# Acculturation Gap, Family Conflict and <br> Well-being for Young Adults in Asian American Families <br> by <br> Yue Shi 

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#### Abstract

The relationship between parent and child acculturation gaps and the child's wellbeing for Asian American families, with the child's perceived family conflict as a potential mediating variable were examined in this study. In addition to linear relationships of acculturation gaps, curvilinear relationships were also examined. The sample consisted of 165 first or second generation Asian Americans, aged between 18 to 22. Results indicated that native culture gap is predictive of participants' self-report of depression, and family conflict did function as a mediator to the relationship between native culture gap and depression. The curvilinear relationship between acculturation gaps and well-being was not supported by the results of the study. Further implications and future directions are discussed.


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## Introduction

Acculturation is the process of cultural change that occurs as a result of contact between members of two or more cultural groups (Berry, 1980). Research has shown that children acculturate to the new culture at a faster pace compared to their parents (Birman \& Trickett, 2001). In contrast, adults tend to hold onto values from their culture of origin, and acculturate at a slower pace (Liebkind, 1996). This discrepancy between the child's and adult's acculturation rate is usually referred to as an "acculturation gap" and is thought to contribute to conflict within families and to psychological adjustment problems among second-generation adolescents from a variety of cultural backgrounds (Farver, Narang \& Bhadha, 2002). The purpose of the current study is to examine the relation of this generation gap with indicators of psychological functioning in Asian college students. A key aspect of this study is the examination of this generation gap and what an "acculturation gap" is more specifically. According to Redfield and colleagues (1936), the classical definition of acculturation "comprehends those phenomena which result when groups of individuals having different cultures come into continuous firsthand contact with subsequent changes in the original culture patterns of either or both groups". Later, a distinction of the definition was made by Graves (1967), between acculturation as a collective or group-level phenomenon, and as a psychological phenomenon. In the former, acculturation is a change in the culture of the group, whereas in the ladder, acculturation relates to a change in the psychology of the individual. According to Berry (1997), this distinction in definition is important because not all individuals participate to the same extent in the general acculturation patterns
experienced by their particular group. Individuals can vary greatly in the degree to which they participate in these community changes (Berry, 1970).

Previous studies have examined the relationship between psychological acculturation levels of either the child or the parent and family relationships (Luo \& Wiseman, 2000; Portes \& Hao, 2002). When significant effects were found between acculturation levels and family well-being, the authors inferred that the relationship exists because of the existing differences in acculturation levels between the parent and the child, which in turn could impact family relationships. Scholars found that acculturation gaps are related to language and communication difficulties among family members (Liu et al., 2009), and immigrant parents who are more oriented toward their native culture may find traditional parenting styles to be ineffective with children who are quickly adopting the host culture (Buki et al, 2003).

There are typically two frameworks researchers adopt when examining acculturation gaps. The first is a unidirectional framework which assumes that acculturation occurs one-directionally towards the host culture. Assimilation into the American society is considered as both desirable and inevitable for immigrants (Gordon, 1964). Research that adopt this model of acculturation calculates the acculturation gap either by difference scores between the children and the parents on an acculturation scale or categorize both parents and children into acculturation types determined by acculturation scales (Telzer, 2011). One model which researchers adopt under this framework is the acculturation gap-distress model. The model works under the assumption that immigrant children acculturate to their new culture at a faster pace in comparison to their parents, which in turn leads to family conflict and youth
maladjustment. According to Telzer (2011), it has been largely accepted that the acculturation gap-distress model is an immigrant phenomenon. However, support for the acculturation gap-distress model from previous studies has been mixed and inconclusive (Telzer, 2011). Many researchers examining the acculturation gap-distress model do not test for other gap possibilities, such as when parents acculturate at a faster pace compared to their children or when children retain more of their native culture compared to their parents.

Later, researchers realized the potential of existence for an orthogonal relationship between acculturation to the native culture and to the host culture (Birman, 1994; Farver et al., 2002; Ho \& Birman, 2010). In this bi-dimensional framework, acculturation measures assess the extent of affiliation to both the host and native culture. It assumes that two kinds of gaps may exist between parents and children: one is in respect to the host culture, the other with respect to the native culture. Berry (2006) expanded on this framework with his model of acculturation, where within one family, the parent and child can be matched in acculturation levels in both the host and native cultures, they can have an acculturation gap in both cultures, or they can be matched in one culture but have different acculturation levels in the other. Therefore, according to Berry's model of acculturation (2006), there are four types of classified acculturation gaps: (1) The child is more acculturated than the parent in the host culture; (2) the child is less acculturated than the parent in the host culture; (3) the child is more acculturated than the parent in the native culture; (4) the child is less acculturated than the parent in the native culture.

Various studies have examined this bi-dimensional model of acculturation and whether the acculturation differences between the parent and the child are related to a decrease in the child's well-being (Farver, Narang \& Bhadha, 2002; Lim et al., 2009). However, when measuring the levels of acculturation, cut-offs were used in analysis to categorize subjects into high/low levels and the differences of subjects within these levels were not examined. The current study proposes to examine for first or second generation Asian Americans, whether the child's perceived parent and child acculturation differences among these two dimensions are related to the child's well-being without categorizing subjects into acculturation levels as well as to examine potential interaction effects between the two dimensions of acculturative differences that contribute to this outcome variable. This is an important step because often when subjects were categorized into termed acculturation levels, variations within groups were lost. Farver and colleagues (2002) noticed that when their subjects were separated into acculturation styles, within style differences were noticeable and should have been taken into account as pointed out in their limitations. This resulted in a loss of power for the effects found for their study, as well as valuable information that could have been lost due to categorizing subjects. Additionally, cutoffs established for categories are arbitrary and do not contain any meaning on their own. Subjects could have a difference score of one on an acculturation scale but be separated into two complete acculturation categories due to established cutoffs.

Studies which do measure acculturation bi-dimensionally show that acculturation gaps function in unique ways depending on whether the gap is in the host or native culture. Costigan and Dokis (2006) examined both dimensions of acculturation and found
that acculturation gaps in the native culture were the most predictive of family conflict and youth maladjustment among Chinese adolescents in Canada. They collected independent reports of acculturation from mothers, fathers and children. Hierarchical multiple regression analysis were used to assess main effects of acculturation gaps as well as interaction terms whether the relations between children' acculturation and adjustment depended on the parents' levels of acculturation. Specifically, the main effects of fathers', mothers', and children's standardized scores of acculturation were entered in the first step. The standardized scores were used to calculate the interaction terms, which were entered in as the second step. The three-way interaction term among mother, father, and child scores was entered as the third step. Out of 36 interaction analyses, only 1 was significant in the host culture, whereas 7 were significant in the native culture, suggesting that when youths were both more and less acculturated than their parents in their native culture, family conflict, youth depression, and lowered academic motivation arise. The one significant finding regarding the host culture suggested that when mothers were more acculturated than their children in English media use, their children reported lower achievement motivation. Similarly, Liu and colleagues (2009) examined Chinese families’ acculturation and found that acculturation gaps in the native culture were associated with depression and lower math scores, whereas acculturation gaps in the host culture were unrelated to youths' academic achievement or depression. Ho and Birman (2010) found similar findings among Vietnamese youth. To assess the discrepancy in acculturation between parents and children, they used independent reports of acculturation levels from parents and children. An interaction approach was used when analyzing data, similar to that of Costigan and Dokis (2006), which enters each family member's continuous
acculturation scores in a regression model as predictors of family functioning. Acculturation gaps in the native culture in general were associated with lower family cohesion, whereas the same was not found for US cultural orientation. According to previously reported studies, it appears that differences in native culture between parents and child is most related to negative family and child outcomes, whereas the effects of host culture differences are more ambiguous. Telzer (2011) compiled a list of studies that examined acculturation differences of native culture between the parent and the child, and 8 out of 13 studies found that this gap was maladaptive either for families or for the child's well-being, whereas only 4 out of 13 studies found acculturative differences of host culture between the parent and the child to be maladaptive either for families or for the child's well-being.

The present study will be primarily focusing on examining the child's well-being. Specifically, the child's level of self-esteem and depression will be measured. Previous studies have demonstrated that differences in acculturation levels between parent and child are related to depression (Liu et al., 2009; Costigan \& Dokis, 2006) and self-esteem for the child (Farver et al., 2002). Liu and colleagues (2009) found that an acculturation gap in English language use was not associated with maladjustment, but youths who were more proficient in their Chinese native language in comparison to their mothers reported lower math scores and higher depression. Costigan and Dokis (2006) found that when children were more oriented towards their traditional culture in terms of Chinese language and media use compared to their mothers, the child reported greater depression and family conflict. Farver and colleagues (2002) found that adolescents reported higher self-esteem when no acculturation gap was detected between them and their parents. The
consensus for self-esteem, however, is not conclusive, as Hajizadeh (2009) did not find a relationship between acculturation gaps and self-esteem for Indian American college students but rather a relationship between intergenerational conflict and self-esteem instead.

Due to previous literature, I hypothesize several components. First, similar to Telzer (2011) and the majority of studies mentioned in her article, I hypothesize native gaps to be a significant predictor of well-being for Asian American young adults. Although there has not been less support for host gaps being a predictor of well-being alone, Birman (2006) did find host gaps to be a significant predictor of family conflict. Since past research has had conflicting results, I hypothesize host gaps to be a significant predictor of well-being as well.

Next, I propose looking at the relationship of acculturation gaps and well-being in a curvilinear manner as illustrated in Figure 1. Previous studies have demonstrated that a linear difference in acculturation in the native culture is associated with a decrease in the child's well-being (Costigan \& Dokis, 2006; Liu et al., 2009; Ho \& Birman 2010). Additionally, there were also studies that demonstrated similar results for the presence of a host gap (Birman, 2006; Costigan \& Dokis, 2006). Liu and colleagues (2009) also provided support that when the youth's Chinese proficiency was higher than their parents, youths reported higher levels of depression. Taking both directionality and dimensionality into consideration, I hypothesize that while only looking at native gaps, self-reports of well-being for children will be lowest either when the child perceives his/her parents significantly more oriented than they are or vice versa. I hypothesize the same curvilinear relationship for host gaps as well. In addition to Birman (2006)

Figure 1. Proposed Relationship between Acculturation Gaps and Child's Well-Being.


Native and Host Acculturation Gap Level
providing support that when Soviet adolescents acculturate faster than their parents in the host dimension relating to an increase in family conflict, Atzaba-Poria and Pike (2007) found that when Indian adolescents living in Britain have mothers who were more Westernized in comparison, they experienced more internalizing problems as well as higher externalizing problem behaviors. If the child perceives little acculturation differences in either the native or host culture between his/her parents, then self-report of well-being will be the highest.

Next, most studies assessing acculturation gaps between parents and children have been based on children's subjective perceptions of their parents' acculturation levels (Kwak, 2003). According to Telzer (2011), subjective perceptions of acculturation gaps across age, generation, and ethnic groups are consistently associated with higher perceived family problems, such as less parenting satisfaction, less parent-child bonding, less family cohesion, more family conflict, as well as youth maladjustment such as substance use, conduct problems, and depression. Merali (2002) found that perceived family conflict, having ineffective parenting roles and less parental demand from home can all be factors contributing to adolescents reporting larger acculturative differences between themselves and their parents. Additionally, Choi and colleagues (2008) found that youths who perceive acculturation gaps within families report higher family conflict. Such findings suggest the importance of examining the possibility of perceived family conflict as mediator variable for the relationship of acculturation gaps and well-being for children. Intervention targeted at children to improve well-being will be more effective if they take into consideration how children conceptualize their family dynamics. Therefore,
for the present study, I hypothesize perceived family conflict as a mediating variable that can better explain the linear relationship between acculturation gaps and well-being.

Method

## Participants

A total of 165 Asian American first or second generation participants were recruited ( 36 first and 129 second) through various recruitment methods. First generation was defined by "The first generation in your family to have moved from your country of origin to the US", and second generation was defined by "The first generation in your family to be born in the US". For the current study, Asian American participants were descendents or have parents that were born from the following countries: China, Cambodia, Thailand, Vietnam, Malaysia, Taiwan, Indonesia, Myanmar, Philippines, North Korea, South Korea, Japan, Singapore and Laos.

All participants were aged between 18 and 22 (mean $=18.84, \mathrm{SD}=1.30$ ), and all were residents of the US. At least one of each participant's parents must reside in the US as well. 72 participants identified as male, 92 as female and 1 as other. Most participants were current undergraduate students attending universities across the US $(\mathrm{N}=159)$. All participants completed the study online.

## Measures

Demographic Questionnaire - The demographic questionnaire listed in Appendix A assessed basic demographic information, current state of residence, generational status ( $1^{\text {st }}$ or $2^{\text {nd }}$ generation), attending university, year in school, country of origin for both participant and parents, and current country of residence for both parents.

## Acculturation - The Acculturation Rating Scale for Mexican Americans - II

 (ARSMA - II) (Cuellar et al., 1995) listed in Appendix A is a 30-item acculturation scale adopted for the use with Asian Americans for the present study. It consists of two subscales: cultural orientation to Mexican, for the present study, Asian Orientation Scale (AOS) (17 items), and Western Orientation Scale (WOS) (13 items). The items address the life domains of language usage, cultural activities involving the language, ethnic identity, and social interaction. The items are rated on a 5-point scale ranging from 1 (not at all) to 5 (extremely often or almost always), with higher scores representing an orientation toward the Asian or Western culture. Since participants will be responding the scale twice, once for themselves and once for their parents, the parent version of the scale modified each question to address the participant's parents instead of the participants themselves. Lee and colleagues (2006) conduced factor analyses that analyzed the reliability and validity of the Asian version of the measure. Factor analyses revealed similar 2-factor structures for both of the two subscales. Costigan and Dokis (2006) reported good internal consistency for their sample while using the Chinese version of the measure (alpha reliabilities of 0.72 for fathers, 0.79 for mothers and 0.88 for children on Chinese language use, and alpha reliabilities of 0.77 for fathers, 0.79 for mothers and 0.90 for children on Chinese media use). Parallel domains for English and for English language media was also assessed. The alpha reliabilities for English language use were 0.80 for fathers, 0.79 for mothers and 0.63 for children and for English media use were 0.69 for fathers, 0.76 for mothers and 0.53 for children. Liem and colleagues (2000) reported the Asian version of the scale as having high convergent and discriminant validity when using it to distinguish subjects according to Berry's four acculturationgroups (Berry, 2006). They attempted to validate the scale through using generation in the US, length of stay in the US, and age as criterion variables. Age was not related to acculturation, but generation and length of residence in the US were significantly associated with acculturation in their sample. Length of residence was further examined in each of Berry's (2006) acculturation categories, and in each category the length of residence made sense according to existing literature (Liem et al., 2000). For the current sample, the alpha reliability $(\mathrm{N}=165)$ for child AOS is 0.83 , parent AOS is 0.89 , child WOS is 0.74 and parent WOS is 0.89 .

Family conflict - Asian American Family Conflicts Scale (Lee et al., 2000) is a 10-item measure listed in Appendix A aimed to assess conflicts in values and practices between children raised in the US and their immigrant parents. It assesses 10 family conflicts that may occur in Asian American families. Each item is rated for likelihood of occurrence of the event (FCS-Likelihood) and the seriousness of the conflict (FCSSeriousness). They are both assessed on a 5-point Likert scale where 1 is representing "Not at all" and 5 is representing "extremely". Both sub-scale scores range from 10 to 50, with higher scores representing greater likelihood or seriousness of conflict. Lee and colleagues (2000) have tested for the internal reliability of the measure, reporting alpha coefficients ranging from 0.81 to 0.89 for FCS-Likelihood and 0.84 to 0.91 for FCSSeriousness. The stability coefficient for FCS-Likelihood and FCS-Seriousness were 0.80 and 0.85 respectively. The inter-scale correlation was $r=0.74$. The concurrent validity of the Family Conflicts Scale was established using the 24 -item Social, Attitudinal, Familial, Environmental Acculturation Stress Scale (SAFE), the Family Adaptation and Cohesion Emotions Scale II (FACESII), and the Parent and Adolescent Communication Scales
(PACS). The items of the FCS-Likelihood sub-scale were significantly correlated with the family conflict items from the SAFE and the PACS. The FCS-Seriousness sub-scale was related only to the SAFE. For the present study, only the FCS-Likelihood subscale was used as a measure of family conflict due to its significant correlations with other family conflict scales. The internal consistency $(\mathrm{N}=165)$ for the FSC-Likelihood subscale in the present sample is $\alpha=0.89$.

Depression - Generalized Contentment Scale (GCS) (Hudson, 1992) is a 25 -item scale measuring non-psychotic depression listed in Appendix A. Participants rate how they felt about a number of behaviors, attitudes, and events associated with depression. Sample items include "I have crying spells" and "I feel that people really care about me". The items were rated on a seven-point Likert scale ranging from 1, "none of the time", to 7, "all of the time". The GCS is scored by first reverse-scoring 12 of the 25 items. Next, the scores of all the items are added and the total number of completed items is subtracted from this total. The result is multiplied by 100 and divided by the number of items completed times 6. Possible final scores will range from 0 to 100, with higher scores indicating greater severity of problems. The GCS has reported good reliability and validity (Fischer \& Corcoran, 1994). Lim and colleagues (2009) reported a coefficient alpha of $\alpha=0.92$ for their Chinese adolescent sample aged 12 to 23 . The internal consistency $(\mathrm{N}=165)$ for the current sample is $\alpha=0.94$.

Self-esteem - Rosenberg Self-Esteem Scale (Rosenberg, 1965) is a 10 -item selfesteem scale assessing global self-esteem (e.g., "On the whole, I am satisfied with myself") listed in Appendix A. Each question is rated on a four-point Likert scale, ranging from "Strongly Agree" to "Strongly Disagree". Questions are scored on a point
system, where each question can score up to three points, reaching a total of thirty possible points. Five of the ten items are first reverse-scored. Scores ranging from 15 and 25 are within the normal range, and scores lower than 15 suggest low self-esteem.

Previous studies have reported alpha reliabilities ranging from 0.72 to 0.88 (Gray-Little et al., 1997). Robins and colleagues (2001) compared the Rosenberg Self-Esteem Scale to the Single-Item Self-Esteem Scale and found concurrent correlations ranging from 0.72 to 0.76 relating to the following domains: personality, psychological and social wellbeing, peer-related group behavior, academic outcomes, and demographics. For the present study, the alpha reliability $(\mathrm{N}=165)$ is 0.90 .

## Procedures

Recruitment methods included passing along the study's recruitment script to various undergraduate psychology listservs, professors in Arizona State University, Stanford University, and University of California, Los Angeles, various undergraduate classes, referrals, social media and through Reddit, a social networking and news website that allows registered users to submit content. The recruitment script was posted in various Asian related subreddits, or Reddit groups, as well as subreddits for all University of California, San Jose State University, Arizona State University and University of Illinois, Urbana-Champaign.

Participants must answer all questions presented from the following measures in order to progress in the study. Participants were allowed to stop doing the study at any time, but incomplete surveys were not included in data analysis. Once granted online access, each participant first filled out the demographic questionnaire. Each participant then completed the acculturation measure twice - once assessing his or her own levels of
acculturation, and one assessing the perceived parents' level of acculturation. Here, both parents' levels of acculturation are assessed as a single unit to the participant's best judgment. If the question applied more to one parent than the other, the participant was asked to answer the question for the first parent that came to mind. The main reason why the participants answered for their parents was because for the current study, outcome measures are focused on the participant, and not the parents. Therefore, their subjective impressions of their family dynamic and how they saw their parents were more important. Participants then complete a measure for family conflict, depression, and self-esteem. Due to the survey software automatically deleting incomplete responses after one week, the exact number of participants who completed only a portion of the study was unknown, but approximately 20 participants left the study after completing only the demographic questionnaire. Approximately 15 participants left the study after completing the demographic questionnaire and the acculturation scale assessing their own levels of acculturation, and approximately 10 participants left the study after completing their estimates of their parents' levels of acculturation. Approximately five participants left the study after completing the demographic questionnaire, acculturation measures and family conflict measure. Three participants left the study after completing the demographic questionnaire, acculturation measures, family conflict measure and the depression measure.

## Analysis

Average acculturation levels labeled "Asian acculturation elevation" and "Western acculturation elevation" were calculated for each participant by averaging the participant's own acculturation levels with the parents' acculturation levels.

Acculturation gaps were calculated by subtracting the parent's acculturation levels by the participant's acculturation levels for Asian and Western domains. The gap values are then squared to assess curvilinear relationships between acculturation gaps and outcome measures.

Correlation analyses were conducted to assess relationships between all variables for the study. Hierarchical regressions were conducted for both Asian and Western domains as follow-ups to assess main effects of acculturation levels as well as acculturation gaps. For the native domain, Asian acculturation elevation was entered in as the first step, followed by Asian acculturation gap in the second step, and Asian gaps squared as the third step. The same hierarchical regression was conducted for the host domain.

To assess whether family conflict mediated the relationship between acculturation and well-being measures, multiple regression analyses were conducted. According to Preacher and Hayes (2008), the independent variable's causal effect can be apportioned into its indirect effect on the dependent variable through the mediator and its direct effect on the dependent variable. This represents the c'-path. A-path represents the effect of the independent variable on the proposed mediator, whereas the b-path represents the effect of the mediator on the dependent variable partialling out the effect of the independent variable. C-path represents the effect of the independent variable on the dependent variable. If $\mathrm{a}, \mathrm{b}$ and c paths are found to be significant but c' path is not, Preacher and Hayes (2004) suggest that the proposed mediator has a full mediation effect on the relationship between the independent variable and the dependent variable.

## Results

Prior to conducting analyses to test the hypotheses, correlations among all six acculturation variables, family conflict variable, and the two well-being variables were examined. Well-being measures depression (GCS scores) and self-esteem (Rosenberg Self-Esteem Scale scores) were significantly correlated ( $r=-.81, p<.01$ ). No acculturation variable was significantly correlated with self-esteem. All acculturation variables in the Asian domain were significantly correlated with depression, while all the Western variables were not. The proposed mediator family conflict was significantly correlated with all acculturation variables other than Asian acculturation elevation and Western acculturation elevation. It was also found to be significantly correlated with depression $(r=.34, p<.01)$, as well as self-esteem $(r=-.23, p<.01)$ (see Table 1).

To test whether acculturation gaps predicted depression, hierarchical regressions were conducted. Starting at the native domain, Asian acculturation elevation was first entered into the model. It significantly predicted depression as shown in Table $2-F(1$, $163)=4.53, p<.05, R^{2}=.027$. According to Cohen (1988), this is a relatively small effect size. On the second step, Asian gap was entered, resulting in a significant increase in $R^{2}, F(2,162)=5.79, p<.01, \Delta R^{2}=.040, \Delta F=6.90, p<.01$. According to Cohen (1988), this is a small to medium change in effect size. To test whether acculturation gaps function in a curvilinear pattern in predicting outcome measures for the native domain, Asian gap squared was entered as the third step. Although the full model significantly predicted depression $F(3,161)=4.54, p<.01$, Asian gap squared did not significantly contribute above and beyond the first two predictors $t=1.40, p>.05, \Delta F=1.97, p>.05$.

Table 1. Correlations among All Acculturation Variables, Family Conflict, and WellBeing Variables (Depression and Self-Esteem).

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Depression | 1.00 |  |  |  |  |  |  |  |  |
| 2. SelfEsteem | -.81** | 1.00 |  |  |  |  |  |  |  |
| 3. Asian |  |  |  |  |  |  |  |  |  |
| Acculturation Elevation | -.16* | . 07 | 1.00 |  |  |  |  |  |  |
| 4. Western |  |  |  |  |  |  |  |  |  |
| Acculturation Elevation | -. 03 | . 05 | -.50 ** | 1.00 |  |  |  |  |  |
| 5. Asian Gap | .18* | -. 04 | . 14 | $-.22 * *$ | 1.00 |  |  |  |  |
| 6. Western Gap | -. 04 | -. 03 | -.32** | . $55^{* *}$ | -.51** | 1.00 |  |  |  |
| 7. Asian Gap Squared | .22** | -. 04 | . 02 | -.16* | . $94 * *$ | -.49** | 1.00 |  |  |
| 8. Western Gap Squared | . 09 | -. 01 | . 22 ** | -. $45^{* *}$ | . $51 * *$ | -.95** | . $53 * *$ | 1.00 |  |
| 9. Family <br> Conflict | .34** | $-.23 * *$ | . 06 | -. 09 | .18* | -.29** | . $21 * *$ | . 31 ** | 1.00 |
| Mean | 41.08 | 17.21 | 3.63 | 3.42 | . 98 | -1.17 | 1.23 | 1.78 | 26.08 |
| SD | 16.64 | 5.69 | . 53 | . 48 | . 52 | . 65 | 1.12 | 1.70 | 10.08 |

*p<.05 **p $<.01$

Table 2. Summary of Hierarchical Regressions Analyzing the Relationship between Acculturation Measures and Depression.

|  | $r$ | $\beta$ | $t$ | $R^{2}$ | $d f$ | F | $\Delta R^{2}$ | $\Delta F$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Criterion $=$ Depression (Score from Generalized Contentment Scale) |  |  |  |  |  |  |  |  |
| Step 1 |  |  |  | . 027 | 1,163 | 4.53* |  |  |
| Asian Acculturation Elevation | . 16 | -. 16 | -2.13* |  |  |  |  |  |
| Step 2 |  |  |  | . 067 | 2,162 | $5.79 * *$ | . 040 | 6.90** |
| Asian Acculturation Elevation | . 16 | -. 19 | -2.50* |  |  |  |  |  |
| Asian Gap | . 26 | . 20 | 2.63 ** |  |  |  |  |  |
| Step 3 |  |  |  | . 078 | 3,161 | 4.54** | . 011 | 1.97 |
| Asian Acculturation Elevation | . 16 | -. 16 | -1.96 |  |  |  |  |  |
| Asian Gap | . 26 | -. 11 | -. 46 |  |  |  |  |  |
| Asian Gap Squared | . 28 | . 32 | 1.40 |  |  |  |  |  |

Criterion $=$ Depression (Score from Generalized Contentment Scale)

| Step 1 |  |  |  | . 001 | 1,163 | . 15 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Western Acculturation Elevation | . 03 | -. 03 | -. 39 |  |  |  |  |  |
| Step 2 |  |  |  | . 002 | 2,162 | . 14 | . 001 | . 13 |
| Western Acculturation Elevation | . 03 | -. 01 | -. 13 |  |  |  |  |  |
| Western Gap | . 04 | -. 03 | -. 37 |  |  |  |  |  |
| Step 3 |  |  |  | . 034 | 3,161 | 1.90 | . 032 | 5.42* |
| Western Acculturation Elevation | . 03 | -. 07 | -. 70 |  |  |  |  |  |
| Western Gap | . 04 | . 56 | 2.07* |  |  |  |  |  |
| Western Gap Squared | . 19 | . 60 | 2.33* |  |  |  |  |  |

$* p<.05 * * p<.01$

The same hierarchical regression was conducted to assess variables in the host domain. Although Western variables did not yield significant results in predicting depression, the curvilinear Western gap term (Western gap squared) functioned as a suppressor variable in predicting depression. The full regression model in the first two steps did not significantly predict depression, nor did the individual predictors, but when Western gap squared was entered into the full model $(d f=3,161)$, change in F value was significant $\Delta F=5.42, p<.05$. T values for Western gap as well as Western gap squared were also significant $(t=2.07, p<.05$, and $t=2.33, p<.05$ respectively $)$, as shown in Table 2. Since there were no predictors that were correlated with self-esteem, a hierarchical regression was not conducted.

To test family conflict as a potential mediator between the relationship of Asian gap and depression, multiple regression analyses were conducted. First, it was found that Asian gap was positively associated with depression $(b=5.62, t(163)=2.27, p<.05)$. It was also found that Asian gap was positively related to family conflict $(b=3.57, t(163)$ $=2.39, p<.05)$. Lastly, results indicated that the proposed mediator, family conflict, was positively associated with depression $(b=.52, t(163)=4.25, p<.01)$. Because both apath and b-path were significant, mediation analyses were conducted using the bootstrapping method with bias-corrected confidence estimates (Preacher \& Hayes, 2008). Preacher and Hayes (2004) suggested using a $95 \%$ confidence interval to assess the indirect effects with 5000 bootstrap samples. Results of the mediation analyses confirmed the mediating role of family conflict in the relation between Asian gap and depression ( $b$ $=1.85, \mathrm{CI}=.29$ to 4.25$).$ In addition, results indicated that the direct effect of Asian gap on depression became non-significant $(b=3.76, t(163)=1.57, p=.12)$ when controlling

Figure 2. Family Conflict Functioning as a Mediating Variable to the Relationship of Asian Gap and Depression.

${ }^{*} p<.05 * * p<.01$
for family conflict, thus suggesting full mediation. All beta values reported above were unstandardized coefficients. Figure 2 displays the results.

## Discussion

The relations of parent-child acculturation gaps, family conflict, depression and self-esteem among first and second generation Asian American undergraduates were examined in this study. Findings from the current study were consistent with past literature regarding the association of acculturation gaps. First, native or Asian gap was associated with depression in the present study. This was hypothesized. Costigan and Dokis (2006) examined the effects of acculturation differences among Chinese parents and children in Canada on youth adjustment. They found that parents' and children's orientation in the Chinese dimension interacted more consistently to predict adjustment. They suggested that policies and programs which focused on maintaining immigrant children's continued involvement with their ethnic culture may support positive connections in the family and also enhance immigrant children's well-being. Consistent with the present study, it may benefit immigrant children to find means of maintaining their involvement with their native cultures at an early age.

Although it was hypothesized that host gaps would also be associated with the outcome measures, similar results were not found in the present study. Parents may see adapting well to the host culture as an asset for their children (Liu et al., 2009). Additionally, Bacallao and Smokowski (2007) found support that Mexican parents preferred their children to acculturate more in the host domain because they are able to help the family meet daily demands. Despite having a host cultural gap, Mexican parents
in their study were proud that they had children who were able to respond to family responsibilities.

Unfortunately no relationships were found between the independent variables and self-esteem for the present study. However, the mediating variable, family conflict, was significantly correlated with self-esteem. Hajizadeh (2009) found similar results, where the interaction of acculturation gaps and intergenerational conflict among Asian Indian parents and children did not predict self-esteem, but intergenerational conflict alone served as a significant predictor. This can be due to the lack of predictive power of acculturation gaps have on self-esteem.

Next, the results of the study did not support the hypothesis that acculturation gaps functioned in a curvilinear manner to predict well-being in young adults. One possible reason for this is due to the lack of representativeness of the current sample. A big portion of the participants were recruited through Reddit, a social networking and news website that allows registered users to submit content. The majority of Reddit users may not represent the overall Asian American first and second generation undergraduate student. This is a limitation to the study. Attempts were made to look for studies that reported means and standard deviations for measures utilized in the present study for Asian Americans, but no relevant data was found. Although the expected results were not found, the curvilinear relationship of acculturation gaps may be worthy of further exploration. No previous studies have attempted to explore the predictive values of acculturation gaps on well-being in a curvilinear fashion. For future direction, it may be beneficial for scholars to replicate the present study with a more representative sample or recruit a younger sample when the relationship between acculturation gaps and well-
being is more potent. By examining acculturation gaps in a different manner, we can further understand how they function and discover new solutions to promote well-being in immigrant families.

Lastly, data from the present study did support family conflict as a mediator between the relationship of Asian acculturation gap and depression. Ying and Han (2007) demonstrated though their longitudinal study that intergenerational/intercultural conflict was significantly related to depressive symptoms among Southeast Asian adolescents. Although similar in construct, Ying and Han did not utilize an established scale for their conflict measure, as only four questions were used to assess intergenerational/intercultural conflict, and no efforts were made in comparing the scale to pre-established conflict scales as Lee and colleagues have attempted for their conflict measure specifically designed for Asian Americans (Lee et al., 2000). The present study demonstrated a clear mediating relationship between Asian acculturation gap and depression through Asian American family conflict. This is a very important finding and contributes beyond existing literature. In addition to increasing effort to minimizing acculturation differences in the native domain for Asian American families, it may be even more important for mental health professionals to help decrease the perceived family conflict level for the child to foster youth well-being. In other words, it is important for Asian children to be involved with their own native cultures, but to help foster an even healthier environment, we must find solutions specifically designed to lower family conflict in Asian immigrant families.

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## APPENDIX A

RESEARCH SURVEY

## Informed Consent Form

Hello! Thank you very much for your interest in the current research study. My name is Yue Shi and I am a graduate student at Arizona State University under the direction of Dr. Terence Tracey conducting research regarding the acculturation process among Asian American first and second generation college students and their families. In case if you do not understand what "acculturation" means, it refers to the process where members of one culture try to adapt to cultural practices of another culture, a process that most immigrants go through. Your help is needed to better understand the acculturation process among Asian American families and the various effects the acculturation process may have. The study will take roughly $15-30$ minutes to complete. There is minimal risk of your participation to the best of our knowledge. Your participation is voluntary and you can withdraw at any time without penalty. We would appreciate you answering all questions as openly and honestly as possible. All participants of the study will remain anonymous and no personally identifiable information will be requested from any part of the study. You must be 18 years or older and also be first or second generation Asian American to participate (from any part of Asia). Your responses will be collected through this encrypted online survey website and downloaded into computers protected by passwords. Only Yue Shi and Dr. Terence Tracey have access to the data. If you have any questions regarding this research project, you can contact Yue Shi at yshi2418@gmail.com or Dr. Terence Tracey at Terence.Tracey@asu.edu. If you have concerns about your rights as a participant in this study, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. The Email address is research.integrity@asu.edu. If you have read through this letter, understand your rights, acknowledge that you are at least 18 years old, and agree to participate voluntarily, please click the "Yes" button at the bottom of this page. It will be considered as your consent to participate in this study. Thank you for your participation!

Q2 I have read and understood the above consent form and desire of my own free will to participate in this study. If you do not fit for the qualifications of the study or wishes not to participate, feel free to exit the study by closing your browser. If you would like to continue the study, please press "yes" below.

O Yes (1)

Q3 Age:

Q4 Sex:
O Male (1)
O Female (2)
O Other (3)

Q5 Please write your country of origin:

Q6 Please write your mother's country of origin:

Q7 Please write your mother's current country of residence:

Q8 Please write your father's country of origin:

Q9 Please write your father's current country of residence:

Q10 Select the generational status that most applies to you:
O 1st Generation (The first generation in your family to have moved from your country of origin to the US) (1)
O 2nd Generation (The first generation in your family to be born in the US) (2)

Q11 Please write down the college/university you are currently attending. If you are not currently attending college/university, write "N/A".

Q12 Current year in school (freshman, sophomore, etc.). If you are not currently attending college/university, select "N/A".

O Freshman (1)
O Sophomore (2)
O Junior (3)
O Senior (4)
O 5th+ year (5)
O N/A (6)

Q13 Please write the current state you reside in:

Q14 For this part of the study, please answer the following questions:

Q15 I speak an Asian language.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q16 I speak English.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q17 I enjoy speaking an Asian language.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q18 I associate with Caucasians.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q19 I associate with Asians and/or Asian Americans.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q20 I enjoy listening to Asian language music.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q21 I enjoy listening to English language music.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q22 I enjoy Asian language TV.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q23 I enjoy English language TV.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q24 I enjoy English language movies.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q25 I enjoy Asian language movies.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q26 I enjoy reading in an Asian language (e.g., books).
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q27 I enjoy reading in the English language (e.g., books).
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q28 I write in an Asian language (e.g., letters).
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q29 I write in the English language (e.g., letters).
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q30 My thinking is done in the English language.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q31 My thinking is done in an Asian language.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q32 My contact with an Asian country has been $\qquad$ .

O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q33 My contact with the United States has been $\qquad$ .

O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q34 My father identifies or identified himself as "Asian."
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q35 My mother identifies or identified herself as "Asian."
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q36 My friends, while I was growing up, were of Asian descent.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q37 My friends, while I was growing up, were of Caucasian/European descent.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q38 My family cooks Asian foods.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q39 My friends are of Caucasian/European descent.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q40 My friends now are of Asian descent.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q41 I like to identify myself as Caucasian.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q42 I like to identify myself as Asian American.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q43 I like to identify as Asian.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q44 I like to identify myself as an American.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q45 For this part of the study, please use YOUR best judgement to answer the following questions FOR YOUR PARENTS.If a question applies more to one parent than the other, answer the question for the first parent that comes to mind.

Q46 My parents speak an Asian language.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q47 My parents speak English.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q48 My parents enjoy speaking an Asian language.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q49 My parents associate with Caucasians.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q50 My parents associate with Asians and/or Asian Americans.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q51 My parents enjoy listening to Asian language music.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q52 My parents enjoy listening to English language music.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q53 My parents enjoy Asian language TV.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q54 My parents enjoy English language TV.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q55 My parents enjoy English language movies.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q56 My parents enjoy Asian language movies.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q57 My parents enjoy reading in an Asian language (e.g., books).
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q58 My parents enjoy reading in the English language (e.g., books).
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q59 My parents write in an Asian language (e.g., letters).
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q60 My parents write in the English language (e.g., letters).
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q61 My parents' thinking is done in the English language.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q62 My parents' thinking is done in an Asian language.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q63 My parents' contact with an Asian country has been $\qquad$ .

O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q64 My parents' contact with the United States has been $\qquad$ .

O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q65 My parents' fathers identify or identified themselves as \"Asian.\"
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q66 My parents' mothers identify or identified themselves as "Asian."
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q67 My parents' friends, while they were growing up, were of Asian descent.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q68 My parents' friends, while they were growing up, were of Caucasian/European descent.

O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q69 My parents' families cook Asian foods.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q70 My parents' friends are of Caucasian/European descent.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q71 My parents' friends now are of Asian descent.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q72 My parents like to identify themselves as Caucasian.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q73 My parents like to identify themselves as Asian American.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q74 My parents like to identify as Asian.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q75 My parents like to identify themselves as Americans.
O Not at all (1)
O Very little or not very often (2)
O Moderately (3)
O Much or very often (4)
O Extremely often or almost always (5)

Q76 Please answer the following two questions using the given scales for each of the family situations presented below: How likely is this type of situation to occur in your family? 1 - almost never ----- 2 - once in a while ----- 3 - sometimes ----- 4 - often or frequently ----- 5 - almost always How serious a problem is this situation in your family? 1 - not at all ----- 2 - slightly ----- 3 - moderately ----- 4 - very much ----- 5 - extremely

Q77 Your parents tell you what to do with your life, but you want to make your own decisions.

|  | almost never/n ot at all <br> (1) | once in a while/slight ly (2) | sometimes/moderat ely (3) | often or frequently/ve ry much (4) | almost always/extreme ly (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| How |  |  |  |  |  |
| likely |  |  |  |  |  |
| is this |  |  |  |  |  |
|  |  |  |  |  |  |
| situatio | O | $\bigcirc$ | O | O | O |
| occur |  |  |  |  |  |
| in your |  |  |  |  |  |
| family? |  |  |  |  |  |
| (1) |  |  |  |  |  |
| How serious |  |  |  |  |  |
| a proble |  |  |  |  |  |
|  |  |  |  |  |  |
| proble m is |  |  |  |  |  |
| situatio |  |  |  |  |  |
| n in |  |  |  |  |  |
| your |  |  |  |  |  |
| family? |  |  |  |  |  |
| (2) |  |  |  |  |  |

Q78 Your parents tell you that a social life is not important at this age, but you think that it is.

|  | almost never/n ot at all <br> (1) | once in a while/slight ly (2) | sometimes/moderat ely (3) | often or frequently/ve ry much (4) | almost always/extreme ly (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| How likely is this type of situatio n to occur in your family? (1) <br> How serious <br> a proble m is this situatio n in your family? (2) | 0 | $0$ | O <br> O | $0$ | $\bigcirc$ |

Q79 You have done well in school, but your parents' academic expectations always exceed your performance.

|  | almost never/n ot at all <br> (1) | once in a while/slight ly (2) | sometimes/moderat ely (3) | often or frequently/ve ry much (4) | almost always/extreme ly (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| How likely is this type of situatio n to occur in your family? <br> (1) <br> How serious <br> a proble m is this situatio n in your family? (2) | 0 | $0$ | $\mathrm{O}$ | $\bigcirc$ | $\bigcirc$ |

Q80 Your parents want you to sacrifice personal interests for the sake of the family, but you feel this is unfair.


Q81 Your parents always compare you to others, but you want them to accept you for being yourself.

|  | almost never/n ot at all <br> (1) | once in a while/slight ly (2) | sometimes/moderat ely (3) | often or frequently/ve ry much (4) | almost always/extreme ly (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| How likely is this type of situatio n to occur in your family? (1) <br> How serious <br> a proble m is this situatio n in your family? (2) | 0 | $\mathrm{O}$ | $0$ | $0$ | $\bigcirc$ |

Q82 Your parents argue that they show you love by housing, feeding, and educating you, but you wish they would show more physical and verbal signs of affection.

|  | almost never/n ot at all <br> (1) | once in a while/slight ly (2) | sometimes/moderat ely (3) | often or frequently/ve ry much (4) | almost always/extreme ly (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| How likely is this type of situatio n to occur in your family? (1) <br> How serious a proble m is this situatio n in your family? (2) | 0 | $0$ | $0$ | $0$ | 0 |

Q83 Your parents don't want you to bring shame upon the family, but you feel that your parents are too concerned with saving face.

|  | almost never/n ot at all <br> (1) | once in a while/slight ly (2) | sometimes/moderat ely (3) | often or frequently/ve ry much (4) | almost always/extreme ly (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| How likely is this type of situatio n to occur in your family? (1) <br> How serious <br> a proble m is this situatio n in your family? (2) | 0 | $\mathrm{O}$ | O <br> O | $0$ | 0 |

Q84 Your parents expect you to behave like a proper Asian male or female, but you feel your parents are being too traditional.

|  | almost never/n ot at all <br> (1) | once in a while/slight ly (2) | sometimes/moderat ely (3) | often or frequently/ve ry much (4) | almost always/extreme ly (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| How likely is this type of situatio n to occur in your family? $\begin{gathered} \text { (1) } \\ \text { How } \\ \text { serious } \\ \text { a } \\ \text { proble } \\ \mathrm{m} \text { is } \\ \text { this } \\ \text { situatio } \\ \mathrm{n} \text { in } \\ \text { your } \\ \text { family? } \\ (2) \end{gathered}$ | O | $0$ | O <br> O | O <br> O | 0 |

Q85 You want to state your opinion, but your parents consider it to be disrespectful to talk back.

|  | almost never/n ot at all (1) | once in a while/slight ly (2) | sometimes/moderat ely (3) | often or frequently/ve ry much (4) | almost always/extreme ly (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| How |  |  |  |  |  |
| likely |  |  |  |  |  |
| is this |  |  |  |  |  |
| type of |  |  |  |  |  |
| situatio | O | $\bigcirc$ | $\bigcirc$ | O | O |
| $\begin{aligned} & \mathrm{n} \text { to } \\ & \text { occur } \end{aligned}$ |  |  |  |  |  |
| in your |  |  |  |  |  |
| family? <br> (1) |  |  |  |  |  |
|  |  |  |  |  |  |
| How serious |  |  |  |  |  |
| proble |  |  |  |  |  |
|  |  |  |  |  |  |
| m is <br> this | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | O | $\bigcirc$ |
| situatio |  |  |  |  |  |
|  |  |  |  |  |  |
| n in your |  |  |  |  |  |
| family? <br> (2) |  |  |  |  |  |

Q86 Your parents demand that you always show respect for elders, but you believe in showing respect only if they deserve it.

|  | almost never/n ot at all <br> (1) | once in a while/slight ly (2) | sometimes/moderat ely (3) | often or frequently/ve ry much (4) | almost always/extreme ly (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| How likely is this type of situatio n to occur in your family? <br> (1) <br> How serious <br> a proble m is this situatio n in your family? (2) | 0 | $0$ | $0$ | $0$ | $\bigcirc$ |

Q87 Please select the appropriate response for each of the following items:

Q88 I feel powerless to do anything about my life.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q89 I feel blue.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q90 I am restless and can't keep still.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q91 I have crying spells.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q92 It is easy for me to relax.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q93 I have a hard time getting started on things I need to do.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q94 I do not sleep well at night.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q95 When things get tough, I feel that there is always someone I can turn to.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q96 I feel that the future looks bright for me.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q97 I feel downhearted.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q98 I feel that I am needed.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q99 I feel that I am appreciated by others.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q100 I enjoy being active and busy.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q101 I feel that others would be better off without me.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q102 I enjoy being with other people.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q103 I feel it is easy for me to make decisions.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q104 I feel downtrodden.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q105 I am irritable.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q106 I get upset easily.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q107 I feel that I don't deserve to have a good time.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q108 I have a full life.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q109 I feel that people really care about me.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q110 I have a great deal of fun.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q111 I feel great in the morning.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q112 I feel that my situation is hopeless.
O None of the time (1)
O Very rarely (2)
O A little of the time (3)
O Some of the time (4)
O A good part of the time (5)
O Most of the time (6)
O All of the time (7)

Q113 Please select the appropriate response for each of the following items:

Q114 On the whole, I am satisfied with myself.
O Strongly agree (1)
O Agree (2)
O Disagree (3)
O Strongly disagree (4)

Q115 At times I think I am no good at all.
O Strongly agree (1)
O Agree (2)
O Disagree (3)
O Strongly disagree (4)

Q116 I feel that I have a number of good qualities.
O Strongly agree (1)
O Agree (2)
O Disagree (3)
O Strongly disagree (4)

Q117 I am able to do things as well as most other people.
O Strongly agree (1)
O Agree (2)
O Disagree (3)
O Strongly disagree (4)

Q118 I feel I do not have much to be proud of.
O Strongly agree (1)
O Agree (2)
O Disagree (3)
O Strongly disagree (4)

Q119 I certainly feel useless at times.
O Strongly agree (1)
O Agree (2)
O Disagree (3)
O Strongly disagree (4)

Q120 I feel that I'm a person of worth.
O Strongly agree (1)
O Agree (2)
O Disagree (3)
O Strongly disagree (4)

Q121 I wish I could have more respect for myself.
O Strongly agree (1)
O Agree (2)
O Disagree (3)
O Strongly disagree (4)

Q122 All in all, I am inclined to think that I am a failure.
O Strongly agree (1)
O Agree (2)
O Disagree (3)
O Strongly disagree (4)

Q123 I take a positive attitude toward myself.
O Strongly agree (1)
O Agree (2)
O Disagree (3)
O Strongly disagree (4)

