incomplete

     _____ High School Diploma or equivalent

     _____ AA Degree or Trade School

     _____ Some College, incomplete

     _____ Bachelor degree or equivalent

     _____ Graduate Degree

4. Which of the following best represents background?

     _____ White/ Anglo-American (Non-Latino)

     _____ Black/ African American (Non-Latino)

     _____ Asian-American

     _____ Latino/ Hispanic American (Any race)

     _____ Other (specify) _____

5.) Were you born in the United States? _____ Yes _____ No
     If no, indicate the year you immigrated to the United States _____

6.) Marital Status (Check the appropriate response)

     _____ Single (never married)

     _____ In a Serious Relationship

     _____ Divorced or Separated

     _____ Widowed

     _____ Married, ethnicity of spouse _____ how long? _____

7. Please state your current occupation _____

8. What is your religious orientation/ preference?

     _____ Christian (Catholic, Protestant)

     _____ Jewish

     _____ Muslim

     _____ Buddhist

     _____ Hindu

     _____ None/ No Preference
     _____ Other (specify) _____

Dear Student,

You are invited to participate in a study on conflict resolution. The purpose of this study is to gain additional knowledge in how people handle conflict. Participation in this study is expected to take approximately 20-25 minutes. Involvement in this study requires the completion of a questionnaire. If you choose not to participate, please read quietly until the study is over. By participating in this study, you will be exposed to NO particular risks and you may receive course credit for your participation.

During the study, you have the freedom to withdraw without any consequences. Your participation is completely voluntary and you may also refuse to take part in the study without penalty. Your responses to the questionnaire will be strictly ANONYMOUS and will only be used as part of a group of respondents to the questionnaire. If you have any further questions regarding the study or experiment other concerns, you may contact the following people:

Gangaw Zaw, Student Investigator, or
Hector Betancourt, Ph.D Research Supervisor
(909) 558-8577 or
David Chavez, Ph.D Co-Investigator (909) 880-5572

*If you wish to contact an impartial third party not associated with this study regarding any complaint you may have about the study, you may contact the following for information and assistance:*

Office of Patient Relations
Loma Linda University Medical Center
Loma Linda, Ca. 92354
Phone (909) 558-4647

By checking below, I acknowledge that I freely consent to participate in this study and I am over 18. _____

Appendix C: Closing Statement

Thank you for your participation in this study. As we indicated in the cover letter you read in the beginning, the main purpose of the study is to better understand the way people handle conflict. The responses, all of which are anonymous, will be analyzed to compare large groups of participants. If you have any questions regarding this study, or if you are interested in the results and analyses we will be performing, please feel free to contact **Gangaw Zaw or** Dr. **Hector Betancourt,** in the **Department of Psychology** at Loma Linda University **(909) 558- 8577,** or Dr. **David Chavez (909) 880-5572, at** Cal State University, San Bernardino. You may also write to:

Gangaw Zaw
Department of Psychology
Loma Linda University
Loma Linda, Ca. 92350

Sincerely,

Gangaw Zaw