

## Acculturative Family Distancing: Links with Self-Reported Symptomatology among Asian Americans and Latinos

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**Abstract** *Objective* Our knowledge of how acculturative processes affect families remains quite limited. This article tests whether acculturative family distancing (AFD) [1], a more proximal and problem-oriented measure of the acculturation gap, influences the mental health status of Asian American and Latino college students. AFD occurs along two dimensions: communication difficulties and cultural value incongruence. *Methods* Data were collected from 186 Asian American ( $n = 107$ ) and Latino ( $n = 79$ ) undergraduates, who provided self-reports on psychological problems, depressive symptoms, and family conflict. A new self-report measure of AFD evidencing good psychometric properties was used to test hypothesized relations among these variables in structural equation models (SEM). *Results* For both Asian American and Latinos, results indicated that higher levels of AFD were associated with higher psychological distress and greater risk for clinical depression, and that family conflict mediated this relation. *Conclusion* AFD processes were associated with the mental health of students and the functioning of their families. These findings highlight potential foci to address in prevention and intervention programs, such as improving communication and teaching families how to negotiate cultural value differences.

**Keywords** Family · Culture · Asian-American · Latino-American · Mental health · Acculturation gap

According to the 2000 Census, foreign-born immigrants currently make up 11.1% (31 million) of the U.S. population and have increased more than 57% between the years of 1990–2000; hence, acculturative stressors may affect a sizable proportion of U.S. families [1, 2]. Despite our rapidly diversifying population, our understanding of how acculturative

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processes impact ethnic minority families and our ability to develop effective therapeutic interventions remains limited. This is especially salient given that ethnic minorities may be at greater risk for developing mental and physical illnesses as they acculturate across subsequent generations [3–6]. The focus of this study is to examine how acculturation-related processes affect family processes for Asian Americans and Latinos. Specifically, we introduce and test the acculturative family distancing (AFD) model, a more proximal construct related to the distal concept of the acculturation gap. AFD is particularly important to study among Asian Americans and Latinos because they are not only the fastest growing minority groups in the U.S., but also the two groups with the largest proportion of foreign born individuals [2].

Acculturation is commonly defined as the “...phenomena which result when groups of individuals having different cultures come into continuous first-hand contact with subsequent changes in the original culture patterns of either or both groups” [7]. In practice, acculturation involves the acquisition of the dominant group’s cultural beliefs, behaviors and values and the relinquishment or retention of one’s culture of origin. Much of the acculturation-health literature focuses on identifying whether those who are more or less acculturated are at greater risk for problem development [4, 8]. However, as a number of scholars have pointed out, this area of research suffers from significant conceptual and methodological limitations [4]. For example, there is no uniform conceptualization, operationalization, or method of measuring acculturation. Acculturation has been assessed in a variety of ways, including linguistically, demographically (e.g., country of origin, place of birth, and years in the U.S.), socioculturally (e.g., values, attitudes, beliefs, behaviors, social relations, and individualistic and collectivistic orientation) and psychologically (e.g., personality, identity, and ethnic identity) [9, 10]. Although level of acculturation can be used to identify whether those who are more or less acculturated are at higher risk, it is a group identifier that does not in of by itself increase or decrease risk for difficulties. Rather, those of varying acculturative status are likely to be differentially exposed to risk factors (e.g., acculturative stressors, language barriers, disconnect from social resources) that increase vulnerability to problem development [4, 8]. As we progress forward, there needs to be a shift from the distal understanding of acculturation to an identification of acculturative mechanisms of risk that can be targeted in interventions.

One proximal mechanism of risk related to acculturation is acculturation-specific intrafamilial difficulties. Given that many mental health difficulties among ethnic minorities seem to originate from family dysfunction [11], understanding how acculturative forces can disrupt family relations and lead to poor mental health is important [12]. Unfortunately, there continues to be a dearth of empirical research in this arena, with most of what we know stemming from clinical experience [13–16]. The discrepancy in acculturative status between parents and youth, known as the acculturation gap, has been hypothesized to exacerbate normal parent–child generational differences and increase discord and misunderstanding in culturally diverse families [15]. This acculturation gap develops because children tend to acculturate faster than their parents for various reasons, including being educated in the U.S., better English fluency, and greater exposure to mainstream American values and social networks [16]. Acculturation gaps are more likely to affect those of the first and second generation. However, because of differential exposure to the values associated with one’s culture of origin, acculturation gaps may also affect the family relations in subsequent generations. A few programs have been developed to help Asian and Latino families work through these acculturation-related family difficulties [17, 18].

Large acculturation gaps (e.g., marked by a significant discrepancy between parents and children in adopting the cultural practices of the dominant culture) have been associated

with increased intergenerational family conflict and decreased family cohesion and satisfaction in Asian American and Latinos [18–23]. In addition, there is a well-documented relationship between high levels of intergenerational family dysfunction and poor mental health among these groups [24–29]. However, few studies have integrated these two bodies of research to examine how acculturation gaps impact family functioning and the resultant psychological dysfunction.

A few recent studies of the acculturation gap, family conflict, and youth mental health that use different methodologies and measurements of the acculturation gap have yielded inconsistent results. In a small sample split across the U.S. and Canada, Crane et al. [30] found that both the parent–child acculturation gap and poor family functioning were independently associated with depressive symptoms among North American Chinese adolescents. Pasch et al. [31] found that linguistic acculturation gaps among Mexican Americans were not related to parent–adolescent conflict or adolescent adjustment problems. A study of the acculturation gap among youth already receiving psychosocial services found that it was youth who were less acculturated than their parents that evidenced the greatest conduct problems [32]. In studying parent–child acculturation issues among Chinese Canadians, Costigan and Dokis [33] recently found that when parents were more strongly oriented to Chinese culture and preferred to speak Chinese, lower levels of Chinese cultural and linguistic involvement by the children was associated with maladjustment. However, child maladjustment was not associated with parental acculturation when parents did not adhere strongly to Chinese culture. In a sample of 73 recently immigrated Latino families, Martinez Jr. [34] found that a larger acculturation gap led to increased likelihood of future substance abuse, but that this relationship was mediated by increased family stress and ineffective parenting strategies.

Although an acculturation gap may set the stage for problem development in the family, a person's level of acculturation may not directly increase or decrease risk for mental health problems. Rather, identifiable mechanisms such as increased acculturative stress in those who are less acculturated, loss of culturally protective factors among those who are more acculturated, and family conflict between family members who are at differing levels of acculturation lead to problem development. Hwang [1] recently reconceptualized the literature and proposed an integrated theory of AFD. AFD is a theoretically derived new construct, but the theory surrounding acculturation's impact on family relations has been around for some time and a handful of interventions to address acculturation-related family problems have been developed [15, 18]. AFD, a more specific and nuanced formulation of the acculturation gap, consists of two dimensions, incongruent cultural values and breakdowns in communication that are a consequence of different rates of acculturation among parents and children. This inability to communicate effectively in the same language and differences in cultural values may serve as a mechanism that increases family conflict and leads to increased risk for depression and other psychological problems. Clinical illustrations demonstrating how both dimensions of AFD affects immigrant families have been documented [1]. Unfortunately, no studies have empirically examined the impact of AFD on families, which makes this study unique.

Because younger children have greater exposure to mainstream American culture and are more easily influenced developmentally than their parents, parent–child value discrepancies develop [1]. These discrepancies may encompass disagreements on how old they should be when they are able to date, what they should study for school, adherence to cultural practices, and perceptions of appropriate parent–child relations. For example, Kim and Ge [35] found that adolescent reports of being exposed to more traditional Chinese

parenting practices (e.g., harsher, more intrusive, and less collaborative parenting) were linked with greater depressive symptoms among Chinese American adolescents.

Breakdowns in communication may occur because many ethnic minority children become more proficient in English than their parents and may not evidence similar advances in age-appropriate learning of their ethnic language [36–39]. Parents who could not previously fluently speak English, continue to have difficulties learning English and feel more comfortable speaking their native language at home [39]. Although some parents develop fluency sufficient to communicate instrumental needs, the ability to effectively communicate affect and connect with children emotionally in English can be limited. This language gap has been found to be associated with intrafamilial family difficulties, e.g., family cohesion [40], conflict [38] and disagreements [41].

The AFD model postulates that parent–child acculturation differences become particularly salient as children transition into adolescence and early adulthood [1]. According to the theoretical model, high levels of AFD (i.e., substantial parent–child differences in cultural values and language use) are directly linked with family conflict. The degree of struggle is expected to vary depending on the combination of characteristics and circumstances of the family (e.g., prior exposure to U.S. culture, linguistic fluency, level of education). As a chronic and acute stressor, family conflict is postulated to increase risk for psychological difficulties [11, 14, 42].

In this paper we tested the theory and construct of AFD through several steps. First, the reliability and concurrent validity of a novel measure of AFD was evaluated. Second, we tested the hypothesis that high family conflict stemming from elevated AFD processes in ethnic minority families would be associated with elevated psychological symptomatology as well as risk for depression in college students. This hypothesis presumes that there is a distal relationship between AFD processes and indices of psychopathology, and that this is largely indirect and mediated through the proximal impact of AFD on family conflict, which in turn, increases risk for psychological distress and major depression. Third, the equivalency of the AFD conceptual model was tested for Asian American and Latino youth. Because both groups were expected to evidence similar acculturation-related family problems, the conceptual model of AFD was hypothesized to similarly affect Asian Americans and Latinos. In this paper, the terms parent and child are used as descriptors of family positioning, not as an indicator of developmental status, since the participants in this study were college students.

## Method

### Participants

Data were collected from 186 Asian American ( $n = 107$ ) and Latino ( $n = 79$ ) undergraduate college students attending a large 4-year public university located in the Rocky Mountain region of the U.S. The student sample consisted of 67 males (Asian American = 36; Latino = 31) and 119 females (Asian American = 71; Latina = 48). Forty percent of the students were foreign born (Asian American = 42; Latino = 32) and students represented various years in college (1st year = 24%, 2nd year = 15%, 3rd year = 28%, 4th year = 17%, 5th year or more = 16%). The majority of the sample (75%) was age 23 years or younger; 90% was below age 30 years; and 10% were non-traditional students above age 30. Chi-square analyses indicate that there were no ethnic differences (Asian American = 39.3%, Latino = 40.5%) in foreign-born status,

$\chi^2 (1, n = 185) = 0.03, p = 0.86$ . The five largest groups of Asian Americans in the sample included Chinese Americans ( $n = 34$ ), Vietnamese Americans ( $n = 20$ ), Japanese Americans ( $n = 15$ ), Taiwanese Americans ( $n = 12$ ), and Korean Americans ( $n = 10$ ). The four largest groups of Latinos in the sample included Mexican Americans ( $n = 44$ ), Peruvian Americans ( $n = 8$ ), Argentine American ( $n = 4$ ), and Puerto Rican American ( $n = 3$ ). The rest of the respondents were few in numbers and came from a variety of ethnic backgrounds.

## Procedures

Students responded to IRB-approved advertisements sent through email inviting them to participate in an internet-based research study on student health. Students completed the surveys online, which took approximately 1 h to complete. They received a \$10 incentive for participating. The identity of each student was confirmed by checking the validity of their email address initially and then asking for student IDs when the incentive was collected, and cross-checking their IDs against the identifying information collected online. It is also important to note that only 8% of students attending this university lived on campus, with the vast majority commuting from home or off-campus housing. In order to estimate student financial resources, students were asked to rate their financial need using a five-point scale ranging from 1 (*no financial need*) to 5 (*severely needy*). ANOVA indicated that there was a small but significant difference in financial need (Asian Americans  $M = 2.40, SD = 1.03$ ; Latinos  $M = 2.86, SD = 0.944$ ),  $F(1, 184) = 9.72, p = 0.00$ . Descriptive statistics for the sample are provided in Table 1.

## Measures

### AFD

The AFD Youth Report (AFD-YR) scale [43] is a 40-item self-report measure that assesses AFD along two dimensions, Communication and Cultural Values. Items are rated on a seven-point scale ranging from “strongly agree” to “strongly disagree.” The two primary dimensions were theoretically derived by Dr. Hwang based on his clinical experiences treating immigrant families and his overall review of the acculturation literature (W. Huang, unpublished manuscript) (for clinical reports). The items of the AFD scale were originally developed by Dr. Hwang and later refined by a multicultural team of 10

**Table 1** Descriptive statistics for variables used in the structural equation model

Variable	<i>M</i>	<i>SD</i>	Range	Skewness	Kurtosis
Sex (1 = male, 2 = female)	1.64	0.48	1–2	–0.58	–1.66
Financial need	2.60	1.02	1–5	0.31	–0.27
AFD communication	84.16	24.40	32–126	–0.08	–0.89
AFD values	104.73	21.56	39–152	–0.08	–0.23
Family conflict scale	14.42	4.27	6–24	0.24	–0.53
BSI total score	0.67	0.55	0–2.49	1.31	1.38
HDI total score	11.77	8.47	0–41.86	1.22	1.57

*Note:*  $N = 186$ . For AFD variables, higher scores reflect better communication and more shared values. For family conflict, BSI, and HDI variables, higher scores represent more conflict and problems

undergraduate and graduate students over several meetings and focus groups. Changes were made to the wording of questions and several items were dropped or added to the scale. The 18-item Communication subscale assesses the degree to which youth believe that they can effectively communicate with their parents (nine items) and that their parents can effectively communicate with them (nine items) along a variety of dimensions, including how successful they feel their attempts at communication are, how much they talk and share personal disclosures, whether they feel able to communicate feelings and emotional needs, and the degree to which they feel their communication is hindered by linguistic issues. The 22-item Cultural Values subscale assesses the degree to which youth and parents experience incongruent cultural values from the youth's perspective. Items focus on issues such as gender roles, dating practices, moral values, work ethics, social norms, and parenting style. The two dimensions of the AFD-YR evidenced strong internal consistency reliability in this sample,  $\alpha = 0.90$  for Cultural Values and 0.94 for Communication. Lower scores on the two dimensions reflect fewer shared cultural values and less adequate communication (i.e., higher levels of AFD).

As an initial test of the concurrent validity of the AFD-YR, correlations with the measure of family conflict used in this study (Social Interactions Scale—see below) were calculated (see Table 2). Correlations were in the expected direction and ranged from  $-0.48$  to  $-0.56$  ( $ps < 0.01$ ), suggesting that more AFD is associated with higher family conflict, but that the two constructs do not overlap to such an extent that they represent a unitary phenomenon in this sample.

### *Psychological Maladjustment*

The brief symptom inventory (BSI) and the Hamilton depression inventory (HDI) were used to create a composite psychological maladjustment construct in the SEM model (see below) [44, 45]. The BSI is a well-validated 53 item self-report measure of psychological symptom patterns. Participants were asked to indicate how much each of the symptoms described bothered them in the past 7 days. The BSI uses a five-point Likert scale ranging from “not at all” to “extremely.” The BSI is scored along nine primary symptom dimensions and three global indices of distress. The present study used the global severity index because it is the most sensitive of the three global indices. This scale has been found to have high internal consistency ( $\alpha$  for subscales ranging from 0.71 to 0.85) and

**Table 2** Intercorrelation matrix for all measured variables used in the model

Variable	1	2	3	4	5	6
Sex (1 = male, 2 = female)	–					
Financial need	–0.08	–				
AFD communication	0.01 <sup>a</sup>	0.01 <sup>a</sup>	–			
AFD values	–0.06	0.04	0.66**	–		
Family conflict scale	0.07	0.14	–0.48**	–0.56**	–	
BSI total score	0.07	0.13	–0.23**	–0.22**	0.45**	–
HDI total score	0.12	0.11	–0.20**	–0.22**	0.42**	0.81**

Note:  $N = 186$

<sup>a</sup> This correlation is estimated to be of trivial magnitude and may approach zero

\*  $p < 0.05$ , two-tailed. \*\*  $p < 0.01$ , two-tailed

convergent validity [44]. It also demonstrated high internal consistency for participants in this study ( $\alpha = 0.96$ ). The BSI has been used extensively for research in Asian and Asian American populations [46, 47] as well as Latino populations [48, 49].

The HDI is a 23-item self-report inventory version of the Hamilton Depression Rating Scale (HDRS), one of the most common interview-based measures of depression [50, 51]. There is strong support for the reliability and validity of the HDI in assessing the severity of depression in multiethnic samples [45, 52]. The HDI evidenced good internal consistency ( $\alpha = 0.93$ ), test–retest reliability ( $r = 0.95$ ), and validity (content, criterion, and convergent) in its development study [45, 52]. The HDI uses clinical cutoff scores for depression over the past 2 weeks. A clinical cutoff score of 19 maximizes the hit rate (98.2%), sensitivity (99.3%), and specificity (95.9%) in differentiating between nonreferred community adults and psychiatric outpatients diagnosed with major depression [45].

### *Family Conflict*

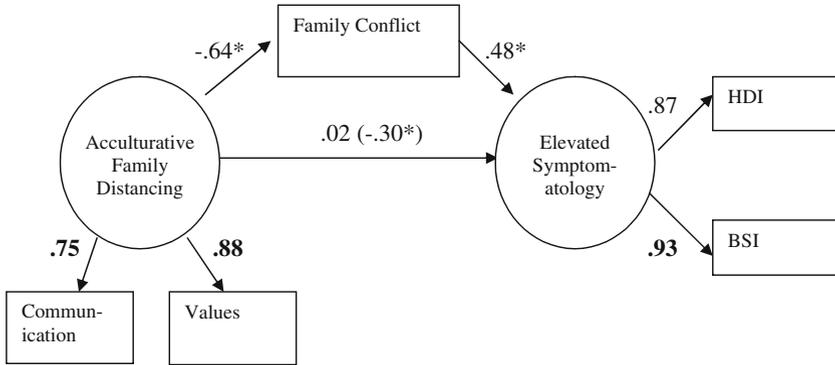
The 36-item Social Interactions Scale (SIS) assesses positive and negative social interactions (family, friend, and spouse) using a four-point Likert scale ranging from “none at all” to “a lot” [5]. Items from the family conflict scale focus on how many family members argue, criticize, “let you down,” and “get on your nerves.” Only the family conflict scale was used in the current study ( $\alpha = 0.86$ ). Although the SIS evidenced good reliability in this study for both groups, the psychometric properties of the SIS has not been examined before separately for Latino samples. However, Hwang et al. [47] have confirmed the cross-cultural validity and reliability for the SIS among Chinese Americans.

## **Results**

Structural equation modeling (SEM) with EQS 6 [53] was used to test our theoretical model. Prior to analyzing data, we tested the assumption that all variables were normally distributed. Variables were standardized and the  $z$ -score distributions were plotted. Several youth had  $z$  scores with absolute values of 3.0–3.5. However, examination of the raw score plots and frequencies suggested that these cases were not outliers, but rather the tail end of approximately normal distributions.<sup>1</sup> Diagnostic statistics supported the assumption of a multivariate normal distribution. The kurtosis and skewness coefficient for each measured variable was divided by its standard error and the resulting quotient was below an absolute value of 1.96 (suggesting a distribution with a normal shape; [54] for all but two of the variables. The two symptom variables, HDI and BSI, had skewness coefficients above the threshold. Measures of symptomatology are often somewhat skewed [55]. To address this slight violation of the normality assumption, the SEM model was tested using robust maximum likelihood estimation, which provides standard errors that are correct even when distributional assumptions are violated [56]. Table 1 presents the means, standard deviations, ranges, and values of skewness and kurtosis for all variables included in the SEM model.

The structural model was based on the theory and research discussed above. Figure 1 presents the estimated SEM model for the full sample including both Asian and Latino

<sup>1</sup> The SEM models were later retested after dropping these cases to rule out the possibility that these more extreme scores were acting as outliers and inflating structural path coefficients. However, no parameters changed substantively from the model that included all cases, and all findings remained significant. Therefore all cases were retained in the models reported herein.



**Fig. 1** Structural equation model for the acculturative family distancing model using elevated symptomatology as the outcome variable. Control variables, which had nonsignificant path weights, are not depicted. The path coefficient in parentheses represents the direct effect before controlling for family conflict

students. In addition to the structural paths, all variances and disturbances of measured variables and factors were allowed to vary freely. In order to control for socioeconomic differences and potential gender effects, financial status and gender were entered as controls in the models, but are not shown in Fig. 1. Across all SEM models reported in this section, these control variables were set to predict the symptomatology latent variable, but all path weights were nonsignificant ( $\beta$ s ranged from 0.05 to 0.10 for gender; and from 0.01 to 0.17 for financial status across models; *ns*). Model-fitting parameters for the model (Fig. 1) were indicative of good fit; Satorra-Bentler scaled  $\chi^2$  (12,  $N = 186$ ) = 12.79,  $p = 0.38$ ; comparative fit index (CFI) = 1.00; normed fit index (NFI) = 0.97; and root mean-square error of approximation (RMSEA) 90% CI = 0.00–0.08 [57]. Because the structural paths for the SEM model were specified a priori, no stepwise model modification procedures (e.g., Wald test) were used.

The latent variables representing the AFD construct and the psychological symptomatology construct each had excellent measurement characteristics. Factor loadings were high ( $\geq 0.75$ ) for both predictors of AFD as well as both predictors of symptomatology. These high loadings suggest an adequate measurement model for both constructs. The structural path coefficients depicted in Fig. 1 suggests that AFD processes affect levels of family conflict, which directly affect symptomatology. Path weights from the AFD latent factor to family conflict ( $\beta = -0.64$ ,  $t = -7.66$ ) and from family conflict to the symptomatology latent factor ( $\beta = 0.48$ ,  $t = 4.98$ ) were large and statistically significant. Specifically, poor communication (low scores on AFD Communication) and cultural value differences between youth and parents (low scores on AFD Cultural Values) were associated with family conflict (high scores on the SIS scale). In turn, high family conflict was associated with greater psychological symptomatology.

### Tests of Mediation

Baron and Kenny's [58] multiple-step approach to testing mediation was employed. Baron and Kenny's first step establishes the effect of the IV on the DV; step 2 establishes the effect of the IV on the mediator; step 3 establishes the effect of the mediator on the DV controlling for the IV; and step 4 requires that the path weight from the IV to the DV is reduced or eliminated by controlling for the mediator. The SEM model depicted in Fig. 1

addresses steps 2–4 and meets Baron and Kenny's criteria in each case. To address step 1, we estimated the SEM model without including family conflict (i.e., eliminating the mediator from the model), and this model fit well,  $\chi^2(11, N = 186) = 4.82, p = 0.78$ ; CFI = 1.00; NFI = 0.99; RMSEA 90% CI = 0.00–0.06. The bivariate path from the latent AFD factor to the latent symptomatology factor when the mediator was eliminated was statistically significant ( $\beta = -0.30; p < 0.05$ ). However, when controlling for family conflict in the full model (see Fig. 1), the direct effect of AFD processes on psychological symptomatology was reduced to 0.02. Hence, all mediation steps were supported. The indirect effect of AFD processes on psychological symptomatology via family conflict was also statistically significant ( $\beta = -0.30, t = -4.24$ ). This pattern of results suggests that family conflict mediated the relationship between AFD and youth psychological maladjustment.

### *Test of Multiple Covariance Structures in Asian American and Latino Youth*

The third aim of this study was to test for invariance of the hypothetical model across two ethnic groups. To test youth ethnicity (Asian American and Latino) as a moderator of the hypothesized interpersonal and psychological processes, the multisample analysis feature of EQS [56] was employed. In multisample analysis, the invariance of the model parameters across two or more groups is tested by (a) first constraining these parameters to be the same across all the groups, (b) re-estimating the model in each group separately without such constraints, and (c) testing whether model fit is significantly improved by removing the equality constraints using the lagrange multiplier (LM) test [56] Ethnic group differences in one or more model parameters would be likely if the model without equality constraints fit better than the model with constraints.

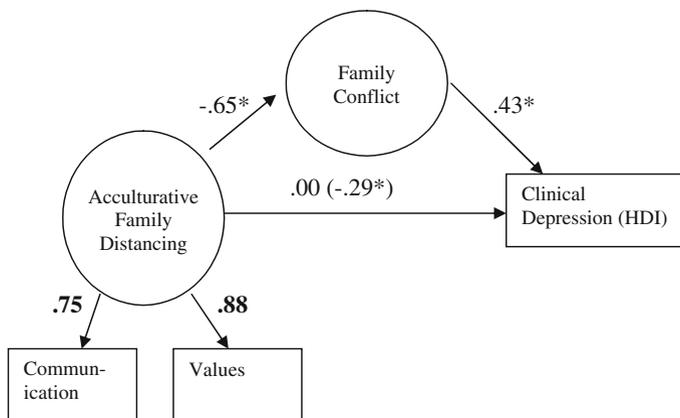
When multisample analysis was conducted, all equality constraints were imposed correctly during modeling, and the model with constraints (i.e., with Asian American and Latino youth having identical structural and measurement models) fit well,  $\chi^2(29, N = 186) = 23.49, p = 0.75$ ; CFI = 1.00; NFI = 0.95; RMSEA 90% CI: 0.00–0.04. The unconstrained model also fit well,  $\chi^2(24, N = 186) = 20.48, p = 0.67$ ; CFI = 1.00; NFI = 0.95; RMSEA = 0.00 (90% CI: 0.00–0.05). The structural path coefficients in the unconstrained model were as follows: AFD processes → family conflict (Asian American model:  $-0.58$ , Latino model:  $-0.69$ ); AFD processes → psychological symptomatology (Asian American model:  $-0.03$ , Latino model:  $0.06$ ); family conflict → psychological symptomatology (Asian American model:  $0.43$ , Latino model:  $0.52$ ). When the LM test was employed to determine the effect of releasing constraints (i.e., allowing the Asian American and Latino samples to have differing path coefficients) on model fit, no statistically significant improvement was obtained in either univariate (maximum  $\chi^2 = 2.11, p = 0.15$ ) or multivariate [maximum  $\chi^2$  value was at step 1 ( $2.11; p = 0.15$ )] tests. This suggests that the constraints were reasonable and that the hypothesized structural and measurement models are likely equivalent for both groups.

### *AFD in Youth at Risk for Depression*

To explore the findings from the SEM model from a psychopathology-oriented perspective, SEM analyses were repeated using a categorical outcome variable, clinical status on the HDI (see Fig. 2). Of the 186 youth participants, 25 (13.7%) were above the published HDI cut score for clinically significant depressive symptoms [45]; the rates were 12.7% for

Latinos and 14.0% for Asian Americans. Clinical status on the HDI (normal versus clinical level of symptoms) was used as the categorical DV in an SEM model that was similar to the one tested in the primary analyses above, but with two differences: (a) as recommended by Bentler [56], since EQS cannot incorporate continuous measured variables as predictors in models with categorical outcomes, the family conflict variable was transformed into a latent factor by setting the family conflict measured variable to be the sole indicator of the factor and (b) the control variables (financial status and gender) were not included because they did not have significant path loadings or otherwise affect the primary analyses above, and they were both single measured variables and would have required their own “latent variables” in the model, adding an unacceptable number of estimated parameters to the model given the sample size.

The Lee et al. [59] optimal weight matrix was used to estimate model parameters to account for the categorical DV. The full model (see Fig. 2) fit reasonably well,  $\chi^2(1, N = 186) = 0.37, p = 0.54$ ; CFI = 1.00; NFI = 0.99; RMSEA 90% CI: 0.00–0.19. Factor loadings for the AFD latent variable were identical to those in the model depicted in Fig. 1. Furthermore, all coefficients were of similar magnitude to those in Fig. 1, and identical in terms of statistical significance and direction of influence. Low AFD scores (representing poor parent–child communication and incongruent parent–child values) were associated with high family conflict scores, which were associated with a higher risk of scoring in the clinical range on the HDI. When family conflict was removed from the model, the direct association between the AFD latent variable and clinical status on the HDI was statistically significant (see Fig. 2), yielding a fully mediated model consistent with our hypotheses. Multisample analysis was again conducted, and again no significant differences emerged between ethnic groups in terms of the structural path coefficients in their respective models. Both univariate (maximum  $\chi^2 = 0.99, p = 0.32$ ) and multivariate [maximum  $\chi^2$  value was at step 1 (0.99;  $p = 0.32$ )] LM tests revealed nonsignificant differences between the models. The unconstrained model fit fairly well,  $\chi^2(2, N = 186) = 0.92, p = 0.63$ ; CFI = 1.00; NFI = 1.00; RMSEA 90% CI: 0.00–0.12. The structural path coefficients in the unconstrained model were as follows: AFD processes → family conflict (Asian American model:  $-0.62$ , Latino model:  $-0.77$ ); AFD



**Fig. 2** Structural equation model for the acculturative family distancing model using clinical status on the HDI (depressed versus not depressed) as the outcome variable. The path coefficient in parentheses represents the direct effect before controlling for family conflict ( $*p < 0.05$ )

processes → clinical status on HDI (Asian American model: 0.00, Latino model: 0.00); family conflict → clinical status on HDI (Asian American model: 0.25, Latino model: 0.43). This follow-up categorical SEM model provides support that AFD processes are associated with clinical depression.

## Discussion

An integrative theory and more proximal definition of the impact of acculturation on youth mental health—AFD—was used to guide the present study and its conceptual model. Structural equation modeling was employed to test the plausibility that AFD can increase risk for mental health problems. Study results suggested that a new self-report measure of AFD processes pertaining to parent–child value discrepancies and communication difficulties had good psychometric properties (internal consistency reliability and concurrent validity) and fit well in the SEM measurement model. Findings also extend the current literature on acculturation gaps by illustrating that a refined, theory-based conceptualization of proximal intrafamilial acculturation-related difficulties may have a direct effect on family conflict, which accounts for the increased risk for psychopathology. This study also used a large non-clinical sample of college students from two different cultural groups, and used sophisticated statistical modeling to better assess the acculturation-mental health linkage.

Asian American and Latinos are the fastest growing minority groups in the U.S., proportionately and numerically, respectively [2]. Understanding the impact of acculturative processes on these two groups will be particularly important to promote optimal mental health for youth from diverse cultures living in the U.S. Most of the acculturation-gap research to date has focused only on psychological distress, with few studies examining how acculturative processes might increase risk for diagnosable disorders. Our findings suggest that family conflict mediates the relationship between AFD processes and psychological distress and clinical depression similarly for both Asian American and Latino college students. Differing views on appropriate cultural practices are liable to engender parent–child arguments and relational negativity. Conflict also emerges when linguistic understanding is limited and family members become frustrated by others' lack of responsiveness to their emotional needs—potentially leading to the assumption of willful disrespect or selfishness (i.e., an internal attribution about the others' motives) rather than poor comprehension (an external attribution that might potentially mitigate a family member's annoyance and frustration) [1, 60].

Results from this study help integrate a disparate set of findings and models in the literature on ethnic minority mental health and family functioning. These findings are particularly important because there is a growing body of literature indicating that Asian American and Latino youth are at greater risk for psychological dysfunction than their European American counterparts [24, 46, 61–63] as well as family conflict and dissatisfying familial relations [24–26, 29]. This study also provides a more sophisticated understanding of how emic (culture-specific) and etic (culture-universal) factors interplay and contribute to mental health problems (i.e., how etic phenomena such as family conflict can mediate the effects of emic phenomena such as AFD processes in increasing risk for psychopathology). It is important to note that while etic factors like family conflict impact people from across the world, there may be a qualitative difference in the expression and experience of negative family interactions across cultures. Understanding both universal and culture-specific risk factors is essential if we are to effectively intervene and prevent problems from developing.

## Research Implications

There are a number other of questions that remain unanswered and the ability to assume causality is precluded by the cross-sectional nature of the data. Many believe that acculturation-related gaps are commonplace and influence intergenerational relations, but we still do not know how prevalent parent–child acculturation gaps are, during what life stage are parent–child gaps most deleterious, whether acculturation problems affect families differently depending on what age the parents and children emigrate, and how these relations change over time and across the life course. Given that most immigrant families are likely to evidence some form of acculturation gap and that not all families develop problems, we also need to better understand which factors increase risk for problem development and what factors protect families from acculturation gap related risk. Specifically, what individual, family, or community level variables serve as risk or protective factors? Intervention and preventions programs that focus on reducing risk and increasing cultural protections need to be developed and tested.

## Limitations

In this study, a novel approach was used to examine acculturation related family issues. However, a number of limitations deserve attention. First, data were cross-sectional and longitudinal studies may help us better assess temporal relations. Second, data were collected on a college student sample and our findings may not generalize to other age groups or settings. Future studies need to examine how AFD processes impact family and individual functioning in primary and secondary school youth. It may also be that college students are different from those that don't attend college (e.g., intellectual functioning, command of the English language, socioeconomic status). Third, our data are based on youth reports. In order to better understand how AFD processes influence youth mental health, multi-informant (parent and youth) and multi-method (self-report and face-to-face interview) reports need to be gathered and examined. Fourth, more research needs to be conducted on how AFD processes change over immigrant generations. Although we would hypothesize that the effects of AFD would decrease across generations because of decreased language and cultural gaps that occur when both parents and children are born and raised in the U.S., future research should examine this possibility more thoroughly. Small sample size also may have limited power to detect differences between the structural models in the Asian American and Latino groups. Another limitation is that there is diversity within Asian Americans and Latinos that needs to be better accounted for in future studies.

## Clinical Implications

The findings from this study have a number of clinical implications. In the initial conceptualization of AFD, Hwang [1] provided clinical illustrations of how AFD can increase risk for psychological dysfunction by breaking down family relationships and provided initial recommendations to reduce the impact that AFD can have on family relations. The empirical validation and more refined specification of the AFD model as tested and validated in this paper can guide foci for prevention and intervention programs. For example, because parents and youth may have difficulty communicating, a target for intervention would be bicultural effective communication training that focuses not only on improving parental English training and child native language education, but also helps them to frame-switch (i.e., putting

oneself in another's shoes), develop empathy and understanding for mutual sacrifices, and reduce negative attributional biases. Cultural value differences could also be addressed through psychoeducation and helping parents and children realize that their perceived value differences stem not from personality dispositions alone, but also because of differences in cultural upbringing. Reducing negative attributions aimed at the person and targeting deleterious acculturative process that have damaged the family may help improve empathy, reduce blame, and foster a more biculturally effective understanding of family difficulties.

Interventions to help Hispanic adolescents improve family relations through bicultural effectiveness have been developed [15]. Therapeutic techniques such as reframing and detouring have been used to help alleviate blame on family members identified as having the problem and shift the blame to the conflict caused by cultural differences. This strategy may loosen existing rigid generational-cultural alliances and improve mutual understanding. In addition, techniques such as establishing crossed alliances have been used to help parents and youth become more aware of, comfortable with, and accepting of the positive aspects of each other's cultural affiliations. Szapocznik's et al. [15] bicultural effectiveness training program has been shown to improve immigrant family relations.

## Summary

Many people come to the U.S. looking for a better life and in search of opportunities for themselves and their families. Unfortunately, there continues to be little research that identifies acculturation-related risk factors for family conflict and mental illness. Until this process is better understood, the development of prevention and intervention programs will be limited. Rather than examining the more distal concept of the acculturation gap, we focused on understanding AFD and its two subcomponents (i.e., communication difficulties and cultural value differences), which were found to negatively impact the mental health of individuals and functioning of families. Conceptualizing acculturation-related family problems in this way also highlights potential foci to address in prevention and intervention programs, such as improving communication and teaching families how to negotiate cultural value differences. Rather than merely saying one's oath of national allegiance during naturalization, programs that educate immigrants on the types of problems their family is likely to encounter and that provide skills for dealing with these problems may be beneficial in facilitating healthier immigrant adaptation.

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