CULTURAL INFLUENCES ON COPING WITH PARENT-CHILD CONFLICT

BY

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DISSERTATION

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ABSTRACT

The present study tested the role of traditional family values (*familism*) on the processes associated with coping with parent-child conflict among Mexican and Mexican American college students. It was hypothesized that traditional family values would moderate: 1) the relation between parent-child conflict and appraisals of threat and, 2) the relation between threat appraisals and psychological distress. Two additional hypotheses tested the mediating effects of threat on the relation between parent-child conflict and psychological distress and the mediating effects of coping on the relation between threat and psychological distress. Data were obtained from college students in El Paso, TX ($n = 196$) and Ciudad Juarez, MX ($n = 199$). Self-report measures were used to assess traditional family attitudes, general levels of parent-child conflict, threat appraisals, coping styles, and psychological distress. As predicted, familism moderated the relation between conflict severity and threat appraisals. Specifically, the relation between parent-child conflict and threat appraisals was stronger at high levels of familism than at low levels of familism. However, familism did not moderate the relation between threat and distress. Study findings suggest the need to assess familism among Mexican and Mexican American young adults because of its important implications for psychological distress.

To my Mother, my Father and my Husband Chris
With all my Love

ACKNOWLEDGEMENTS

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Introduction

Mexican Americans are at high risk for mental health problems (USDHHS, 2001). Studies show that Mexican American children and young adults report higher levels of depressive symptoms, anxiety-related problems, drug use, and suicide compared to European American and African American youth (Glover, Pumariega, Holzer, Wise, & Rodriguez, 1999; Roberts & Chen, 1995). Although researchers cite high exposure to risk factors such as poverty and family conflict as a possible explanation for these grim statistics, little is known about how Mexican Americans cope with stress, and the factors that impact their reactions to stressful events. This is unfortunate given that researchers have shown that the impact of stress levels on mental health outcomes such as psychological distress should take into account appraisals and responses to stress. The present study addresses this gap in the literature with an empirical examination of Mexican and Mexican American young adults' levels of psychological distress using a stress-coping paradigm.

According to Lazarus and Folkman (1984), coping strategies are the "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (p. 141). Lazarus and Folkman's stress and coping model includes: a) the occurrence of a potentially stressful event, b) individuals' appraisals of the event – the individuals' cognitive evaluations of whether the event presents an actual threat and what might, or can, be done in response to the event, c) the implementation of a coping strategy, and d) the physical and mental health outcomes associated with the event (Slavin, Rainer, McCreary, & Gowda, 1991). Cognitive appraisals are particularly important because they

are hypothesized to mediate an individual's behavioral and emotional reaction to environmental demands.

Stress-Coping Processes among Mexican Americans

In the present study, the stress-coping model was used to examine how young adults of Mexican descent cope with parent-child conflict. Researchers have suggested that stress-coping processes provide a central framework for a multicultural approach to understanding human behavior and mental health (Slavin, et al., 1991). Likewise, Lazarus and Folkman (1984) suggested that "the way emotional reactions are expressed and managed hinges on the meaning and significance the *culture* gives to human transactions with the environment" (p. 228, italics added). Although recognizing the significance of culture on an individual's appraisals of events, Lazarus and Folkman did not test culture-related variables in their model of stress and coping, nor did they provide a framework for understanding its role.

To address the gap in clarity in terms of how ethnocultural background impacts stress-coping processes, Cervantes and Castro (1985) presented a modified conceptualization of the stress-coping model. In their model, an individual's culture influences a number of internal characteristics that impact coping outcomes by mediating the relation between stressors and cognitive appraisals. Cervantes and Castro included in this list of characteristics the individual's personality traits, adherence to traditional values and beliefs, and stage of acculturation.

A number of cultural beliefs and values have been identified as being important in Mexican culture and as potentially having an impact on appraisals and coping styles (Diaz-Guerrero, 1994; Triandis, Marin, Lisansky, & Betancourt, 1984; Unger, et al.,

2006). One of the most studied culture related constructs that is particularly relevant to the study of parent–child conflict as a stressor among Mexican origin populations is *familismo*. *Familismo* is defined as a sense of obligation to, and connectedness with, one's immediate and extended family (Cuellar, Arnold, & Gonzalez, 1995; Schwartz, 2007; Zayas & Solari, 1994). The tendency to rely on kin for emotional support, strong feelings of loyalty, solidarity, and attachment among family members are also aspects of familismo (Unger, et al., 2002; Unger, et al., 2006). Research has indicated that Mexican Americans are highly familistic because they rely on the family as a source of support in adverse situations and use the family as a major source of identity and self-worth (Parra-Cardona, Bulock, Imig, Villarruel, & Gold, 2006; Triandis, Marin, Hui, Lisansky, & Ottati, 1984). In addition, Latino adolescents report that their mothers are the individuals they most wish to please (Becerra & de Anda, 1984) and put great emphasis on avoiding conflict with family members (Freeberg & Stein, 1996). Given the culture's importance on avoidance of conflict with family members, respect towards elders, and strong use of family for social support, individuals who adhere strongly to these cultural norms should be less likely to view the use of coping strategies characterized by direct confrontation or assertion (i.e., primary control strategies) as acceptable responses to interpersonal conflict. In other words, familism is hypothesized to lead to lower levels of primary control coping strategies (Phinney, Kim-Jo, Osorio, & Vilhjalmsdottir, 2005).

In addition to the hypothesis that familism impacts coping choices, it can be hypothesized that adherence to familism will also influence the stress-coping processes by moderating the relation between the stressor and cognitive appraisals. Given the dictum that harmony among family members is primary, stressors involving family

conflict will likely be *appraised* as more threatening among individuals who subscribe to such beliefs or values. Similarly, it can be hypothesized that these threat appraisals will have stronger effects on the individual's levels of distress among more familistic individuals than among less familistic individuals. The present study sought to empirically test these hypotheses regarding the role of familism in the relation between parent-child conflict and psychological distress in Mexican young adults.

<center>*Parent-Child Conflict as Stressor*</center>

Among young adults and adolescents, interpersonal difficulties are common stressors (Ebata & Moos, 1994; Laursen & Collins, 1994). Although interpersonal stressors include those with siblings, friends, and romantic partners, the most common interpersonal conflicts among adolescents and young adults involve those with parents (Laursen, 1993; Raymond, Rhoads, & Raymond, 1980). Besides being most common, studies have found that parent-child conflict has detrimental effects on the well-being and adjustment of high school and college age youth and involve the highest levels of negative affect compared to conflict with friends and romantic partners (Laursen, 1993). Students who perceive high levels of conflict in their relationships with their parents often also report high levels of stress, anxiety, depression, and loneliness during college years (Brock, Sarason, Sanghvi, & Gurung, 1998; Sarason, Pierce, Bannerman, & Sarason, 1993). Family conflict rates are also linked to adolescent delinquency, behavior disorders, suicide attempt, low grades, and detachment from school (Berndt & Keefe, 1992; Jaycox & Repetti, 1993; Patterson & Bank, 1989). Among college students, parent-child conflict predicts negative alcohol-related consequences, and students who perceive higher levels of parent-child conflict report higher levels of depression and global

psychological distress than students reporting lower levels of conflict (Turner, Larimer, & Sarason, 2000).

Given the importance of the family unit among Mexican Americans (Parra-Cardona, et al., 2006; Triandis, Marin, Hui, et al., 1984), conflicts within the family have the potential to have particularly negative consequences for Mexican American young adults. However, few studies have examined the effects of parent-child conflict among Mexican Americans. Even fewer studies have examined the strategies Mexican American young adults use to cope with this type of stressor, or the factors affecting their coping choices. Phinney et al., (2005) found that ethnic minority students (including Mexican Americans) tended to use more compliance (i.e., conformed without question to parent's wishes or views) when confronted with conflict with their parents, compared to European Americans. Moreover, the authors found that adherence to the value of 'family interdependence' mediated the effect of ethnicity on the use of conflict resolution styles. These findings highlight the importance of family-related values as influential on the coping choices of minority adolescents dealing with parent-child conflict.

Study Overview and Hypotheses

Broadly, I tested the role of familism on a stress-coping model of the effects of parent-child conflict on psychological distress. Specifically, I hypothesized a moderating effect of familism on the relation between parent-child conflict and threat appraisals, and between threat appraisals and psychological distress. It was also hypothesized that familism would be significantly associated with lower use of primary control coping. Secondary hypotheses examined the mediating effects of threat appraisals on the relation between parent-child conflict and psychological distress, and the mediating effects of

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primary control coping on the relation between threat appraisal and psychological

distress. Table 1 lists the 6 study hypotheses.

Research Design and Methods

Data Collection Sites

Data were collected at public universities. Data for the Mexican American sample were collected in El Paso, TX (The University of Texas at El Paso). Data for the Mexican sample were collected in Ciudad Juarez, Chihuahua, MX (Universidad Autónoma de Ciudad Juárez). These sites were chosen to obtain a sample of participants of Mexican background with varying degrees of adherence to familism. Due to lower degrees of contact with traditional Mexican culture, it was expected that the Mexican American participants would show lower degrees of adherence to familism compared to the Mexican participants. Obtaining data from students with a broad range of scores on adherence to familism was desirable to increase the variance and hence the statistical power to test the hypothesized roles of familism in the stress-coping model.

The site for our Mexican American sample, the University of Texas at El Paso hosts 20,000 students and is located on the US-Mexico border. The demographic composition of the student body is 69% Hispanic, 14% Anglo, 2.4% African American, 1.3% Asian, 0.3% Native American, and 13% International Students. The Autonomous University of Juarez City, site of our Mexican sample, hosts approximately 18,000 students in the Mexican city of Ciudad Juarez which stands directly across the U.S. border from El Paso, Texas. Thus, both cities comprise one of the largest binational metropolitan areas in the world, with a combined population of 2.5 million people.

Participants and Procedures

Data from 395 college students were collected: 199 Mexican and 196 Mexican American participants. To eliminate bias due to outliers, data from three participants were

removed from the analyses because they were more than two standard deviations from the mean age (+40 years old). Although all other variables of interest were examined for outliers, no other outliers were identified. Thus, data from approximately 392 participants were analyzed (numbers differ slightly between analyses due to missing data).

Data were collected during the Spring of 2008. Mexican American participants were recruited through the Psychology Department subject pool and received course credit for their participation. The Mexican participants were asked to volunteer and were compensated monetarily ($5.00) for their participation given that they were not offered course credit.

Consent forms, approved by each University's Institutional Review Board, were signed by participants prior to participation. Participants completed the battery of self-report measures during group sessions (2 to 100 participants per session). On average, it took participants 50 minutes to complete all questionnaires. All data collection was monitored by the author and research assistants. All questionnaires and forms were available in English and Spanish. All 199 Mexican participants chose to fill out the materials in Spanish. All 196 Mexican American participants chose to fill out the materials in English.

Measures

Demographic Information

A demographics questionnaire was used to obtain participant's age, race/ethnicity, gender, school grade level, parental income, and educational level (see Appendix A).

Parent-Child Conflict Questionnaire (PCCQ)

The PCCQ is a measure created for this study to assess the severity of parent-child conflict experienced in the last 6 months. Students were asked to rate the severity of conflict in twelve domains empirically found to be the most common areas of conflict among college students and their parents: dating, friends, money, grades, time spent with family, work, household rules, responsibilities, drugs and alcohol, sex, and housing (Renk, et al., 2006). An "Other" category was added for participants to fill in any other disagreements that were not captured by the categories provided. Participants provided responses on a scale from 1 (*Not at all*) to 6 (*Extremely*). Answers were averaged across all conflict areas to create a distinct severity score. The Spanish version was created following recommendations by Matias-Carrelo et al., (2003) that included an initial translation of the scale, a qualitative review and evaluation by a small committee of bilingual clinicians and researchers, and pilot testing of the translated scale. (Appendix B)

Threat Appraisals (SAMA)

To assess cognitive appraisals, participants completed a modified version of the Threat Appraisals subscale of the Stress Appraisal Measure for Adolescents (SAMA; Rowley, Roesch, Jurica, & Vaughn, 2005). The SAMA's instructions were modified so that the answers reflected appraisals related to a parent-child conflict the participants had experienced in the 6 months prior to data collection. The scale has demonstrated good internal reliability and adequate convergent and discriminant validity with a sample of low SES English speaking Latino adolescents as demonstrated by its correlations with measures of depression, coping styles, and dispositional hope (Rowley, et al., 2005). Sample items of the SAMA (Appraisals of Threat subscale) include "I perceived stress as threatening," "The event has serious implications for my life". Participants were asked to

indicate their levels of threat appraisals using a 5-point scale from 0 (*Not at all*) to 4 (*A great amount*). The procedure suggested by Matias-Carrelo et al., (2003) was followed to create a Spanish translation of this scale. (Appendix C)

Coping (RSQ)

Responses to parent-child conflict were assessed using a modified version of the Responses to Stress Questionnaire (Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman, 2000), a measure designed to assess coping responses to stress. For the purpose of this study, only the Primary Control Subscale of the RSQ was used (see the 21-item scale in Appendix D). The Primary Control coping subscale consists of 9 items measuring active, approach-oriented strategies aimed at altering the specific stressors or one's emotional reactions to these stressors (e.g., problem solving). Sample items include, "I try to think of different ways to change the problem or fix the situation" and "I get help from other people when I am trying to figure out how to deal with my feelings." The RSQ has been shown to have good internal reliability and validity scores when used with adolescents and young adults (Connor-Smith, et al., 2000). Participants were asked to indicate, using a 4-point scale from 1 (*Not at all*) to 4 (*A lot*), to what extent they felt or did those things "when you had the disagreement with your mom or dad." As such, the scale does not specify a time frame. Although to our knowledge the RSQ has not been used with Mexican samples, a Spanish version created for a study in Spain has been found to have acceptable validity and reliability scores (Connor-Smith & Calvete, 2004).

Familism

To assess adherence to traditionalistic family values participants completed the Familism Scale (Lugo Steidel & Contreras, 2003). The Familism scale assesses

attitudinal familism (i.e., the individual's view of the importance of "a strong emotional bond with the family") using 18 items. English and Spanish versions of the scale have demonstrated good internal reliability and adequate convergent and discriminant validity with a sample of low SES Latino adults as demonstrated by its correlations with measures of acculturation (Lugo Steidel & Contreras, 2003). Sample items on the Familism Scale include "A person should live near his or her parents and spend time with them on a regular basis," "Aging parent should live with their relatives" and "Children should live with their parents until they get married" (see Appendix E). The scale specifies no time frame. Participants were asked to indicate to what extent they agree with each statement using a 10-point scale from 1 (*Strongly disagree*) to 10 (*Strongly agree*). An overall "Familism" score was also obtained by calculating the mean.

Psychological distress (CES-D)

The Center of Epidemiological Studies – Depression Scale (Radloff, 1977) was used to measure levels of psychological distress experienced in the week prior to data collection. The CES-D was designed for use in non-clinical populations. The initial validation of the scale showed high internal consistency, test-retest reliability, concurrent validity, and construct validity in the general population (Radloff, 1977) and with Latino adolescents (Crockett, Randall, Shen, Russell, & Driscoll, 2005). The Spanish version has also demonstrated adequate validity and reliability in Mexican groups (Masten, Caldwell-Colbert, Alcala, & Mijares, 1986). The CES-D consists of 20 items. Sample items on the CES-D include "I was bothered by things that usually don't bother me", and "I felt lonely". Participants were asked to indicate, using a 4-point scale from 1 (*Rarely or none of the time*) to 4 (*Mostly or almost all the time*), to what extent they felt this way

during the week prior to data collection (Appendix F). Answers to the 20 items were summed to obtain a measure of each participant's level of psychological distress.

Reliability Analysis by Language

Cronbach's alphas were calculated for all the scales by site. Internal consistency of the measures ranged from moderate ($\alpha = .73$) to very good ($\alpha = .97$). No scales were excluded due to low internal consistency.

Data Analysis Strategy

Measured Variable Path Analyses tested the study hypotheses. All path analyses were conducted with LISREL Version 8.8 (Jöreskog & Sörbom, 1998). Model fit was evaluated using the chi-squared goodness-of-fit statistic (χ^2). Because the chi-squared statistic is a function of the sample size, with large sample sizes (i.e., over 200 cases) chi-squared statistics are almost always significant, creating an artificial tendency to reject the model even if it were only marginally inconsistent with the data (Raykov & Marcoulides, 2006). As such, the root mean square error of approximation (RMSEA) and the comparative fit index (CFI) and were also used to measure the fit of the models. The RMSEA evaluates the overall discrepancy between the observed and model-implied covariances while taking into account the model's simplicity. The CFI is a measure of incremental fit that evaluates a model's absolute or parsimonious fit relative to a baseline model, usually the null (independence) model. Typically, models with CFI values greater than .95 and RMSEA values less than .05 are considered good fits to the data (Hu & Bentler, 1999). To examine the moderation hypotheses of familism, interaction terms were created and included as measured variables in the Path Models. Creating interaction terms is a preferred method over dichotomizing the data when examining continuous

variables because it can drastically lower statistical power, may lead to "high" and "low"

groups that do not represent actual high and low groups in the populations of interest, and

may lead to distorted interaction effects (Allison, Gorman, & Primavera, 1993).

Results

Preliminary Analyses

Means, standard deviations, and correlations by sample for the main variables of interest are presented in Table 2. As expected, parent child conflict severity was positively correlated with appraisals of threat and with psychological distress. Appraisals of threat were positively correlated with use of primary control coping and psychological distress. To test if correlations differed by site, *r*-to-*z* transformations were calculated. None of the differences in correlations between sites were large enough to achieve statistical significance.

One-way ANOVA's were computed for each variable of interest to assess site differences. A statistically significant difference in age was observed between the Mexican (*M* = 20.8) and Mexican American (*M* = 19.9, *F* (1, 374) = 9.4, *p* < .05) samples. A significant difference was also found in reports of primary control coping with Mexican American participants reporting significantly higher scores (*M* = 2.8, *SD* = 0.7) than the Mexican participants (*M* = 2.5, *SD* = 0.6; *F* (1, 371) = 9.3, *p* < .05; *Cohen's d* = -0.5). There were no other significant mean differences between the two samples.

Path Analyses

Multigroup analyses were used to examine the potential moderating effects of site, that is, El Paso vs. Ciudad Juarez (Byrne, 2001). To formally examine whether the full path model was moderated by site, we compared the fit of an unconstrained path model to that of a constrained model. In the latter, the path loadings were constrained to be equal across the Ciudad Juarez (Mexican) and El Paso (Mexican) subsamples, while in the former the path loadings are free to vary across samples (see Kline, 2004).

Compared to the unconstrained model, the constrained model showed a significant decrease in fit, as assessed by chi-squared change test ($\Delta\chi^2$ (10) = 19.06, $p < .04$). When specific parameter estimates were unconstrained to conduct a more fine-grained analyses of site differences, significant increments in fit were obtained only when two parameters were unconstrained (1) the parent-child conflict to threat appraisals ($\Delta\chi^2$ (1) = 5.2, $p = .02$), and (2) the threat appraisals to coping. However an examination of other fit indices suggested that the differences in fit between the constrained and unconstrained models were small: RMSEA = .07 versus .08, and CFI =.91 versus .94, for the constrained and unconstrained models respectively. Furthermore the constrained models had a good fit. Taken together, the multigroup analyses findings suggest that it is appropriate to combine the two samples for the rest of the analyses.

For parsimony, the results of the multiple models for each hypothesis are shown together with standardized path coefficients in Figure 1. Path coefficients of direct (i.e., unmediated) effects are shown in parentheses.

Moderating Role of Familism

To test the moderating role of familism, a model was specified in which variables were included representing the interaction terms between (a) familism and conflict severity, and (b) familism and threat appraisals. As in linear regression, when adding an interaction term in a Path Model to test for moderation, the direct paths (main effects) of the two interacting variables must also be added. Thus, in the specified full model direct paths from familism to threat and to psychological distress were added as covariates (see Figure 1). The fit of the model was good, χ^2 (5) = 4.42, $p= .49$, RMSEA = 0.0, CFI = 1.00. However, only the familism X conflict interaction to threat appraisals path

coefficient was significant ($\beta = .12$, $t = 2.49$, $p < .05$), indicating that familism moderates the relationship between parent child conflict and threat appraisals (Hypothesis 1) but not the relation between threat appraisals and psychological distress (Hypothesis 2). In addition, there was no main effect of familism on primary control coping (Hypothesis 3).

Following Aiken and West (1991), the interaction was interpreted by solving the unstandardized regression equation to predict threat appraisals from parent child conflict severity in the context of high (one standard deviation above the mean), medium (at the mean), and low (one standard deviation below the mean) levels of familism. Decomposition of the interaction revealed that the strength of association between parent child conflict severity and appraisals of threat was stronger in the high familism group ($\beta = .57$, $t = 8.73$, $p < .001$), followed by the medium familism group ($\beta = .48$, $t = 10.687$, $p < .001$) and the low familism group ($\beta = .40$, $t = 6.74$, $p < .001$). Figure 2 shows the simple slopes for the relation between parent child conflict severity and threat appraisals at the three levels of familism. For all levels, the slopes differ significantly from zero indicating that the relation between parent child conflict severity and threat appraisals is decreased but not eliminated by low adherence to familism.

Tests for threat appraisals as mediator of the association between conflict severity and psychological distress

To examine the role of threat appraisals as a mediator of the relation between conflict severity and psychological distress (Hypothesis 4), a model in which only a direct effect from parent child conflict to distress was first specified (i.e., a model in which the paths from parent child conflict to threat appraisals and from threat appraisals to distress were constricted to zero). This direct effect model showed a poor fit to the

data, $\chi^2 (7) = 128.17$, $p < .01$, RMSEA=0.20, CFI= .51. This model was then compared to one in which threat appraisals was specified as a mediator in the relation between conflict and psychological distress. The fit of this model was excellent, $\chi^2 (5) = 4.42$, $p = .49$, RMSEA = 0.0, CFI = 1.00. In addition, all path coefficients (from conflict to threat, from threat to distress, and conflict to distress) were significant.

Finally, the fit of this model was compared to a model in which the path from parent child conflict to distress was constrained to zero (a complete mediation model). Because this constrained model is a nested version of the model without the constraint, a chi-squared difference test was conducted. The model with the constrained path produced a significantly larger chi-squared value than the unconstrained model, demonstrating a decrement in fit from the unconstrained model $\Delta\chi^2 (1) = 11.79$, $p < .001$. Given that the conflict to distress path significantly improved the fit of the model, threat appraisals partially mediate this relationship.

Strength of the mediation effect was assessed using the Sobel test of significance of mediation. First, consistent with mediation, the indirect effect of parent-child conflict on psychological distress was significant (IE =.15, $Z = 5.83$, $p < .001$; Sobel 1982, 1986). Second, the direct effect of conflict severity on psychological distress was reduced, but remained significant ($\beta = .18$, $t = 3.41$, $p < .05$) when threat appraisals were included in the model. Finally, the effect proportion (indirect effect/total effect; Shrout & Bolger, 2002) indicated that 48% of the total effect of conflict severity on psychological distress was accounted for by threat appraisals. Taken together, these indicators suggest that threat appraisals partially mediated the relation between parent-child conflict and psychological distress (Hypothesis 4).

Tests for coping as mediator between threat appraisals and psychological distress

To examine the role of primary control coping as a mediator (Hypothesis 5), a model in which only a direct effect from threat appraisal to distress was first specified (i.e., a model in which the paths from threat to coping and from coping to distress were constricted to zero). This direct effect model showed a poor fit to the data, χ^2 (7) = 35.10, $p < .001$, RMSEA=0.10, CFI= .87. This model was then compared to one in which primary control coping was specified as a mediator in the relation between threat appraisals and psychological distress. As shown in Table 3, this model also had an excellent fit with the data, χ^2 (5) = 4.42, p= .49, RMSEA = 0.0, CFI = 1.00. In addition, all path coefficients (from threat to distress, threat to primary coping, and primary coping to distress) were significant. Finally, a model in which the threat to distress path was constrained to zero was compared to the model in which the path was not constrained. The unconstrained model provided a significant improvement in fit over the first model, $\Delta\chi^2$ (1) = 38.86, $p < .001$. Given that the threat to distress path provides a significant improvement to the fit of the data, we can conclude that there is no mediation. Thus, results did not support the primary coping as mediator hypothesis (see Figure 1).

In sum, the results show that familism moderated the relation between parent child conflict severity and threat appraisals (Hypothesis 1) but did not mediate any other relation in the model. In addition, we found supportive evidence for the partial mediating effects of threat appraisals on the relation between parent-child conflict and psychological distress, but no evidence of mediation of the relation between threat appraisals and psychological distress by coping.

Discussion

Mental health researchers have highlighted the need to include culturally relevant constructs in stress and coping models to identify the impact of culture on individual's responses to stressful events (Cervantes & Castro, 1985; Slavin, et al., 1991). However, empirical research that identifies which culturally relevant constructs are important and how these constructs are linked to mental health outcomes among Latinos is scarce. To address this gap in the literature, this study examined associations between the culturally relevant construct of familismo and psychological distress by testing familism's role in a model that links parent-child conflict, threat appraisals, primary control coping, and psychological distress.

Role of Threat Appraisals in the Stress-Coping Model

Previous research has shown that cognitive appraisals partially explain (mediate) the relation between stressors and mental health outcomes. The importance of cognitive appraisals has been recognized as studies have found that how individuals perceive an event affects their emotional and behavioral reactions (Lengua & Long, 2002; Lengua, Sandler, West, Wolchik, & Curran, 1999; Pakenham & Rinaldis, 2001; Peacock & Wong, 1993; Schneider, 2008). In this study, we replicated these findings while adding to the literature by finding evidence that appraisals of threat mediate the relation between parent-child conflict and levels of psychological distress. Although appraisals of threat among youth have previously been found to mediate the relation between interparental conflict and internalizing problems (Grych, Fincham, Jouriles, & McDonald, 2000), to our knowledge this is the first study to examine the impact of threat appraisals in the context of parent-child conflict. In addition, to our knowledge

this is the first study to examine the mediating properties of threat appraisals in a sample of Mexican origin emerging adults. These unique features of the present study are noteworthy given the importance of family relations among Mexican American youth, particularly the parent-child dyad (Becerra & de Anda, 1984; Parra-Cardona, et al., 2006; Triandis, et al., 1984), and the strong effects that parent-child conflict have on emerging adult's mental health outcomes (Brock, et al.,1998; Sarason, et al.,1993).

Role of Familism in Stress-Coping Model

In our sample of Mexican and Mexican American college students, familism moderated the relation between parent-child conflict severity (defined as a composite of the severity of conflicts experienced across a number of domains) and threat appraisals (defined as their perceptions of threat as a result of a specific conflict experienced). Specifically, results showed that the relation between parent-child conflict severity and threat appraisals was significantly stronger at higher levels of familism than at low levels of familism. Thus, a traditionalistic value orientation is a risk factor when the family context includes high levels of parent-child conflict. These results seem to be contrary to previous research on traditional family values that have found familism to have beneficial (protective) effects on mental health (Fuligni, Tseng, & Lam, 1999; German, Gonzales, & Dumka, 2008).

One way to explain these seemingly contradictory findings is by comparing our operationalization of the familism construct with those of others. In this study, we used a measure of attitudinal familism that focuses on the individual's view of the importance of "a strong emotional bond with the family" (Lugo Steidel & Contreras, 2003). This definition of "attitudinal familism" differs from other measures that focus on "family

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support," which have been found to be a protective factor in mental health (Halpern, 2004) and focus on perceived, or measured, emotional support from family members (Rodriguez, Bingham Mira, Paez, & Myers, 2007).

Although distinctions between attitudinal familism and family support are rare in the literature, there have been calls for researchers to be more specific when measuring these constructs (Rodriguez, et al., 2007). It is possible that this lack of conceptual clarity has led researchers to find the protective factors associated with family support while obscuring "the potential strain that family may also exert" (Rodriguez, et al., 2007). The results of this study highlight some of these "potential strains" and the need to consider the potential negative implications of adherence to traditional values and the conditions under which familism could be a risk factor.

In addition to considering the different aspects of familism and their differential impact on mental health outcomes, it is also important that we consider the specific stressors being studied. It is possible that certain aspects of familism, such as family support, act as protective factors against some stressors (e.g., peer stress; German et al., 2009) while acting as risk factors in the context of other stressors (e.g., domestic violence; Haj Yahia, 2002).

Another interesting finding is that familism was neither directly associated nor did it moderate any associations with psychological distress. Given that familism has been conceptualized as a multidimensional construct (see Cuellar et al., 1995; Lugo Steidel & Contreras, 2003), it is possible that some aspects of familism have effects on coping and distress while others do not (Yeh & Bedford, 2004). Because we chose to use a measure of attitudinal familism focused on expectations of family relations, we did

not measure other aspects of this construct. In addition, it is possible that the effects of familism on mental health differ depending on the socio-cultural context of the studied sample. In fact, Losada, et al., (2006) found that while a measure of familism was significantly correlated with lesser burden in a Hispanic sample of caregivers in the U.S., the same measure was correlated with higher levels of depressive symptoms in a sample of Spanish caregivers (residents of Spain). The authors of that study hypothesized that the distinct sociocultural contexts of these two groups affected the degree to which familism principles lead to mental health outcomes. Specifically, they hypothesized that the adverse socio-economic conditions found among Hispanics in the US could render familism an especially powerful resource for adaptation. Meanwhile, the increasingly individualistic perspectives of Spanish society may lead to a disconnect between the familistic caregivers and their non-familistic family members, which could result in "emotional consequences such as guilt or frustration" (Losada, et al., 2006, p. 6). Additional work in this area should be conducted to systematically study the different aspects of familism and their impact on mental health.

We hypothesized that familism would be significantly negatively associated with primary control coping. Unfortunately, we did not find evidence for a relation between familism and primary control coping. We made this hypothesis mainly based on a review of the empirical literature on cultural attitudes and coping styles among Asian youth (Phinney et al., 2005) and hypotheses about the coping styles of Mexican and Mexican American emerging adults (Diaz-Guerrero, 1994). Unfortunately, the empirical literature on familism and its relation to coping styles among Mexican youth and emerging adults is scarce. It is possible that levels of familism do not have a direct effect on primary

control coping (i.e., active, approach-oriented strategies aimed at altering the specific stressors) but instead have an impact on the use of secondary control coping strategies (i.e., strategies focused on adapting to the problem). Further research that examines the impact of cultural values such as familism on the coping styles of Mexican and Mexican American young adults is needed to understand under what conditions culture impacts responses to stress, and therefore mental health outcomes.

Limitations

One limitation of this study is the mismatch between the measure of parent-child conflict and measures of threat and coping. Whereas the measure of parent-child conflict was a composite measure of general conflict across several domains (used in the literature on parent-child conflict; see Renk et al., 2006; Smetana, Yau, & Hanson, 1991), the threat appraisals and coping measures used in this study referred to a specific event the participants described. To the extent that a specific assessment of appraisals and coping tap an individual's general disposition, then one may be more confident of the present findings. To the extent that there is significant variability in how an individual perceives and copes with individual events, then one should take caution in how present findings are interpreted. Future research should examine both event specific and general stressors so that the relationship between these construct could be better understood.

Another limitation of the present study is the lack of a systematic examination of the moderating role of gender. Gender was examined as a potential covariate and was not found to be associated with significant differences in the study variables. However, previous research has found evidence that gender moderates the relation between familism and mental health outcomes (Lugo Steidel, 2006). And, while little is known

about gender differences in adherence to familistic attitudes per se, there is evidence of gender differences in the socialization of traditional gender roles (Rafaelli & Ontai, 2004). Additionally, a large body of research has found significant gender differences in coping (Altermatt, 2007; Eschenbeck, Kohlmann, & Lohaus 2007; Lawrence, Ashford, & Dent, 2006). In our future research, we will also examine the possibility remains that gender could moderate the hypothesized relations examined in this study.

Conclusions

Present findings provide support for the role of familism on the conflict-threat link among Mexican Americans. The findings provide evidence that familism has important implications for the individuals' levels of threat appraisals. Moreover, the study findings highlight the need to make specific hypotheses regarding the role of familism, include clearer conceptualizations of the familism construct, and distinguishing familism from related constructs such as family support. These hypotheses should take into account, and clarify, the specific aspects of familism being measured as well as the context on which the samples are embedded (such as the stressors being studied) because there are important moderating effects among these variables.

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Table 1. *Study Hypotheses*

Hypothesis 1.	Familism will moderate the relation between parent-child conflict severity and appraisals of threat such that the relation between parent-child conflict and appraisals of threat will be **stronger** among those high in familism than those low in familism.
Hypothesis 2.	Familism will moderate the relation between threat appraisals and psychological distress such that the relation between threat and distress will be **stronger** among those high in familism than those low on familism.
Hypothesis 3.	Familism will be negatively associated with primary control coping.
Hypothesis 4.	Threat appraisals will mediate the relation between parent-child conflict severity and psychological distress.
Hypothesis 5.	Primary control coping will mediate the relation between threat appraisals and psychological distress.

Table 2. *Intercorrelations, Means and Standard Deviations among variables*

	1	2	3	4	6
1. Conflict severity	--	-.08	.41**	.16*	.34**
2. Familism	-.01	--	.04	.15*	.05
3. Threat Appraisals	.56**	.04	--	.37**	.48**
4. Primary control coping	.16*	.05	.16*	--	.12
5. Distress	.36**	-.09	.35**	-.08*	--
M	1.96	6.92	1.23	2.64	15.78
SD	.68	1.36	.98	.68	11.17

$^{\wedge} p < .10.$ $^* p < .05.$ $^{**} p < .01.$

Note: Intercorrelations for the Mexican sample are shown below the diagonal and for the Mexican American sample above the diagonal. R-to-z transformations yielded no significant differences between samples in correlations.

Table 3. *Model fit statistics.*

	χ² (df)	Δ χ² (df), p	RMSEA	CFI
Test of Moderation by Site				
Constrained Full Path Model	46.75 (23)	--	.07	.91
Unconstrained Full Path Model	27.69 (13)	19.06 (10), *p* < .05	.08	.94
Test of Mediation by Threat				
Full path model	4.42 (5)	--	.00	1.00
Direct model	128.17 (7)	--	.20	.51
Mediation model	16.21 (6)	*11.79 (1), *p* < .01	.07	.95
Test of Mediation by Coping				
Full path model	4.42 (5)	--	.00	1.00
Direct model	35.10 (7)	--	.10	.87
Mediation model	43.28 (6)	*38.86 (1), *p* < .01	.13	.83

* As compared to the full path model

Figure 1. Full path model

Familism

-.02
-.05
.03
-.06

.06   -.02   .08

R²=.08
Primary

.26*   -.11*

R²=.21
Threat

.35*(.32*)

Conflict

.46*

-.12

.12*

Familism
X Conflict

.10

.07

.20

.18* (.22*)

R²=.20
Distress

.07

Familism
X Threat

-.03

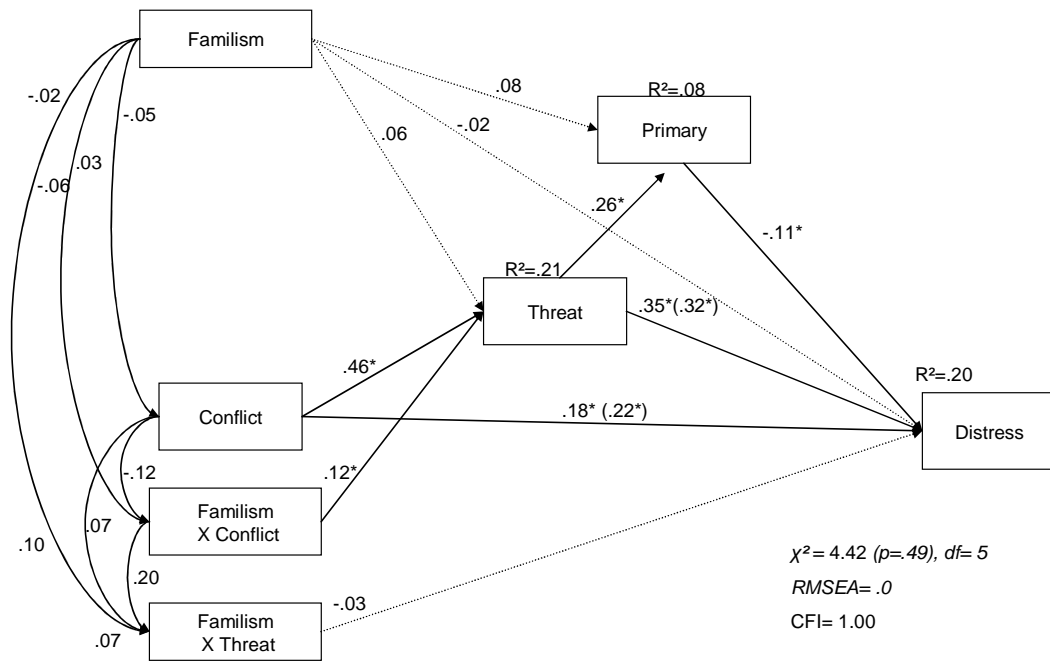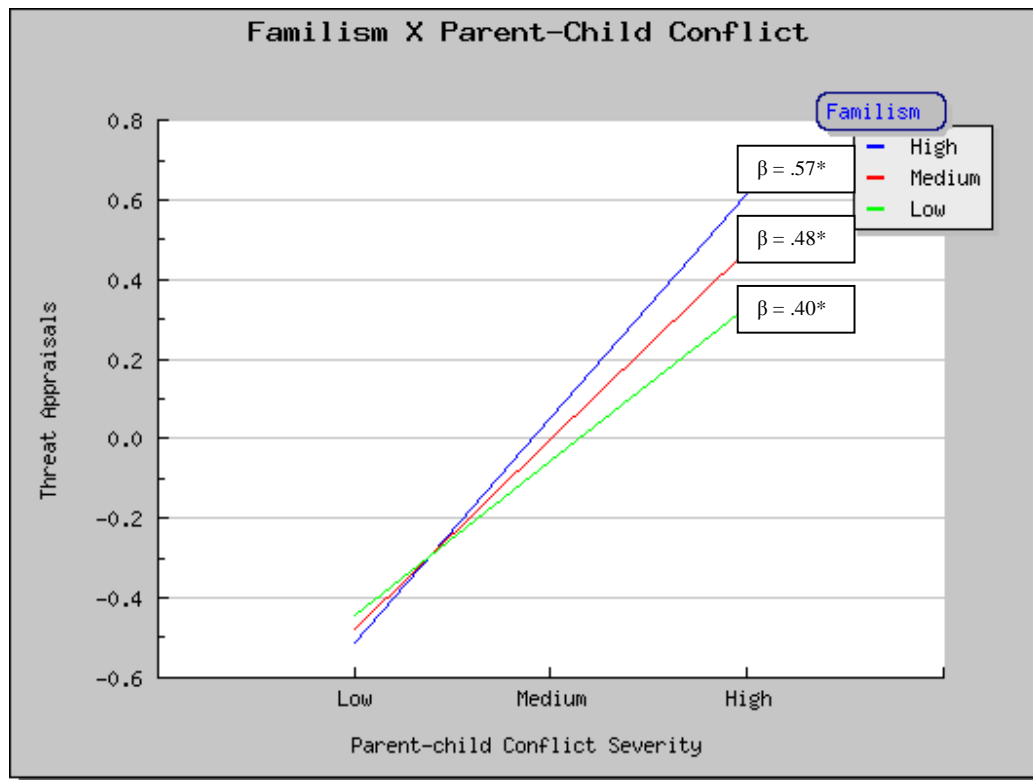χ² = 4.42 (p=.49), df= 5
RMSEA= .0
CFI= 1.00

Figure 2. Familism x Parent-Child Conflict Interaction

Appendix A- Demographic Information

1.   **Current class level:**   (*circle your choice*)

   1. Freshman
   2. Sophomore
   3. Junior
   4. Senior
   5. Other (please specify): _____

2. **Gender** (*circle your choice*)
      A. Male
      B. Female

3. **Ethnicity:** *(Circle your choice)*
      A.   Mexican (National)
      B.   Latino/Hispanic (please specify)
                   a) Mexican American
                   b) Other, Latin-American (*specify country of origin*) _____

      C.   Biracial (*please specify*, e.g. Mexican and European American)
      _____
      D.   Other (*please specify*):
      _____

4.   **Age:** _____

5.   **Household Income** *(Circle your closest approximation of your parents' combined income)*
      A. $0-4,999 yearly (or $416 monthly)
      B. $5,000-9,999 yearly (or $417-833 monthly)
      C. $10,000- 19,000 yearly (or $833-1583 monthly)
      D. $20,000-29,000 yearly (or $1666-2,415 monthly)
      E. $30,000-39,000 yearly (or $2,000- 3,250 monthly)
      F. $40,000-49,000 yearly (or $3,333-4,083 monthly)
      G. $50,000 -74,000 yearly (or $4,083 – $6166 monthly)
      H. $75,000 – 100,000 yearly (or $6250 – $8333 monthly)
      I. $101,000 or above ($8417 or above)

6.   **Generation:**

   A. Where were you born? _____
                             City   state   country

   B. Where were your parents born?

   Mother_____ Father_____
              City   state   country   city   state   country

   C. How long have your parents lived in the U.S? Mother: _____   Father: _____

   D. Where were all of your 4 grandparents born?

1. _____ 2._____

       City   state   country   city   State   country

3. _____ 4._____

       City   state   country   city   State   country

7. **Father's occupation** (*Please be as specific as possible, for example if you father is self-employed be specific about the kind of business*):

_____

8. **Father's educational status** (*Circle the best choice*):

    A. Elementary or junior High School
    B. High School
    C. Some college or technical school
    D. 2-yr college or technical school
    E. 4-yr college
    F. Beyond 4-yr college
    G. Professional/graduate degree
    H. Don't know

9. **Mother's occupation** (*Please be as specific as possible, for example if you father is self-employed be specific about the kind of business*):

_____

10. **Mother's educational status** (*Circle the best choice*):

    A. Elementary or junior High School
    B. High School
    C. Some college or technical school
    D. 2-yr college or technical school
    E. 4-yr college
    F. Beyond 4-yr college
    G. Professional/graduate degree
    H. Don't know

11. **Parents' marital status**:
    A. Married
    B. Separated
    C. Divorced
    D. Widowed
    E. Other (*please specify):* _____

12. **Where do you live now?**
    A. Dorm
    B. Apartment/house
    C. At home with parents

D. Parent's house with my husband (wife)
E. My own home with my husband (wife)
F. other: _____

13. **If you do NOT live with your parents:**

A. How often do you see them?
    a. Every day
    b. 2-3 times per week
    c. Once per week
    d. A few times per month
    e. Every few months

B. How often do you speak with them on the phone?
    a. Every day
    b. 2-3 times per week
    c. About once per week
    d. A few times per month
    e. Every few months

C. Do you ever communicate with them by email/text message?
    a. Yes: _____   If so, how often? _____
    b. No: _____

14. **How many brothers and sisters do you have: _____**

15. **How many of your relatives (aunts, uncles, grandparents, cousins, etc) lived within 3 miles (5 km) from your house while you were growing up?**
_____

16. **How many of your relatives (aunts, uncles, grandparents, cousins, etc) lived within 6 miles (10 km) from your house while you were growing up?**
_____

17. **How many of your relatives (aunts, uncles, grandparents, cousins, etc) lived within 12 miles (20 km) from your house while you were growing up?**
_____

18. **How often did your family sought help from relatives (aunts, uncles, grandparents, cousins, etc) who lived nearby while you were growing up?**
(Skip if it does not apply)
    A. Every day
    B. 2-3 times per week
    C. About once per week
    D. A few times per month
    E. Every few months

Appendix B- Parent-Child Conflict Scale

This questionnaire asks how **frequently** you have experienced disagreements with your mother and/or father about a number of different themes in the **IN THE LAST 6 MONTHS.** The questionnaire also asks how **severe** these problems were/have been for you.

Frequency refers to how often you have you experienced disagreements with your mother and/or father in a certain area in the last 6 months (from "Not at all" to "Everyday"). **Severity** refers to how bothersome these disagreements have been for you (from "Not severe at all" to "Extremely severe").

For each domain, circle the number that best describes the frequency and severity of disagreement.

 IN THE LAST 6 MONTHS

Dating:
1. How frequently have you had disagreements with your father/mother regarding your dating?

1	2	3	4	5	6
Not at all (Not once)	Rarely (2 or 3 times)	Occasionally (5 or 6 times)	Often (Every 2 or 3 weeks)	Frequently (At least once per week)	All the time (Every day)

2. How severe have disagreements about dating been?

1	2	3	4	5	6
Not at all	A little	Somewhat	Quite a bit	Very severe	Extremely

Friends:
1. How frequently have you had disagreements with your father/mother regarding your friends?

1	2	3	4	5	6
Not at all (Not once)	Rarely (2 or 3 times)	Occasionally (5 or 6 times)	Often (Every 2 or 3 weeks)	Frequently (At least once per week)	All the time (Every day)

2. How severe have disagreements about friends been?

1	2	3	4	5	6
Not at all	A little	Somewhat	Quite a bit	Very severe	Extremely

Amount of time spent with parents and/or family:
1. How frequently have you had disagreements with your father/mother regarding the amount of time you spend with your parents and/or family?

1	2	3	4	5	6
Not at all (Not once)	Rarely (2 or 3 times)	Occasionally (5 or 6 times)	Often (Every 2 or 3 weeks)	Frequently (At least once per week)	All the time (Every day)

2. How severe have disagreements about this been?

1	2	3	4	5	6
Not at all	A little	Somewhat	Quite a bit	Very severe	Extremely

Money:
1. How frequently have you had disagreements with your father/mother regarding money?

1	2	3	4	5	6
Not at all (Not once)	Rarely (2 or 3 times)	Occasionally (5 or 6 times)	Often (Every 2 or 3 weeks)	Frequently (At least once per week)	All the time (Every day)

2. How severe have disagreements about money been?

1	2	3	4	5	6
Not at all	A little	Somewhat	Quite a bit	Very severe	Extremely

Getting a job:
1. How frequently have you had disagreements with your father/mother regarding your job (or getting a job)?

1	2	3	4	5	6
Not at all (Not once)	Rarely (2 or 3 times)	Occasionally (5 or 6 times)	Often (Every 2 or 3 weeks)	Frequently (At least once per week)	All the time (Every day)

2. How severe have disagreements about this been?

1	2	3	4	5	6
Not at all	A little	Somewhat	Quite a bit	Very severe	Extremely

Drugs or alcohol:
1. How frequently have you had disagreements with your father/mother regarding drugs or alcohol?

1	2	3	4	5	6
Not at all (Not once)	Rarely (2 or 3 times)	Occasionally (5 or 6 times)	Often (Every 2 or 3 weeks)	Frequently (At least once per week)	All the time (Every day)

2. How severe have disagreements about drugs or alcohol been?

1	2	3	4	5	6
Not at all	A little	Somewhat	Quite a bit	Very severe	Extremely

Sex:
1. How frequently have you had disagreements with your father/mother regarding sex?

1	2	3	4	5	6
Not at all (Not once)	Rarely (2 or 3 times)	Occasionally (5 or 6 times)	Often (Every 2 or 3 weeks)	Frequently (At least once per week)	All the time (Every day)

2. How severe have disagreements about sex been?

1	2	3	4	5	6
Not at all	A little	Somewhat	Quite a bit	Very severe	Extremely

Smoking:
1. How frequently have you had disagreements with your father/mother regarding your smoking?

1	2	3	4	5	6
Not at all (Not once)	Rarely (2 or 3 times)	Occasionally (5 or 6 times)	Often (Every 2 or 3 weeks)	Frequently (At least once per week)	All the time (Every day)

2. How severe have disagreements about smoking been?

1	2	3	4	5	6
Not at all	A little	Somewhat	Quite a bit	Very severe	Extremely

Grades:

1. How frequently have you had disagreements with your father/mother regarding your grades?

1	2	3	4	5	6
Not at all (Not once)	Rarely (2 or 3 times)	Occasionally (5 or 6 times)	Often (Every 2 or 3 weeks)	Frequently (At least once per week)	All the time (Every day)

2. How severe have disagreements about grades been?

1	2	3	4	5	6
Not at all	A little	Somewhat	Quite a bit	Very severe	Extremely

Housing:

1. How frequently have you had disagreements with your father/mother regarding housing?

1	2	3	4	5	6
Not at all (Not once)	Rarely (2 or 3 times)	Occasionally (5 or 6 times)	Often (Every 2 or 3 weeks)	Frequently (At least once per week)	All the time (Every day)

2. How severe have disagreements about housing been?

1	2	3	4	5	6
Not at all	A little	Somewhat	Quite a bit	Very severe	Extremely

Household rules:

1. How frequently have you had disagreements with your father/mother regarding household rules?

1	2	3	4	5	6
Not at all (Not once)	Rarely (2 or 3 times)	Occasionally (5 or 6 times)	Often (Every 2 or 3 weeks)	Frequently (At least once per week)	All the time (Every day)

2. How severe have disagreements about household rules been?

1	2	3	4	5	6
Not at all	A little	Somewhat	Quite a bit	Very severe	Extremely

Responsibilities:

1. How frequently have you had disagreements with your father/mother regarding responsibilities?

1	2	3	4	5	6
Not at all (Not once)	Rarely (2 or 3 times)	Occasionally (5 or 6 times)	Often (Every 2 or 3 weeks)	Frequently (At least once per week)	All the time (Every day)

2. How severe have disagreements about responsibilities been?

1	2	3	4	5	6
Not at all	A little	Somewhat	Quite a bit	Very severe	Extremely

Other domains (please specify):_____

1. How frequently have you had disagreements with your father/mother regarding this issue?

1	2	3	4	5	6
Not at all (Not once)	Rarely (2 or 3 times)	Occasionally (5 or 6 times)	Often (Every 2 or 3 weeks)	Frequently (At least once per week)	All the time (Every day)

2. How severe have disagreements about this issue been?

1	2	3	4	5	6
Not at all	A little	Somewhat	Quite a bit	Very severe	Extremely

Appendix C- Appraisals Questionnaire

Please respond to the following items with respect to how you felt and what you thought
when you encountered the disagreement with your father/mother you just described.

	Not at all	A little	Somewhat	Quite a bit	A great amount
1. I have the ability to overcome stress.	0	1	2	3	4
2. I perceive stress as threatening.	0	1	2	3	4
3. There is someone I can turn to for help.	0	1	2	3	4
4. I can positively attack stressors.	0	1	2	3	4
5. I have what it takes to beat stress.	0	1	2	3	4
6. I feel anxious.	0	1	2	3	4
7. Stressful events impact me greatly.	0	1	2	3	4
8. There is help available to me.	0	1	2	3	4
9. The outcome of stressful events is negative.	0	1	2	3	4
10. The event has serious implications for my life.	0	1	2	3	4
11. I have the resources available to me to overcome stress.	0	1	2	3	4
12. I have the skills necessary to overcome stress.	0	1	2	3	4
13. Stress has a negative impact on me.	0	1	2	3	4
14. There are long-term consequences as the result of stress.	0	1	2	3	4

*Think of the disagreement with your parents you just described. For each item on the list below, , circle **one** number from 1 (not at all) to 4 (a lot) that shows **how much** you did or felt these things when you had the disagreement with your mom or dad. Please let us know about everything you do, think, and feel, even if you don't think it helps make things better.*

		Not at all	A little	Somewhat	A lot
1	I tried to think of different ways to change the problem or fix the situation. (Write one plan you thought of): _____ _____ _____	1	2	3	4
2	I let someone or something know how I felt (Check all you talked to): ☐ Father/Mother ☐ Sibling ☐ God ☐ Friend ☐ Teacher	1	2	3	4
3	I decided I'm okay the way I am, even though I'm not perfect	1	2	3	4
4	I realized that I just have to live with things the way they are.	1	2	3	4
5	I asked other people for help or for ideas about how to make the problem better (Check all you talked to): ☐ Father/Mother ☐ Sibling ☐ God ☐ Friend ☐ Teacher	1	2	3	4
6	I let my feelings out. I did this by: (Check all that you did.) Writing in my journal/diary [] Drawing/painting [] Complaining to let off steam [] Punching a pillow [] Being sarcastic/making fun [] Listening to music [] Exercising [] Yelling [] Crying [] None of these []	1	2	3	4
7	I got help from other people when I was trying to figure out how to deal with my feelings. (Check all that you went to): ☐ Father/Mother ☐ Sibling ☐ God ☐ Friend ☐ Teacher	1	2	3	4
8	I did something to try to fix the problem or take action to change things (Write one thing you did): _____ _____ _____ _____	1	2	3	4
9	I just took things as they went, I went with the flow.	1	2	3	4

		Not at all	A little	Somewhat	A lot
10	I thought about happy things to take my mind off the problem or how I was feeling.	1	2	3	4
11	I got sympathy, understanding, or support from someone (Check all you went to): ☐ Father/Mother ☐ Sibling ☐ God ☐ Friend ☐ Teacher	1	2	3	4
12	I kept my mind off problems with my mom/dad by: (Cheek all that you did): []Exercising [] Seeing friends [] Watching TV []Playing video games [] Doing a hobby [] None of these	1	2	3	4
13	I did something to calm myself down when I was having problems with my mom/dad. (Check all you did): [] Take deep breaths [] Pray [] Walk [] Listen to music [] Take a break [] Meditate [] None of these	1	2	3	4
14	I kept my feelings under control when I had to, then let them out when they wouldn't make things worse.	1	2	3	4
15	I imagined something really fun or exciting happening in my life.	1	2	3	4
16	I told myself that things could be worse.	1	2	3	4
17	I told myself that it didn't matter, that it wasn't a big deal.	1	2	3	4
18	I thought about the things I could learn from the situation, or something good that would come from it.	1	2	3	4
19	I told myself that I can get through this, or that I'll do better next time.	1	2	3	4
20	I told myself that everything will be all right.	1	2	3	4
21	I thought of ways to laugh about it so that it wouldn't seem so bad.	1	2	3	4

Appendix E- Familism Scale

Instructions: Here are a few statements about families. We would like you to indicate to what extent you agree with these statements. For example, if strongly disagree, agree, or strongly disagree.

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Strongly Disagree									**Strongly Agree**

1. Children should always help their parents with the support of younger brothers and sisters, for example, help them with homework, help the parents take care of the children, and so forth……………………….	
2. The family should control the behavior of children younger than 18……………………	
3. A person should cherish the time spent with his or her relatives………………………...	
4. A person should live near his or her parents and spend time with them on a regular basis……………………………………………………………………………………	
5. A person should always support members of the extended family, for example, aunts, uncles, and in-laws, if they are in need even if it is a big sacrifice. ……………………..	
6. A person should rely on his or her family if they need arises. …………………………..	
7. A person should feel ashamed if something he or she does dishonors the family name...	
8. Children should help out around the house without expecting an allowance……………	
9. Parents and grandparents should be treated with great respect regardless of their differences in views………………………………………………………………………	_____
10. A person should often do activities with his or her immediate and extended families, for example, eat meals, play games, or go somewhere together………………………	
11. Aging parents should live with their relatives………………………………………	
12. A person should always be expected to defend his/her family's honor no matter what the cost………………………………………………………………………………………	
13. Children younger than 18 should give almost all their earnings to their parents………..	
14. Children should live with their parents until they get married………………………...	
15. Children should obey their parents without question even if they believe they are wrong………………………………………………………………………………………..	_____
16. A person should help his or her elderly parents in times of need, for example, helping financially or sharing a house……………………………………………………….	
17. A person should be a good person for the sake of his or her family. ……………………	
18. A person should respect his or her older brothers and sisters regardless of their differences in views.	

Appendix F- Center for Epidemiological Studies Depression (CES-D)

How often you felt that way **during the past week**.

	Rarely or None of the time (Less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Mostly or almost all the time (5-7 days)
1. I was bothered by things that usually don't bother me	1	2	3	4
2. I did not feel like eating; my appetite was poor.	1	2	3	4
3. I felt that I could not shake off the blues, even with help from family and friends.	1	2	3	4
4. I felt that I was just as good as other people.	1	2	3	4
5. I had trouble keeping my mind on what I was doing.	1	2	3	4
6. I felt depressed	1	2	3	4
7. I felt that everything I did was an effort.	1	2	3	4
8. I felt hopeful about the future	1	2	3	4
9. I thought my life had been a failure.	1	2	3	4
10. I felt fearful.	1	2	3	4
11. My sleep was restless	1	2	3	4
12. I was happy.	1	2	3	4
13. I talked less than usual.	1	2	3	4
14. I felt lonely.	1	2	3	4
15. People were unfriendly.	1	2	3	4
16. I enjoyed life.	1	2	3	4
17. I had crying spells.	1	2	3	4
18. I felt sad.	1	2	3	4
19. I felt that people disliked me.	1	2	3	4
20. I could not get "going"	1	2	3	4