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Relationships among differential acculturation, family environment, and delinquency in first and second generation immigrant youths.

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RELATIONSHIPS AMONG DIFFERENTIAL ACCULTURATION, FAMILY ENVIRONMENT, AND DELINQUENCY IN FIRST AND SECOND GENERATION IMMIGRANT YOUTHS.

A Thesis Presented
by
SHARLENE TANICA BECKFORD

Submitted to the Graduate School of the University of Massachusetts Amherst in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE

May 2001

Psychology
RELATIONSHIPS AMONG DIFFERENTIAL ACCULTURATION, FAMILY ENVIRONMENT, AND DELINQUENCY IN FIRST AND SECOND GENERATION IMMIGRANT YOUTHS.

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SHARLENE TANICA BECKFORD

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I would like to begin with thanking the chair of my committee, and advisor Margaret Stephenson, for her encouragement, emotional support, ideas, and helpful suggestions throughout the course of this project. I would also like to thank the members of my committee, Sally Powers and Arnold Well, for their helpful suggestions and unwavering interest in this research.

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ABSTRACT

RELATIONSHIPS AMONG DIFFERENTIAL ACCULTURATION, FAMILY ENVIRONMENT, AND DELINQUENCY IN FIRST AND SECOND GENERATION IMMIGRANT YOUTHS.

MAY 2001

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This study investigates the family environment as a mediator of the effect of differential acculturation on adolescent delinquency. Two hundred and twenty-seven university students who identified as first and second generation immigrants completed questionnaires concerning their acculturation process, perceptions of their parents’ acculturation, their family environment, involvement in risk behaviors, and their demographic information. Results showed that participants were differentially acculturated from their parents on both dimensions of acculturation. Participants rated their parents as more immersed in ethnic society than they are, and rated themselves as more immersed in dominant society than their parents. It was also shown that differential acculturation with mothers in dominant society immersion was negatively related with the seriousness of adolescent’s substance use. Further, when the two generations were analyzed separately, differential acculturation predicted delinquency for first generation immigrants but not for second-generation immigrants. This study showed that future
studies and interventions with immigrant youths must consider generational status, a bidimensional acculturation process, and the family environment.
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CHAPTER 1
INTRODUCTION

Most researchers agree that stressors to the family predict increased risk for adjustment problems among adolescents (Jacob, 1987). Although relatively few studies have examined the immigration process as a stressor to families, the existing research suggests that changes in family life, social networks, language, employment, and education, that often accompany immigration may cause it to be a stressful process (Kou, 1978; Matsuoko, 1990; Segal, 1991). Not only can there be considerable stress for individuals, but there may be an increase in the stress experienced by the family unit as both adolescents and parents face changes (Yu & Berryman, 1996) that may disrupt their ability to maintain stable family relations. Stress related to immigration has been linked to higher levels of loneliness, depression, anxiety, and other psychological symptomatology (Shin, 1993). Negative adjustment is not an inevitable outcome however, for adolescents who experience stressors in their family environment.

Not only is the immigration process itself stressful, but upon arriving in the new country the process of acculturation begins that may compound the stress experienced by individuals and families. Broadly defined, acculturation refers to the process individuals and groups undergo when they come into continuous contact with people or societies different from their own (Berry, 1996). Two main models of acculturation have been proposed in the literature. In one model, acculturation is conceptualized as a linear phenomenon, occurring along a continuum from unacculturated to acculturated (e.g. Salgado de Snyder, 1986). As a result, most current measures of acculturation are
organized along a single dimension of adjustment and are predominantly developed for specific ethnic groups.

A more refined model describes acculturation as a process that occurs along two independent dimensions: immersion in the dominant society and immersion in the ethnic society, (for more detail see Berry 1996). From this framework four acculturation strategies or outcomes can be generated (figure 1). Individuals who not only maintain meaningful ties to their own ethnic societies, but are also meaningfully immersed in the dominant society depict the integration strategy. Another frequently used strategy is assimilation; individuals using this strategy are not meaningfully immersed in their own ethnic society, but are fully immersed in the dominant society. Separation describes individuals who may seek to maintain, and are meaningfully immersed in their own ethnic societies, and do not wish to, or are not allowed to immerse in the dominant society. The final strategy, marginalization, occurs when an individual is not meaningfully immersed in either their own society or the dominant society. For the purpose of this study, I have taken the perspective of a bidimensional acculturation model, as any study on acculturation that ignores the complexity of the process is incomplete.

The amount of stress experienced through the acculturation process is affected by individual differences as well as by conditions in the new country. Greater cultural differences between the country of origin and the new country have been found to relate to more stress in immigrant families and individuals (Heras & Revilla, 1994). For instance, differences in values or language represent two areas where cultural differences may manifest. Individuals from cultures that emphasize conformity and obedience to
family may experience greater difficulty adjusting to the dominant American society that idealizes individuality (Shin, 1993). Similarly, individuals who immigrate from societies whose language is different from that of the dominant society may experience more stress as they adjust to the dominant society and a new language.

Another potential stressor to families may occur when parents and their children experience the process of acculturation differently and do not adopt the same adaptation strategies or outcome. The difference in the acculturation outcome of parents and their children, referred to as differential acculturation, is thought to be due in part to differences in their acculturation processes (Nguyen & Williams, 1989; Berry, 1996). Whereas parents are well grounded in their ethnic identities, children of immigrants are more malleable to socialization and social pressures than are their parents. For instance, adolescents are socialized into the dominant society through the media, schools and peer groups that often include members of the dominant group. This difference in process can result in adolescents being less entrenched in the values that are rooted in their ethnic societies (Matsuoka 1990). Essentially, children of immigrants are socialized into the dominant American society, whereas their parents are resocialized into the dominant American society (Heras & Revilla, 1994; Yu & Berryman, 1996; Berry, 1996).

Nguyen and Williams (1989) explored the cognitive adaptation of Vietnamese refugee adolescents and their parents to Western culture. They found that parents were more likely to endorse traditional Vietnamese values whereas their adolescents, especially girls, were more likely to reject these same values. The gender effect for girls most likely resulted because American family values for girls are different and less stringent than the traditional Vietnamese roles for girls. In addition, they also found that
while parents adhered to traditional values, regardless of length of stay in the U.S.,
adolescents were likely to shift away from these values.

It then follows that differential acculturation may effect changes in the traditional
authority structure of the family. For instance, the differences between parents and
adolescents are especially salient when adaptation to a new culture involves learning a
new language (Yu & Berryman, 1996). Children of immigrants tend to be more
immersed in the dominant society and become more proficient in the new language than
their parents. When parents are unfamiliar with the new language and customs they will
often depend on their children to help them navigate the new culture, giving the
adolescent the role of the spokesperson (Baptiste, 1993; Rosenthal, Ranieri & Klimidis,
1996). This can lead to adolescents losing respect for adult family members, and adult
family members in turn feeling ineffective (Sluzki, 1979; Stephenson, 1999; Giles, 1989).
These changes in family dynamics can also leave adolescents feeling isolated from their
families, and vulnerable to the influences of their peer groups, a contributing factor in the
development of adolescent delinquency (Caspi, 1993). Although adolescents from
immigrant families who become immersed in the dominant culture and form friendships
with their peers are at less risk for emotional distress, they are at increased risk for

The primary issue in the current study is to explore whether perceived difference
in the acculturation outcome of adolescents and their parents are related to delinquency
among adolescents. Indirect evidence of the relationship between differential
acculturation, the family environment, and adolescent delinquency comes from several
sources. Below follows a review of the literature that suggests a link between differential
acculturation and family environment, and of studies linking aspects of family relationships to adolescent delinquency.

Differential Acculturation and the Family Environment

Few researchers have studied the topic of differential acculturation and even fewer have examined the relationship between differential acculturation and family relationships. However, despite the dearth of studies that directly address parent-adolescent relationships in immigrant families, the idea that this is an important issue is widely noted (Yau & Smetana, 1993; Heras & Revilla, 1994; Dumka, Roosa, & Jackson, 1992). Research suggests that, as a function of adolescents’ development of autonomy there may be an increase in parent-adolescent conflict (Hill & Holmbeck, 1988). When differential acculturation occurs, already present, normative intergenerational differences may be exacerbated (Rick & Forward, 1992). The likely acculturation scenario portrays the adolescent abandoning traditional beliefs and embracing the beliefs of the dominant society, while parents are less apt to abandon traditional beliefs even as they become immersed in the dominant society. Embracing different and often opposing values presumably leads to conflict between parent and adolescent which may exacerbate normative parent-adolescent conflict.

There are several ways that conflict that result from embracing differing beliefs and values may play out in the family. First, it has been suggested that to maintain a sense of control parents will often adhere to rules from their countries of origin and become relatively stricter in their new environment (Sue, 1981; Lee, 1982), leading to increased parent-adolescent conflict. Second, children are likely to be more immersed in the dominant society relative to their parents, and this may increase conflict and decrease
the effectiveness of family communication. In addition to intergenerational differences in perspective, parents and their children may understand issues from two different cultural perspectives making it difficult to hold discussions where both parties feel understood (Yau & Smetana 1993).

Not all studies on immigrant family relationship have reported widespread intergenerational conflict, or consistent reports of perception of conflict. The Heras and Revilla (1994) study of first and second-generation Pilipino American families found that more acculturated Pilipino students did not report significant differences in their family environment compared to less acculturated students. Interestingly, the mothers of less acculturated students reported being significantly more satisfied with their family relationships, than did mothers of more acculturated students. Results of this study also suggested that students who reported higher levels of family satisfaction had higher scores on measures of psychological adjustment and self-esteem.

Reports of conflict also differ when parents’ reports are compared to their children’s. In the Dumka et al. (1989) study, the children’s report of family conflict showed a direct significant relationship to their conduct disorder, whereas, mothers’ report of family conflict was not related to their children’s conduct disorder. This finding suggests that children’s adjustment may be more linked to their perception of family conflict than their mothers’ perception of the family environment. In many cases, this discrepancy may be attributed to poor communication (Clark & Shields, 1997). The Dumka et al. study also found a significant relationship between higher maternal acculturation and lower child depression among low-income Mexican-American families, indicating that fewer differences in parent/child acculturation outcome may be related to
better adjustment. Because this study used a sample of fourth graders, it is not known whether these effects hold for adolescents and young adults. The studies reviewed above did not examine the link between mothers’ acculturation level and family conflict, nor did they look at children’s level of acculturation. Where acculturation was measured, it was measured as a simplified unidimensional construct and it is not clear whether these differences were due to dominant or ethnic society immersion.

The Family Environment and Delinquency

There has been little research exploring the relationship between acculturation, the family environment, and adolescent involvement in delinquency and drug use. However, family related variables have been studied extensively in the research on adolescent delinquency. Delinquency includes a wide range of behaviors that vary in seriousness, stability, and their developmental implications (Henggeler, 1989). The origins of delinquent behavior are best understood when the adolescent is viewed as embedded in multiple systems, such as family, school, and peers. Although the family only represents a small piece of the multiple influences on adolescent behavior, it is a very important influence, and is the focus of the current project.

Some researchers also distinguish between different categories of risk behaviors (Stanger, Achenbach & Verhulst, 1997), classifying delinquent behaviors as covert or overt. Covert delinquency includes sneaky, concealing behaviors such as lying and theft. Overt delinquency is more confrontational, and includes aggressive and violent behavior, that may cause physical harm to a victim (Loebet & Stouthamer-Loeber, 1998).

Overall, studies suggest the quality of family relationships relate to self-reported delinquency among adolescents. Adolescents, who report high parent-adolescent conflict,
low parental acceptance, and low parental caring and trust, report higher rates of delinquent behaviors. On the other hand, adolescents who report feeling connected to their families and involved in family activities report less delinquent behaviors (Henggeler 1989; Florsheim, Tolan & Gorman-Smith, 1996; Moos & Moos, 1986). Families with delinquent adolescents typically score low on measures of independence, and higher on measures of control. Good communication has been shown to be a protective factor against adolescent delinquency. Among two parent families, adolescents who report good communication with their parents were less likely to report involvement in serious forms of delinquency compared to adolescents who reported poor communication (Clark & Shields, 1997). Family cohesion has also been identified as a significant predictor of delinquent behavior. A lower level of family cohesion is associated with involvement in more delinquent behaviors (McCord, 1996; Tolan & Thomas, 1988; Cashwell & Vace, 1996).

Studies that have explored the connection between ethnicity and delinquency have found that the impact of the family differs by ethnic group (Florsheim, Tolan & Gorman-Smith, 1996; Weber, Miracle & Skehan, 1995; Smith & Krohn, 1995). Weber, Miracle and Skehan (1995) investigated how membership in different ethnic groups impacts the relationship between social bonding and participation in delinquent activities. They found that a measure of social bonding generated different factors across three ethnic groups: Blacks, Whites, and Hispanics. Family pride was negatively associated with delinquent behavior among Hispanic youth, but less so among White youth, and there was no association for African American youth. Hispanic families are characterized by strong family loyalty, as are many immigrant families from non-Western cultures. It is
conceivable that adjustment to American culture, which does not place similar relative emphasis on these values, may be associated with intergenerational conflict for adolescents who are more immersed in American society than are their parents.

Smith and Krohn (1995) proposed a model to explain the relationships among family context, family processes, and delinquency for adolescents from three ethnic groups: Hispanic American, African American, and European American. Family-related variables explained twice as much variance in delinquency for Hispanic American male adolescents, than for the other two groups. Certain family disruptions had greater relations to delinquency among Hispanic American youths than among African American or European American youths. For instance, being from a single parent home and being less involved with parents in activities were significantly related to delinquent behavior in Hispanic American adolescents. These findings suggest that the relationship between family processes and adolescent delinquency may be stronger among immigrant families than what has been demonstrated for non-immigrant families.

Florshiem et al. (1996) presented further evidence that certain family relational characteristics differentiate delinquent groups from non-delinquent groups. In their sample of African American and Hispanic American adolescent boys, they found that high risk boys’ relationships with their mothers were marked with more blaming and less nurturing, while low risk boys were more trusting and friendly in their relationships with both parents. Interesting ethnic differences were also noted in their study. Hispanic families were found to be more controlling, however this was not related to risk behavior in Hispanic American adolescents as it was in their sample of African American adolescents. They conclude “culturally derived expectations about adolescent
development play an important role in the link between family process and adolescent risk behavior” (p. 1229).

**Predictions and Hypotheses**

Irrespective of ethnic background, the process of acculturation appears to be predictable and similar across acculturating groups (Stephenson, 2000). The present study used a multi-ethnic sample of first and second-generation immigrant adolescents, and included measures of acculturation, the family environment, and risk behaviors. There are no previous studies looking at the relation between these variables. The measure of acculturation used, the Stephenson MultiGroup Acculturation Scale (SMAS), allowed me to study acculturation outcomes across ethnic groups unlike most available measures of acculturation that are developed for use with a specific ethnic group. Although it is possible that immersion in dominant society and immersion in ethnic society may have divergent relationships with adolescents’ adjustment, most studies have examined acculturation using unidimensional scales. The SMAS facilitates a more complex understanding of the acculturation process and measures immersion in the dominant society as well as immersion in ethnic society. The current study does not propose to compare different ethnic groups, but extends the literature on acculturation by examining the relationship of differential acculturation to adolescent adjustment within the context of the immigrant family. I predict that adolescents’ perception of difference of their acculturation outcome with parents’ acculturation outcome, and disturbances in the family environment will be related to adolescents’ self-reported delinquency.

Four questions that remain unexplored in the context of immigrant families are considered: 1) How is differential acculturation related to adolescent delinquency? 2)
the adolescent’s perception of family relationships related to the incidence of delinquency among first and second-generation immigrant youths? 3) Are the patterns of relations different for perceptions of differential acculturation for mother as compared to fathers, and for differential acculturation in ethnic society immersion as compared to dominant society immersion? 4) Finally, does perception of the family environment mediate the relationship between differential acculturation and delinquency?

Specifically, the following hypotheses are examined:

1. Based on previous research, I hypothesized that adolescents would perceive themselves to be differentially acculturated from their parents in their degree of immersion in ethnic society and immersion in dominant society. Specifically, adolescents’ acculturation scores would be significantly different from their perceptions of their parents’ acculturation scores on these two acculturation dimensions.

2. Adolescents’ dominant society immersion scores would be significantly and positively associated with their perceptions of family conflict, and significantly and negatively associated with perceptions of family cohesion and expressiveness. Adolescents’ ethnic society immersion scores would be significantly and positively related to perception of family cohesion and expressiveness, and negatively and significantly related to perception of family conflict.

3. Previous research does not provide clear guidelines for prediction of the relations among differential acculturation, the family relationship, and delinquency. However, based on general adolescent research, relationships with mothers are thought to be more intense in terms of conflict, communication, and cohesion as compared to
fathers (Youniss & Smolar, 1987). These variables have also been linked to adolescent delinquency.

    a) I expected that the difference between adolescents’ dominant society immersion score and mothers’ dominant society immersion scores, and the difference between mothers’ ethnic society immersion scores and adolescents’ ethnic society immersion scores would be related to adolescent delinquency more strongly than would the differences with fathers’ scores on both dimensions.

    b) In addition, perception of differential acculturation in both ethnic and dominant society immersion would be significant predictors of adolescent delinquency.

4. Family relationship variables (conflict, cohesion, and expressiveness) would mediate the relationship between differential acculturation and adolescent delinquency.
CHAPTER 2

METHOD

Participants

Participants included 227 university college students (Mean Age =19.8; SD =1.5), selected from students in undergraduate psychology courses who responded to a posting seeking first and second-generation immigrants. First generation immigrants are defined as students who themselves and their parent(s) are born in another country (n = 90). Students born in the United States of foreign-born parents define second generation immigrants (n = 137).

No specifications were outlined for racial or ethnic origin, or for gender breakdown. The majority of the participants were females (80%), and most (97%) reported being single. Participants in this study represent four major ethnic groups: Asian Americans, Americans of African Descent, European Americans, and Hispanic Americans. See Table 1 for a detailed list of countries represented.

Parents’ SES was assessed with the Hollingshead (1975) Index of Social Status. According to our participants, 23% of their fathers were in the highest socioeconomic class, while only 11% of their mothers were in this class. Most of the mothers were in the third and fourth socioeconomic class, and most of the remaining fathers fell in the second and third socioeconomic class. This demographic information is included in Table 2.
Materials

*Family Environment Scale (FES).* Family environment was assessed with the Family Environment Scale (FES; Moos & Moos, 1986). The FES comprises of 10 subscales that assess three underlying dimensions, Relationship, Personal Growth, and System Maintenance that measure the social environmental characteristics of families. Only the relationship dimension was used in this study. The relationship dimension assesses Cohesion or the degree of commitment, help, and support that family members provide one another; Expressiveness or the extent to which family members are encouraged to act openly and to directly express their feelings; and Conflict or the amount of openly expressed anger, aggression and conflict within families. Items are answered on a dichotomous format, true or false. Cronbach’s alpha for the subscales were cohesion = .78, expressiveness = .69, and conflict = .75. Test retest reliability (2 months) ranged from .73 to .86. Several studies support the construct validity of the FES (Moos & Moos, 1986). For this sample, Cronbach’s alpha for the subscales were cohesion = .72, expressiveness = .56, and conflict = .73.

*Stephenson Multigroup Acculturation Scale (SMAS).* Differential acculturation was assessed with the Stephenson Multigroup Acculturation Scale (SMAS; Stephenson, 200). The SMAS, a 32-item questionnaire, was designed to measures acculturation across ethnic groups. It assesses two acculturation dimensions, dominant society immersion (DSI; 15 items) and ethnic society immersion (ESI; 17 items), and within each dimension there are questions that tap language, interaction, food, and media. Strong reliability and validity were demonstrated with the SMAS. Coefficients alpha were .86 for the entire scale, and .97 for ESI and .90 for DSI. Strong validity was demonstrated by the predictive
ability of the SMAS regarding generational status and performance on the subscales, and
with replication of previous findings regarding the mediating effects of the DSI subscale.
Validity studies indicated good convergent and discriminant validity (Stephenson, 2000).
Coefficient alphas for this sample were .83 for overall, and .90 for ESI and .84 for DSI.
Table 3 presents the reliabilities for participants’ ratings of their parents. Separate scores
were calculated for dominant and ethnic society immersion because each dimension is
conceptualized as independent one from the other. Likewise, separate difference scores
were calculated for mothers and fathers on each dimension. Differential acculturation
scores were calculated as the difference between the participants’ acculturation scores
and the scores of the participants’ perception of their parents’ acculturation.

Risk Behavior Form (RBF). The Risk Behavior Form was developed for use in the Rural
Adolescent and Family Study and analyzed in a Master’s Thesis on risk behaviors among
rural adolescents (Pollack, 1994). There are 45 items that adolescents respond to using a
scale that ranges from 1 (never) to 5 (4 or more times a month). Adolescents also indicate
for each behavior, if ever, at what age they first engaged in the behavior, and at what age
they last engaged in the behavior. The items assess two categories of risk behavior:
Substance Use/Abuse, and Delinquency. The overall scale is comprised of three
subscales: the Overt Delinquency Scale (26 items assessing aggressive behaviors
including arguing, fighting, and acting loud or rowdy), the Covert Delinquency Scale (7
items assessing concealing behavior such as lying and theft), and the Substance-Related
Risk Behavior Scale (9 items assessing the frequency of use of drugs and alcohol).

Each item on the Risk Behavior Form was weighted for seriousness by a panel of
four judges. The correlations for the four raters ranged from .73 to .83 for the overall
The means for the seriousness ranking for each behavior was determined. The frequency reported for each behavior was then multiplied by the mean seriousness ranking of that behavior. The adolescents’ weighted score for each behavior was then added to determine overall score, as well as scores on the various subscales (overt delinquency, covert delinquency, and substance use). The frequency distribution of the risk behavior scale was positively skewed (Figure 2). This was expected, as the sample used in the current study was a self-selected college sample that was expected to report lower levels of delinquency.

The reliability of this scale was determined on 352 rural adolescents. Internal reliability of the three subscales range from .83 to .87. With the Overall Risk Behavior Scale yielding a reliability coefficient of .92. Significant correlations with the Youth Self-Report Scales (YSR) have been taken as tentative evidence of the validity of the Risk Behavior Scale. For this sample, reliabilities (standardized Cronbach’s alphas) ranged from .67 to .85 for the three subscales, and .87 for the overall Risk Behavior Form.

*Demographic Questionnaire.* Participants also completed a demographic questionnaire designed to collect information on a number of issues related to them and their parents. Questions addressed their age, gender, and racial and ethnic identification. In addition they were asked about their parents’ place of birth, occupation, level of education, and marital status. They were also asked about their grandparents’ place of birth.
Procedure

Participants were recruited from various undergraduate psychology courses and asked to sign up for specific times to report to a lab to complete a questionnaire packet on acculturation processes in immigrant families. Upon arrival at the lab, the study was described to participants and they signed a consent form. Following this introduction, participants then completed the demographics questionnaire, followed by a questionnaire packet containing the Risk Behavior Form, Stephenson Multi-group Acculturation Scale, and the Family Environment Scales. After completing all questionnaires, participants were debriefed and given the opportunity to ask questions. They received extra credit for participating in this study.
CHAPTER 3
RESULTS

Investigation of Hypotheses

Four planned t tests were conducted to test hypothesis 1 that adolescents' acculturation scores would be significantly different from their perception of their parents’ acculturation scores in dominant and ethnic society immersion. To examine the difference between adolescents' acculturation scores and their perception of their parents' acculturation scores, I computed acculturation scores on both dimensions of the SMAS for each participant and their perception of their parents’ acculturation. All four comparisons were significant. According to these results, adolescents perceive their mothers (M = 59.27) to be more immersed in ethnic society than they are (M = 47.14), t (226) = -14.56, p < .001. Adolescents also perceive their fathers (M = 59.41) to be more immersed in ethnic society than they are (M = 47.41), t (218) = -14.26, p < .001.

Adolescents also perceive themselves as more immersed in dominant society (M = 54.34) than their mothers (M = 47.32), t (226) = 10.236, p < .001. Similarly, they perceive their fathers as less immersed in dominant society (M = 46.61), than they are (M = 54.42), t (218) = 10.94, p < .001. See Table for distribution of differential acculturation scores.

Hypothesis 2 stated that adolescents’ dominant society immersion scores would be significantly and positively related to their perception of family conflict, and negatively related to their perceptions of family cohesion and expressiveness. It was also predicted that immersion in ethnic society would lead to a different pattern of relationships. Specifically, a significant positive relationship was predicted for adolescents' immersion in ethnic society and perceptions of family cohesion and expressiveness, while a
significant negative relationship was expected with perception of family conflict. To explore the relationship between adolescents’ acculturation scores and their perception of the family relationship, Pearson product moment correlations were conducted and hypothesis 2 was not confirmed. There were no significant relationships, although a trend emerged toward adolescents who were more immersed in ethnic society perceiving their family relationship as more cohesive. The results of the correlation analyses and their 95% confidence intervals are presented in Table 4.

Hypothesis 3 made two predictions. First, it was expected that the difference between adolescents’ dominant society immersion scores and mothers’ dominant society immersion scores, and the difference between mothers’ ethnic society immersion scores and adolescents’ ethnic society immersion scores would be related to adolescent delinquency more strongly than differences with fathers’ scores on both dimensions. The second prediction was that perceptions of differential acculturation in both ethnic and dominant society immersion would predict adolescent delinquency.

To test hypothesis 3, four separate differential acculturation scores were calculated. On the dominant immersion dimension, adolescents’ perception of parents’ acculturation score were subtracted from the adolescents’ acculturation score: MADD-Mother adolescent dominant difference; FADD- Father adolescent dominant difference. On the ethnic immersion dimension, adolescents’ ethnic society immersion score were subtracted from adolescents’ perception of parents’ ethnic society immersion score: MAED – Mother adolescent ethnic difference; FAED – Father adolescent ethnic difference.
In addition, a summed delinquency score of the 3 sub-scales was calculated for the adolescents, along with summed scores for each subscale. According to the weights assigned to items on our risk behavior scale, participants could have attained a minimum score of 217 and a maximum score of 10,892. Actual scores in the current study ranged from 1092 to 4984, with a mean score of 2770.

According to hypothesis 3, MAED and MADD scores would be stronger predictors of the seriousness of adolescent delinquency than FAED and FADD. With this in mind, analyses were conducted separately for MAED and MADD, and then for FAED and FADD. This prediction was tested with regression analyses. MADD scores significantly predicted substance use among adolescents. The effects of MADD scores were negative and significant (β = -0.14, p < .04). It seems smaller differences with mother in dominant society immersion predicted more serious substance use among adolescents. MAED scores were marginally related to substance use in the opposite direction (β = 0.12, p < .08). FAED and FADD scores were not significantly associated with delinquency scores. These analyses suggest mother-adolescent acculturation difference is more closely linked to adolescent outcome than is the father adolescent acculturation difference.

Hypothesis 3 also predicted that perception of differential acculturation in both ethnic and dominant society would be significant predictors of adolescent delinquency. The above analyses partially support this hypothesis. The only significant predictor of adolescent delinquency was differential acculturation from mother in dominant society. No measure of discrepancy in ethnic society immersion was significant. This suggests
that perceived discrepancy in dominant society immersion might be a more important predictor of adolescent delinquency.

Hypothesis 4 proposed that the family relationship variables (conflict, cohesion, and expressiveness) would mediate the relationship between differential acculturation and adolescent delinquency. To test for mediation, I proceeded in four steps. The first step was addressed in hypothesis 3. MADD scores significantly predicted the seriousness of substance use among adolescents ($\beta = -0.14$, $p < .04$). MAED, FADD and FAED did not satisfy the first condition and were excluded from further analyses.

The second step in the proposed model requires that differential acculturation scores predict perceived family relationship scores. MADD scores were significantly associated with all the family relationship variables: cohesion, ($\beta = -0.319$, $p < .001$), expressiveness, ($\beta = -0.285$, $p < .001$), and conflict, ($\beta = 0.235$, $p < .002$).

To test the third condition outlined by Baron and Kenny (1986) another set of regression equations were run that included each family relationship variable as a predictor, and delinquency scores as outcomes. Conflict positively predicted overall delinquency ($\beta = 0.22$, $p < .01$), overt delinquency ($\beta = 0.26$, $p < .003$), and covert delinquency ($\beta = 0.24$, $p < .004$). Expressiveness was a positive predictor of overt delinquency ($\beta = 0.17$, $p < .04$), and cohesion was a marginally significant predictor of overall delinquency ($\beta = 0.16$, $p < .08$). These results did not meet the third necessary condition for mediation. Because there was no significant relationship between the proposed mediators and substance use, there was no basis to continue to test the proposed mediated model.
Although the mediated model is not supported, these results demonstrate that the family relationship variables included in the present study and differential acculturation between mother-adolescent are important predictors of adolescent delinquency. The results also suggest that differential acculturation in dominant society immersion is associated with the seriousness of adolescent delinquency, unlike differential ethnic society immersion that was not significantly associated with any delinquency variable.

Given these results, and the nature of this study, several post hoc analyses were conducted to clarify these findings. Because existing literature (Heras & Revilla, 1994) provides evidence for potential differences in self-esteem and self-concept of first and second-generation immigrants, exploratory analyses were conducted to determine the relationships of adolescent delinquency and differential acculturation among first and second-generation student participants.

**Exploratory Analyses**

A two sample t-test showed that second generation participants (n = 137) had significantly higher mean overall delinquency scores (M = 2846.4) than first-generation participants (n = 90; M = 2656.8), t (210) = -3.064, p < .003. The two generations were not significantly different on overt delinquency. However, second-generation students had higher mean scores for both covert delinquency (M = 507.7; t (206) = -2.09, p < .04) and substance use (M = 677.4; t (221) = -3.62, p < .001) than did first-generation students (M = 474.9 and 567.3).

Further, second-generation students were more immersed in dominant society (M = 55.91) than were their first-generation peers (M = 51.96; t (205) = -5.46, p < .001). While, first-generation participants were more immersed in ethnic society (M = 49.2)
than second generation participants (M = 45.79; t (132) = 1.981, p < .05). Further, first-generation immigrants perceived themselves as more differentially acculturated from parents on immersion in dominant society (MADD, M = 11.01, t (161) = 4.754; p < .001; FADD, M = 11.557; t (165) = 4.35, p < .01), than did second generation students (MADD, M = 4.28; FADD, M = 5.3). There was no significant difference between the two generations for differential acculturation in immersion in ethnic society. Additional t-tests revealed that there were no significant generational differences in the ratings of the family environment variables included in this study.

Evaluating the Mediational Model

First Generation: Among first generation immigrants MADD scores predicted adolescents’ report of involvement in covert delinquency, (β = 0.30, p < .008). FADD scores also predicted covert delinquency, (β = 0.33, p < .003). The next set of regression analyses tested to see if the second necessary condition would be satisfied. MADD scores significantly predicted expressiveness (β = -0.25, p < .03) and conflict (β = 0.23, p < .05). FADD scores did not significantly predict any of the proposed mediating family relationship variables.

The next step was to test for significant relationships among the proposed mediators and the delinquency variables. Among first generation immigrant participants, conflict was positively related to overt delinquency, (β = 0.31, p < .03), and expressiveness was negatively associated with covert delinquency (β = -0.32, p < .02). These results allowed for the testing of mediation. When covert delinquency is regressed on MADD and expressiveness, the effect of MADD scores on covert delinquency
decreases and is no longer significant. Figure 3 presents the results of the mediation analyses.

*Second Generation:* Among second-generation immigrant participants a different set of results emerge. Differential acculturation scores did not significantly predict delinquency outcomes. In one case, MADD scores were marginally associated with the seriousness of substance use ($\beta = -0.15$, $p < .09$), as were FAED scores ($\beta = -0.16$, $p < .08$). However, differential acculturation scores were strongly associated with perceptions of family relationship among second generation participants. The effect of MADD scores on expressiveness was negative and significant ($\beta = -0.34$, $p < .001$) as was the effect of MAED ($\beta = -0.20$, $p < .02$). MADD scores were significantly and positively associated to the adolescents' perception of family conflict ($\beta = 0.30$, $p < .01$), and negatively related to their perception of family cohesion ($\beta = -0.44$, $p < .001$). Similarly, FADD scores were significantly and negatively related to the perception of family cohesion ($\beta = -0.32$, $p < .001$) and expressiveness ($\beta = -0.27$, $p < .003$), and positively related to perceived family conflict ($\beta = 0.22$, $p < .01$).

Among second-generation participants, the associations between family relationship variables and delinquency outcomes differ from those observed among first generation participants. The effect of family conflict on the seriousness of overall delinquency was significant and positive ($\beta = 0.236$, $p < .024$), as was its effect on the seriousness of overt delinquency ($\beta = 0.23$, $p < .03$), and covert delinquency ($\beta = 0.27$, $p < .009$). None of the other family relationship variables were significantly related to the seriousness of delinquent outcomes. This suggests that among second-generation
immigrants, perceptions of family conflict might be the most important predictor of delinquent outcomes.

These results did not satisfy the necessary conditions for the proposed mediational model. However, they introduce important differences between first and second-generation immigrants. It appears that among first generation immigrants differential acculturation and the family environment variables are important predictors of adolescent delinquent outcomes. Among second-generation participants the effect of differential acculturation on delinquent outcomes decreases, while the effect of family relationships increases.
CHAPTER 4

DISCUSSION

The results of this study show the complexity of relationships among differential acculturation, adolescent delinquency and perceptions of family relationships. Not all hypotheses were confirmed. However the results support previous anecdotal reports and clarify the relations between acculturation and the family environment. In addition several effects of generational status on risk behavior type were found. These findings were not all predicted, but they have important implications for acculturation research and intervention.

First, the results lend empirical support to anecdotal reports regarding differences in acculturation outcomes of immigrant parents and children (Baptiste, 1993). Adolescent participants consistently rated their parents as less immersed in dominant society than they were, and also rated their parents as more immersed in ethnic society than they rated themselves. It is this difference that defines differential acculturation. Adolescents did not perceive one parent as more or less immersed than the other on either dimension. These findings are not surprising as they fit with both anecdotal and empirical accounts of the effects of acculturation on family members (Rosenthal et al. 1996; Nguyen & Williams, 1988). The Nguyen and Williams study found that adolescents are more likely than their parents to abandon traditional behaviors and values and adopt those that are seen to be more in line with mainstream society.

Second, contrary to predictions, adolescents who were more immersed in dominant society did not perceive their family relationships as more conflictual, less
cohesive, or less expressive. Similarly, adolescents who were more immersed in their ethnic society did not report family relationships as less conflictual, more cohesive, or more expressive.

The lack of significant findings here is discrepant with previous research findings (Nguyen and Williams, 1999) that described robust positive associations between immersion in ethnic culture and family/parent relationship among Vietnamese respondents. They also found a positive relationship between immersion in American society and family/parent relationships. The use of a multigroup sample in the current study, in contrast to a single ethnic group, may in part explain the discrepant findings. Nevertheless, the absence of significant associations in the current study might offer important insights into family functioning and perceived acculturation outcomes. Although the above predictions about adolescents’ immersion were not significant, it was found that differential acculturation scores (MADD, MAED, FADD) are in fact associated with adolescents’ perception of family relationship (Table 5). This suggests that family dynamics are disrupted not because of adolescents’ acculturation outcome, but because of perceived discrepancy in acculturation between adolescents and their parents.

Third, the results indicate that MADD was significantly related with the seriousness of adolescents' delinquent outcomes. Whereas MAED was only marginally significant, and FADD and FAED were not significant predictors of adolescent adjustment. One explanation for this finding is that mothers are more involved with their children, and should have more influence on their adjustment. What is surprising however, is the direction of the relationship. MADD scores were negatively related with
the seriousness of adolescents’ substance use. That is, the less discrepant the difference score between adolescent and mother, the more serious the adolescent’s substance use.

This finding prompted further exploratory analyses that revealed that mothers’ dominant society immersion scores, as well as adolescents' dominant society immersion scores positively predicted adolescents’ substance use. Previous studies suggest that “high parental acculturation” (defined as greater identification with mainstream culture) is adaptive and might serve to reduce stressors on the child (Dumka et al. 1997; Szapocznik & Kurtines, 1980). Alternatively, mothers who are more immersed in dominant society might unwittingly facilitate their children’s substance use. It is possible that mothers who are more immersed in American society are more lenient disciplinarians. are more likely to be working, and may not be able to monitor behaviors and enforce rules. Further, it has been demonstrated that high-acculturated Hispanic women are more likely to use alcohol, have higher lifetime time rates of alcohol and drug use disorders and have higher rates of intravenous drug use compared to low-acculturated women (Fraser, Piacentini, Van Rossem, Hein, & Rotheram-Borus, 1998). Because I do not have information on mothers' substance use, no definite claims may be made about the direction of influence between mothers and adolescents. However, children and adolescents often acquire their involvement in problem behaviors from role models through observation and social reinforcement (Bandura, 1986). It is possible that mothers who are struggling with stressors related to their own acculturation process model particular coping strategies for their adolescents. Similarly, mothers who are more immersed in mainstream society may not be constrained by cultural prohibitions on substance use, and may socialize their children accordingly.
Future research might investigate the relationship between parental behaviors and adolescent behaviors related to substance use through longitudinal studies. Also, including multiple measures of adolescent adjustment, to understand this complex relationship would be useful in future research.

Fourth, the results in this study allowed for comparisons between the two dimensions of immersion. It seems differential acculturation outcomes in dominant society immersion is the most important predictor of adolescent adjustment. This finding supports the use of bidimensional models of acculturation.

Finally, the study found that the seriousness of adolescents' involvement in overt, covert and overall delinquency was directly related to their perception of family conflict and family expressiveness. Participants' perception of differential acculturation from mothers in dominant society also was directly related to their perception of family conflict, cohesion and expressiveness. Contrary to prediction, there was no evidence that any of the family relationship variables included in the current study mediated the relationship between differential acculturation and the seriousness of adolescent delinquency for the overall sample.

In the course of this study, it became clear that generational differences were present among my sample. The post hoc analyses assessed the specific predictiveness of differential acculturation and family relationships for each generation.

For first generation adolescents, discrepancy in immersion in dominant society with both parents predicted the seriousness of covert delinquency. However, only discrepancy in acculturation with mother predicted family relationship variables. In this study, family expressiveness, or the degree to which adolescents perceived family
members are encouraged to act openly and to express their feelings directly, is the mechanism through which differential acculturation from mothers in dominant society affects the seriousness of covert delinquency.

Previous studies have linked covert delinquencies to physical punishment, and authoritarian parenting (Loeber et al. 1997), and Rosenthal and colleagues (1996) have suggested that immigrant parents are more likely to practice authoritarian parenting. It has also been suggested that immigrant parents might become relatively stricter in their new environments in their attempts to maintain a sense of control (Sue, 1981; Lee, 1982). It may follow that adolescents who believed they cannot act openly or express their feelings report more serious lying and sneaky behaviors (covert delinquency). This might explain the relationships among MADD scores, adolescents' perception of family expressiveness and delinquency scores.

The results indicate that second-generation immigrants might not only have worse psychological outcomes as suggested by Heras and colleagues (1994), but also less adaptive behavioral outcomes as demonstrated in this present study. Among second-generation immigrants, perception of differential acculturation was not significantly related to their reports of involvement in risk behaviors. However, differential acculturation continued to predict participants' perception of family relationships. Adolescents who perceived themselves as significantly differentially acculturated from their parents on both dimensions reported that their family relationships were more conflictual, less expressive, and less cohesive. Second-generation participants also report involvement in more serious covert delinquency, substance use, and overall delinquency.
One explanation for this result might be the degree to which adolescents are immersed in their ethnic societies. Preliminary regression analyses revealed that adolescents' immersion in ethnic society was negatively associated with their report of overall delinquency ($\beta = -0.178$, $p < .01$). Second generation immigrants, as a consequence of being born in America, may be more removed from ethnic society than foreign-born first generation immigrants. Their connection to ethnic society is dependent, in part, on their parents' level of immersion. As such, they may not benefit from immersion in ethnic societies in the same way as first generation participants who, along with their parents, may be more immersed in their ethnic societies. The results suggest that immersion in ethnic society might actually serve as a buffer for adolescents.

In sum, many interesting differences are revealed when the generations are considered separately. First, differential acculturation seems to be a significant predictor of delinquency for first generation immigrants, but not for second-generation immigrants. Second, different family relationship variables were predictive of the seriousness and types of risk behaviors for first and second-generation immigrants. For first generation immigrants, expressiveness mediated the relationship of MADD to covert delinquency, while family conflict was predictive of overt delinquency. Whereas for second generation participants only conflict or the amount of openly expressed anger, aggression, and conflict among family members, was predictive of delinquency (overt delinquency, covert delinquency, and overall risk behavior).

Overall, these results suggest that there are aspects of the family relationship that relate to adolescent delinquency across the immigrant generations and are similar to results with non-immigrant groups in previous studies. However, the differences noted
here indicate the importance of investigating first and second-generation immigrants as unique populations. Any risk model or intervention effort should consider generational status, family conflict, family expressiveness, and differential acculturation. For first generation immigrant adolescents it might not be enough to consider family relationship variables, as acculturation differences may also be important in predicting their risk for delinquent outcomes. For second-generation immigrant adolescents, the amount of openly expressed anger, or aggression and conflict among family members seem to be critical in predicting their risk for delinquency. Consequently, these are areas to include in intervention efforts.

Limitations to the Present Study

One limitation of this study is that variables not accounted for in the current study might further explain the relationships among differential acculturation, the family relationship variables, and adolescent delinquency. The pathways of influence to adolescent risk behaviors are varied and complex, particularly in late adolescence. This study concentrated on the influence of the family and acculturation, excluding potentially important antecedents such as SES, peer group, neighborhood, and gender.

The most obvious limitation to the present study is the nature of the sample. The distribution of risk behaviors was positively skewed, with most of the participants reporting low levels of involvement in risk behaviors. As a result, the findings of this study must be considered as preliminary. This study provides a first step in describing how differential acculturation and the family environment may impact adolescent delinquency and how those influences may differ among first and second-generation
immigrant adolescents in a college setting. These results might not generalize to other segments of immigrant adolescents, or the general society.

A third limitation on this study involves only using adolescents’ report. Clearly adolescents’ perception of their parents acculturation might differ from their parents’ experience of their own acculturation process. As such, it must be reiterated that the reported findings address how adolescents’ outcomes are predicted from their perception of differential acculturation. Other studies that use parents’ report rather than adolescents’ might yield different results.

Another limitation to this study has to do with the Risk Behavior Form. Because this measure has not been widely validated, it would have been beneficial to include a second outcome measure. However, there is no other delinquency scale that includes the three categories of delinquent behaviors measured by this scale.

Implications of the Present Study

The current study underscores the importance of considering acculturation as a multidimensional and complex process. Findings reported here might have been missed had I used an uni-dimensional model. Additionally, findings from this study suggest that there are important differences between first and second-generation immigrant adolescents that are not always clear in the previous acculturation literature. The findings further demonstrate that differential acculturation is an important predictor of delinquency among first-generation immigrant adolescents. Finally, the results indicate that intervention programs need to be different and should be tailored for first and second-generation immigrant families. Interventions for both groups might include educational information on acculturation, differential acculturation, and the influence of
the family environment, along with strategies to increase internal prohibitions against involvement in risk behaviors. Skills training that will facilitate expressiveness and conflict resolution among family members should be important also in working with first and second-generation immigrant families.

**Areas for Future Research**

This project adds to a new, but growing body of research, and points to several areas for future research. First, the data available in the current study do not allow for precise testing of the temporal sequencing among these variables and longitudinal studies are needed to determine the effect of acculturation on family relationships and adolescent adjustment. Second, futures studies might obtain data from parents as well as children and derive differential acculturation scores from multiple reporters. Third, future studies might include other measures of adjustment and assess their relation to differential acculturation. Fourth, the use of samples that include not only college students but also community members, who are more likely to show higher levels of delinquency, will yield more generalisable results. Further, including samples of non-immigrant adolescents might guide future interpretations of acculturation studies. Future studies might also assess gender, SES and neighborhoods as risk and protective factors among immigrant youths. Finally, it will be important to examine similar hypotheses among single ethnic groups, to determine what interventions will be most beneficial to specific groups.
APPENDIX A

MATERIALS

Participant Consent Form
Demographic Form
Family Relationship Scale
Risk Behavior Form
Stephenson Multigroup Acculturation Scale
Written Debriefing Statement
Participant Consent Form

As a student at the University of Massachusetts you are invited to participate in a study that will look at immigration, adjustment and family dynamics. The study is being conducted by Professor Margaret Stephenson, Ph.D., and her research team.

If you decide to participate in this study, you will be asked to fill out a number of questionnaires which will take you approximately one hour to complete. You will receive research credits for your time. There are no known risks to participating in this study. If you wish to discontinue participation, you will receive credit based on the amount of time that you participated.

Following the collection of data, your individual identity will be removed from all records and remain confidential at all times. Your responses will be identified only by number.

If you have any questions, please contact Dr. Margaret Stephenson at (413) 545-4276.

I have decided to participate in this study. My signature below indicates that I have decided to participate and that I have read and understood the information in the consent form. I realize that I am completely free to withdraw consent and discontinue participation at any time.

________________________
Print Name

________________________
Signature

________________________
Date

________________________
Address

________________________
Phone Number

I have fully explained the study described above, including the nature and purpose, to the participant.

________________________
Investigator

________________________
Date
Demographic Form

Please respond to these questions by either checking the appropriate answer following the statement, or by filling in the response on the line following the question.

1. Age____

2. Male ____ Female____

3. Place of Birth

United States ____ Other________________________________________ (Fill in)

4. Mother’s Place of Birth

United States ____ Other________________________________________ (Fill in)

5. Father’s Place of Birth

United States ____ Other________________________________________ (Fill in)

6. Grandmother’s Place of Birth

United States ____ Other________________________________________ (Fill in)

7. Grandfather’s Place of Birth

United States ____ Other________________________________________ (Fill in)

8. Marital Status

Single ____ Divorced____ Widow____

Married____ Separated____ Other____

9. What is your mother’s current occupation? ______________________________________

10. What is your father’s current occupation? ______________________________________
Demographic Form

11. What is your mother’s level of education?
   - Less than 7th grade ____
   - Junior High School (9th grade) ____
   - Partial High School (10th or 11th grade) ____
   - High School graduate ____
   - Partial College (at least one year) ____
   - Specialized Training ____
   - College Graduate ____
   - Graduate or Professional Training ____

12. What is your father’s level of education?
   - Less than 7th grade ____
   - Junior High School (9th grade) ____
   - Partial High School (10th or 11th grade) ____
   - High School graduate ____
   - Partial College (at least one year) ____
   - College Graduate ____
   - Graduate or Professional Training ____

13. How do you identify yourself racially (example: Black, White, Asian, etc.)?

14. How do you identify yourself ethnically (example: African American, Puerto Rican, Irish American, Cambodian, etc.)?

15. Other than your parents, are there, or have there been significant adults in your life?
   Yes____  No____

   (If yes, please answer questions 16-18. If no, skip questions 16-18)

16. Would you consider these adults supportive of you?
   Yes____  No____
Demographic Form

17. Would you consider him or her instrumental in your life in some way?

Yes___     No___

18. If you have answered yes to question 17, how?

__________________________________________

__________________________________________

__________________________________________
Family Environment Scales

There are 90 statements in this section. They are statements about families. You are to decide which of these statements are true of your family and which are false. When referring to family, please choose the family with whom you have spent the most time over the course of your life. Circle all of your answers below. If you think the statement is True of your family, circle the number 1 (true). If you think the statement is False or mostly False of your family, circle the number 2 (false).

You may feel that some of the statements are true for some family members and false for others. Circle 1 if the statement is true for most members. Circle 2 if the statement is false or mostly false for most members. If the members are evenly divided, decide what is the stronger overall impression and answer accordingly.

Remember, we would like to know what your family seems like to you. So do not figure out how other members see your family, but do give us your general impression of your family for each statement.

1= True
2= False

01. Family members really help and support one another.
   1     2

02. Family members often keep their feelings to themselves.
   1     2

03. We fight a lot in our family.
   1     2

04. We don't do things on our own very often in our family.
   1     2

05. We feel it is important to be the best at whatever we do.
   1     2

06. We often talk about political and social problems.
   1     2

07. We spend most weekends and evenings at home.
   1     2

08. Family members attend church, synagogue, or Sunday School fairly often.
   1     2

09. Activities in our family are pretty carefully planned.
   1     2

10. Family members are rarely ordered around.
    1     2

11. We often seem to be killing time at home.
    1     2

12. We say anything we want to around home.
    1     2
Family Environment Scales

13. Family members rarely become openly angry.
   \[1\] 2

14. In our family, we are strongly encouraged to be independent.
   \[1\] 2

15. Getting ahead in life is very important in our family.
   \[1\] 2

16. We rarely go to lectures, plays, or concerts.
   \[1\] 2

17. Friends often come over for dinner or to visit.
   \[1\] 2

18. We don’t say prayers in our family.
   \[1\] 2

19. We are generally very neat and orderly.
   \[1\] 2

20. There are very few rules to follow in our family.
   \[1\] 2

21. We put a lot of energy into what we do at home.
   \[1\] 2

22. It’s hard to “blow off steam” at home without upsetting somebody.
   \[1\] 2

23. Family members sometimes get so angry they throw things.
   \[1\] 2

24. We think things through for ourselves in our family.
   \[1\] 2

25. How much money a person makes is not very important to us.
   \[1\] 2

26. Learning about new and different things is very important in our family.
   \[1\] 2

27. Nobody in our family is active in sports, Little League, bowling, etc.
   \[1\] 2

28. We often talk about the religious meaning of Christmas, Passover, or other holidays.
   \[1\] 2

29. It’s often hard to find things when you need them in our household.
   \[1\] 2

30. There is one family member who makes most of the decisions.
   \[1\] 2

31. There is a feeling of togetherness in our family.
   \[1\] 2
Family Environment Scales

32. We tell each other about our personal problems.
   1  2

33. Family members hardly ever lose their tempers.
   1  2

34. We come and go as we want to in our family.
   1  2

35. We believe in competition and “may the best man win.”
   1  2

36. We are not that interested in cultural activities.
   1  2

37. We often go to movies, sports events, camping, etc.
   1  2

38. We don’t believe in heaven or hell.
   1  2

39. Being on time is very important in our family.
   1  2

40. There are set ways of doing things at home.
   1  2

41. We rarely volunteer when something has to be done at home.
   1  2

42. If we felt like doing something on the spur of the moment we often just pick up and go.
   1  2

43. Family members often criticize each other.
   1  2

44. There is very little privacy in our family.
   1  2

45. We always strive to do things just a little better the next time.
   1  2

46. We rarely have intellectual discussions.
   1  2

47. Everyone in our family has a hobby or two.
   1  2

48. Family members have strict ideas about what is right and wrong.
   1  2

49. People change their minds often in our family.
   1  2

50. There is a strong emphasis on following rules in our family.
   1  2
Family Environment Scales

51. Family members really back each other up.  
   1 2

52. Someone usually gets upset if you complain in our family.  
   1 2

53. Family members sometimes hit each other.  
   1 2

54. Family members almost always rely on themselves when a problem comes up.  
   1 2

55. Family members rarely worry about job promotions, school grades, etc.  
   1 2

56. Someone in our family plays a musical instrument.  
   1 2

57. Family members are not very involved in recreational activities outside work or school.  
   1 2

58. We believe that there are some things you just have to take on faith.  
   1 2

59. Family members make sure their rooms are neat.  
   1 2

60. Everyone has an equal say in family decisions.  
   1 2

61. There is very little group spirit in our family.  
   1 2

62. Money and paying bills is openly talked about in our family.  
   1 2

63. If there’s a disagreement in our family, we try hard to smooth things over and keep the peace.  
   1 2

64. Family members strongly encourage each other to stand up for their rights.  
   1 2

65. In our family, we don’t try that hard to succeed.  
   1 2

66. Family members often go to the library.  
   1 2

67. Family members sometimes attend courses or take lessons for some hobby or interest (outside of school).  
   1 2
Family Environment Scales

68. In our family each person had different ideas about what is right and wrong.  
1 2

69. Each person’s duties are clearly defined in our family.  
1 2

70. We can do whatever we want to in our family.  
1 2

71. We really get along well with each other.  
1 2

72. We are usually careful about what we say to each other.  
1 2

73. Family members often try to one-up or out-do each other.  
1 2

74. It’s hard to be by yourself without hurting someone’s feelings in our household.  
1 2

75. “Work before play” is the rule in our family.  
1 2

76. Watching T.V. is more important than reading in our family.  
1 2

77. Family members go out a lot.  
1 2

78. The Bible is a very important book in our home.  
1 2

79. Money is not handled very carefully in our family.  
1 2

80. Rules are pretty inflexible in our household.  
1 2

81. There is plenty of time and attention for everyone in our family.  
1 2

82. There are a lot of spontaneous discussions in our family.  
1 2

83. In our family, we believe you don’t ever get anywhere by raising your voice.  
1 2

84. We are not really encouraged to speak up for ourselves in our family.  
1 2

85. Family members are often compared with others as to how well they are doing at work or school.  
1 2
86. Family members really like music, art and literature.
   1 2

87. Our main form of entertainment is watching TV or listening to the radio.
   1 2

88. Family members believe that if you sin you will be punished.
   1 2

89. Dishes are usually done immediately after eating.
   1 2

90. You can’t get away with much in our family.
   1 2
Below is a list of different activities. We are interested in knowing if you have ever engaged in these activities, how often, and at what age you first did the activity.

<table>
<thead>
<tr>
<th>HOW OFTEN DO YOU DO THIS ACTIVITY?</th>
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</thead>
<tbody>
<tr>
<td>Never</td>
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<td>1</td>
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</tbody>
</table>

Lied about something important to a parent
Lied about something important to someone other than a parent
Cheated on a test at school
Cursed at a parent
Cursed at an adult other than a parent
Ran away from home
Set fire to a building
Smoked cigarettes
Drank alcohol
Smoked marijuana (pot)
Used cocaine
<table>
<thead>
<tr>
<th>Risk Behavior Form</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<tbody>
<tr>
<td>Used LSD</td>
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<td>Used other recre-</td>
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<td>Gotten very drunk</td>
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<td>or high</td>
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<td>Driven a motor ve-</td>
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<td>drunk or high</td>
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<td>Accidentally hurt</td>
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<td>yourself or</td>
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<td>someone else</td>
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<td>while high on</td>
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<td>Skipped school</td>
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<td>Repeated a grade</td>
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<td>in school</td>
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<td>Failed a test</td>
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<td>Were asked to</td>
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<td>leave class</td>
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<td>because you</td>
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<td>were disruptive</td>
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<td>Were given deten-</td>
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<td>reprimanded by</td>
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<td>Were suspended</td>
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<td>Stolen or tried to</td>
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<td>steal a motor</td>
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<td>Stolen or tried to</td>
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<td>steal something</td>
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<td>Risk Behavior Form</td>
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<tr>
<td>Stolen or tried to steal something worth less than $5</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Knowingly bought, sold, or held stolen goods</td>
<td>1 2 3 4 5</td>
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<td>Carried a hidden weapon other than a pocket knife</td>
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<tr>
<td>Stolen or tried to steal something worth $50 or more</td>
<td>1 2 3 4 5</td>
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<td>Attacked someone with the idea of seriously hurting or killing him or her</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Been paid for having sex with someone</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Been in gang fights</td>
<td>1 2 3 4 5</td>
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<td>Sold marijuana or hashish (&quot;pot&quot;, &quot;grass&quot;, &quot;hash&quot;)</td>
<td>1 2 3 4 5</td>
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<td>Sold cocaine or crack</td>
<td>1 2 3 4 5</td>
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<td>Sold other hard drugs, such as heroin or LSD</td>
<td>1 2 3 4 5</td>
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<td>Hit or threatened to hit an adult</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Hit or threatened to hit another student</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Hit or threatened to hit one of your parents</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Risk Behavior Form</td>
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<tr>
<td>Been loud, rowdy, or unruly in a public place</td>
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<td>Taken a vehicle for a ride without the owner’s permission</td>
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<td>Had (or tried to have) sex with someone against their will</td>
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<td>Begged for money or things from a stranger</td>
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<tr>
<td>Used force to get money or things from students</td>
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<tr>
<td>Used force to get money or things from an adult</td>
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<td>Broken into a building or vehicle to steal something or look around</td>
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</tbody>
</table>
Stephenson Multigroup Acculturation Scale (Self)

Below are a number of statements that evaluate changes that occur when people interact with others of different cultures or ethnic groups. For questions that refer to “COUNTRY OF ORIGIN” or “NATIVE COUNTRY”, please refer to the country from which your family originally came. For questions referring to “NATIVE LANGUAGE”, please refer to the language spoken where your family originally came.

Circle the answer that best matches your response to each statement.

1. I understand English, but I’m not fluent in English.
   False  Partly False  Partly True  True

2. I am informed about current affairs in the United States.
   False  Partly False  Partly True  True

3. I speak my native language with my friends and acquaintances from my country of origin.
   False  Partly False  Partly True  True

4. I have never learned to speak the language of my native country.
   False  Partly False  Partly True  True

5. I feel totally comfortable with (Anglo) American people.
   False  Partly False  Partly True  True

6. I eat traditional foods from my native culture.
   False  Partly False  Partly True  True

7. I have many (Anglo) American acquaintances.
   False  Partly False  Partly True  True

8. I feel comfortable speaking my native language.
   False  Partly False  Partly True  True

9. I am informed about current affairs in my native country.
   False  Partly False  Partly True  True

10. I know how to read and write in my native language.
    False  Partly False  Partly True  True
Stephenson Multigroup Acculturation Scale (Self)

11. I feel at home in the United States.
   False Partly False Partly True True

12. I attend social functions with people from my native country.
   False Partly False Partly True True

13. I feel accepted by (Anglo) Americans.
   False Partly False Partly True True

   False Partly False Partly True True

15. I regularly read magazines of my ethnic group.
   False Partly False Partly True True

16. I know how to speak my native language.
   False Partly False Partly True True

17. I know how to prepare (Anglo) American foods.
   False Partly False Partly True True

18. I am familiar with the history of my native country.
   False Partly False Partly True True

19. I regularly read an American newspaper.
   False Partly False Partly True True

20. I like to listen to music of my own ethnic group.
   False Partly False Partly True True

21. I like to speak my native language.
   False Partly False Partly True True

22. I feel comfortable speaking English.
   False Partly False Partly True True

23. I speak English at home.
   False Partly False Partly True True

24. I speak my native language with my spouse or partner.
   False Partly False Partly True True
25. When I pray, I use my native language.  
   False    Partly False    Partly True    True

   False    Partly False    Partly True    True

27. I think in my native language.  
   False    Partly False    Partly True    True

28. I stay in close contact with family members and relatives in my native country.  
   False    Partly False    Partly True    True

29. I am familiar with important people in American history.  
   False    Partly False    Partly True    True

30. I think in English.  
   False    Partly False    Partly True    True

31. I speak English with my spouse or partner.  
   False    Partly False    Partly True    True

32. I like to eat American foods.  
   False    Partly False    Partly True    True
Stephenson Multigroup Acculturation Scale (Father)

Below are a number of statements that evaluate changes that occur when people interact with others of different cultures or ethnic groups. For questions that refer to “COUNTRY OF ORIGIN” or “NATIVE COUNTRY,” please refer to the country from which your family originally came. For questions referring to “NATIVE LANGUAGE,” please refer to the language spoken from where your family originally came.

Circle the answer that best matches your response to each statement.

1. My father understands English, but is not fluent in English.
   False Partly False Partly True True

2. My father is informed about current affairs in the United States.
   False Partly False Partly True True

3. My father speaks his native language with his friends and acquaintances from his country of origin.
   False Partly False Partly True True

4. My father has never learned to speak the language of his native country.
   False Partly False Partly True True

   False Partly False Partly True True

6. My father eats traditional foods from his native country.
   False Partly False Partly True True

7. My father has many (Anglo) American acquaintances.
   False Partly False Partly True True

8. My father feels comfortable speaking his native language.
   False Partly False Partly True True

9. My father is informed about current affairs in his native country.
   False Partly False Partly True True

10. My father knows how to read and write in his native language.
    False Partly False Partly True True

11. My father feels at home in the United States.
    False Partly False Partly True True
12. My father attends social functions with people from his native country.
   False Partly False Partly True True

   False Partly False Partly True True

14. My father speaks his native language at home.
   False Partly False Partly True True

15. My father regularly reads magazines of his ethnic group.
   False Partly False Partly True True

16. My father knows how to speak his native language.
   False Partly False Partly True True

17. My father knows how to prepare (Anglo) American foods.
   False Partly False Partly True True

18. My father is familiar with the history of his native country.
   False Partly False Partly True True

19. My father regularly reads an American newspaper.
   False Partly False Partly True True

20. My father likes to listen to music of his ethnic group.
   False Partly False Partly True True

21. My father likes to speak his native language.
   False Partly False Partly True True

22. My father feels comfortable speaking English.
   False Partly False Partly True True

23. My father speaks English at home.
   False Partly False Partly True True

24. My father speaks his native language with his spouse or partner.
   False Partly False Partly True True

25. When my father prays, he uses his native language.
   False Partly False Partly True True
Stephenson Multigroup Acculturation Scale (Father)

   False Partly False Partly True True

27. My father thinks in his native language.
   False Partly False Partly True True

28. My father stays in close contact with family members and relatives in his native country.
   False Partly False Partly True True

29. My father is familiar with important people in American history.
   False Partly False Partly True True

30. My father thinks in English.
    False Partly False Partly True True

31. My father speaks English with his spouse or partner.
    False Partly False Partly True True

32. My father likes to eat American foods.
    False Partly False Partly True True
Stephenson Multigroup Acculturation Scale (Mother)

Below are a number of statements that evaluate changes that occur when people interact with others of different cultures or ethnic groups.

For questions that refer to “COUNTRY OF ORIGIN” or “NATIVE COUNTRY,” please refer to the country from which your family originally came.
For questions referring to “NATIVE LANGUAGE,” please refer to the language spoken from where your family originally came.

Circle the answer that best matches your response to each statement.

1. My mother understands English, but is not fluent in English.
   False  Partly False  Partly True  True

2. My mother is informed about current affairs in the United States.
   False  Partly False  Partly True  True

3. My mother speaks her native language with her friends and acquaintances from her country of origin.
   False  Partly False  Partly True  True

4. My mother has never learned to speak the language of her native country.
   False  Partly False  Partly True  True

   False  Partly False  Partly True  True

6. My mother eats traditional foods from her native country.
   False  Partly False  Partly True  True

7. My mother has many (Anglo) American acquaintances.
   False  Partly False  Partly True  True

8. My mother feels comfortable speaking her native language.
   False  Partly False  Partly True  True

9. My mother is informed about current affairs in her native country.
   False  Partly False  Partly True  True

10. My mother knows how to read and write in her native language.
    False  Partly False  Partly True  True

11. My mother feels at home in the United States.
    False  Partly False  Partly True  True
<table>
<thead>
<tr>
<th>Step</th>
<th>Statement</th>
<th>False</th>
<th>Partly False</th>
<th>Partly True</th>
<th>True</th>
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<tbody>
<tr>
<td>12.</td>
<td>My mother attends social functions with people from her native country.</td>
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<td>14.</td>
<td>My mother speaks her native language at home.</td>
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<tr>
<td>15.</td>
<td>My mother regularly reads magazines of her ethnic group.</td>
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<tr>
<td>16.</td>
<td>My mother knows how to speak her native language.</td>
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<tr>
<td>17.</td>
<td>My mother knows how to prepare (Anglo) American foods.</td>
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<tr>
<td>18.</td>
<td>My mother is familiar with the history of her native country.</td>
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<tr>
<td>20.</td>
<td>My mother likes to listen to music of her ethnic group.</td>
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<tr>
<td>21.</td>
<td>My mother likes to speak her native language.</td>
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<tr>
<td>22.</td>
<td>My mother feels comfortable speaking English.</td>
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<tr>
<td>23.</td>
<td>My mother speaks English at home.</td>
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<tr>
<td>24.</td>
<td>My mother speaks her native language with her spouse or partner.</td>
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<tr>
<td>25.</td>
<td>When my mother prays, she uses her native language.</td>
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</table>
Stephenson Multigroup Acculturation Scale (Mother)

    False   Partly False   Partly True   True

27. My mother thinks in her native language.
    False   Partly False   Partly True   True

28. My mother stays in close contact with family members and relatives in her native country.
    False   Partly False   Partly True   True

29. My mother is familiar with important people in American history.
    False   Partly False   Partly True   True

30. My mother thinks in English.
    False   Partly False   Partly True   True

31. My mother speaks English with her spouse or partner.
    False   Partly False   Partly True   True

32. My mother likes to eat American foods.
    False   Partly False   Partly True   True
Thank you for your participation in this study. We are interested in the process of acculturation for people in this country. The process of acculturation involves how much people remain connected with their culture of origin and how much they become connected with the larger dominant culture. We are looking at the ways in which parents’ and young adults’ acculturation strategies may differ, and the unique outcomes of these differing strategies.

We believe that acculturation occurs for adults actually immigrating, as well as for their children and further descendants. In addition, we believe that some aspects of the process are common for all immigrants, while others vary among immigrant groups. Therefore, we are sampling people from a wide range of ethnic backgrounds and various distances from actual immigration (i.e., your grandparents may have immigrated). In addition, we are interested in how people from different racial and ethnic groups experience themselves in cross-cultural situations. All of this information can help us understand the process of acculturation and adaptation.
Table 1. Countries of Origin

- Asian Americans: Cambodia, China, Hong Kong, India, Japan, Korea, Malaysia, Philippines, Taiwan, Thailand, Vietnam.

- Americans of African Descent: Haiti, Jamaica, Monsterrat, Nigeria, St. Vincent, Trinidad, Tunisia.

- European Americans: Afghanistan, Armenia, Canada, Czechoslovakia, England, France, Germany, Greece, Hungary, Italy, Israel, Ireland, Jordan, Lebanon, Netherlands, Poland, Portugal, Romania, Russia, Scotland, Slovakia, South Africa, Spain, Turkey, Ukraine.

- Hispanic Americans: Argentina, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala Mexico, Puerto Rico.
Table 2. Participants’ Demographic Information

<table>
<thead>
<tr>
<th></th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Generation Status</strong></td>
<td></td>
</tr>
<tr>
<td>Generation 1</td>
<td>90</td>
</tr>
<tr>
<td>Generation 2</td>
<td>137</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>45</td>
</tr>
<tr>
<td>Females</td>
<td>182</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>221</td>
</tr>
<tr>
<td>Married</td>
<td>3</td>
</tr>
<tr>
<td>Divorced</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
<tr>
<td><strong>Mothers' SES</strong></td>
<td></td>
</tr>
<tr>
<td>Class 1</td>
<td>25</td>
</tr>
<tr>
<td>Class 2</td>
<td>49</td>
</tr>
<tr>
<td>Class 3</td>
<td>62</td>
</tr>
<tr>
<td>Class 4</td>
<td>54</td>
</tr>
<tr>
<td>Class 5</td>
<td>37</td>
</tr>
<tr>
<td><strong>Fathers' SES</strong></td>
<td></td>
</tr>
<tr>
<td>Class 1</td>
<td>50</td>
</tr>
<tr>
<td>Class 2</td>
<td>45</td>
</tr>
<tr>
<td>Class 3</td>
<td>53</td>
</tr>
<tr>
<td>Class 4</td>
<td>41</td>
</tr>
<tr>
<td>Class 5</td>
<td>27</td>
</tr>
</tbody>
</table>
Table 3. Cronbach’s Alphas for Participants' Ratings for Parents on the Stephenson Multigroup Acculturation Scale

<table>
<thead>
<tr>
<th>SMAS</th>
<th># of items</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mother</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominant society Immersion (DSI)</td>
<td>15</td>
<td>0.95</td>
</tr>
<tr>
<td>Ethnic Society Immersion (ESI)</td>
<td>17</td>
<td>0.94</td>
</tr>
<tr>
<td>Overall</td>
<td>32</td>
<td>0.85</td>
</tr>
<tr>
<td><strong>Father</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominant Society Immersion (DSI)</td>
<td>15</td>
<td>0.94</td>
</tr>
<tr>
<td>Ethnic Society Immersion (ESI)</td>
<td>17</td>
<td>0.85</td>
</tr>
<tr>
<td>Overall</td>
<td>32</td>
<td>0.78</td>
</tr>
</tbody>
</table>
Table 4. Differential Acculturation Scores

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MADD</td>
<td>227</td>
<td>7.013</td>
<td>10.32</td>
</tr>
<tr>
<td>FADD</td>
<td>219</td>
<td>7.804</td>
<td>10.56</td>
</tr>
<tr>
<td>MAED</td>
<td>227</td>
<td>12.13</td>
<td>12.55</td>
</tr>
<tr>
<td>FAED</td>
<td>219</td>
<td>12.47</td>
<td>12.70</td>
</tr>
</tbody>
</table>

MADD refers to mother adolescent dominance difference
FADD refers to father adolescent dominance difference
MAED refers to mother adolescent ethnic difference
FAED refers to father adolescent ethnic difference
Table 5. Pearson Product Moment Correlations between Adolescent Acculturation and the Family Environment Variables.

<table>
<thead>
<tr>
<th>Moos Scales</th>
<th>ADSI</th>
<th>95% Confidence Interval</th>
<th>AESI</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohesion</td>
<td>0.138</td>
<td>(0.010, 0.277)</td>
<td>0.182*</td>
<td>(0.050, 0.321)</td>
</tr>
<tr>
<td>Conflict</td>
<td>-0.112</td>
<td>(-0.250, 0.020)</td>
<td>-0.095</td>
<td>(-0.061, 0.035)</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>0.030</td>
<td>(-0.10, 0.161)</td>
<td>0.101</td>
<td>(0.030, 0.234)</td>
</tr>
</tbody>
</table>

* Marginally significant at p < .07

a ADSI refers to adolescents’ immersion in dominant society.
AESI refers to adolescents' immersion in ethnic society.
Table 6. Pearson Product Moment Correlations Between Differential Acculturation scores and the Family Environment Variables.

<table>
<thead>
<tr>
<th>Moos Scales</th>
<th>MADD</th>
<th>MAED</th>
<th>FADD</th>
<th>FAED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohesion</td>
<td>-0.337***</td>
<td>-0.139</td>
<td>-0.248**</td>
<td>-0.059</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>-0.319***</td>
<td>-0.214*</td>
<td>-0.185</td>
<td>-0.037</td>
</tr>
<tr>
<td>Conflict</td>
<td>0.228 *</td>
<td>0.083</td>
<td>0.152</td>
<td>-0.009</td>
</tr>
</tbody>
</table>

* Significant at p < .05
** Significant at p < .01
*** Significant at p < .001
APPENDIX C

FIGURES
Figure 1. Acculturation Strategies/Outcomes

<table>
<thead>
<tr>
<th>ETHNIC SOCIETY</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>High DOMINANT SOCIETY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTEGRATION</td>
<td>ASSIMILATION</td>
<td></td>
</tr>
<tr>
<td>SEPARATION</td>
<td>MARGINALIZATION</td>
<td></td>
</tr>
<tr>
<td>Low DOMINANT SOCIETY</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 2. Distribution of Scores on the Risk Behavior Form
Figure 3. Standardized Coefficients Results from Test for Mediation

MADD → Expressiveness

-0.25*

Expressiveness → Covert Delinquency

-0.23 *

MADD → Covert Delinquency

0.21 (ns)

* significant at p < .04
REFERENCES


