Biculturalism as a Protective Factor Against Antisocial Behavior

Michael Gomez

University of Kansas

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Yo K. Jackson, Ph.D. (Chair)

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Eric M. Vernberg, Ph.D.

(Committee Member)

_____

Michael C. Roberts, Ph.D.

(Committee Member)

Date Defended:_____

The Thesis Committee for Michael Gomez certifies
That this is the approved Version of the following thesis:

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Yo K. Jackson, Ph.D. (Chair)

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Eric M. Vernberg, Ph.D.

(Committee Member)

_____

Michael C. Roberts, Ph.D.

(Committee Member)

Date Approved:_____

Abstract

The current study examined the relation between antisocial behaviors and cultural status in a sample of Mexican American youth. Because rates of externalizing problems are high and because Mexican American children and adolescents represent the largest and fastest growing segments of the population, the present study sought to examine how attachment to cultural group might serve as a protective mechanism. Research shows that acculturation style can impact the prevalence of antisocial behavior and adaptive behavior. Because there have been methodological problems with measurements of acculturation, as it relates to both maladaptive and adaptive behavior, the current study examined the responses of 73 Mexican American students (ages 12-18) and their parents from two sites (an urban Midwest area and an urban and rural West Texas area). Using a series of ANOVA's and t-tests, both antisocial and adaptive behavior was compared among three different types of acculturation style: acculturation, enculturation, and biculturation. The prediction that biculturated individuals will score lower on measures of antisocial behavior and higher on measures of adaptive behavior than their acculturated and enculturated cohorts was not supported. Implications of the findings and the relevance for grouping by acculturation status are discussed.

Biculturalism as a Protective Factor Against Antisocial Behavior

By 2050, Hispanics will compromise almost a quarter of the United States (U.S.) population, with Mexican Americans accounting for two-thirds of the population of Hispanics (U.S. Census Bureau, 2007a). Furthermore, by 2050, a third of the population of individuals under 19 years old in the U.S. will be Hispanic (U.S. Census Bureau, 2007a). Therefore, the problems that affect Mexican American children and adolescents are issues that are likely to increasingly be in the forefront of national attention.

One problem of particular concern is the prevalence of antisocial behaviors among Hispanic youth. In their lifetime, 17% of Hispanic individuals will enter prison, compared to 6% of Anglo Americans (U.S. Department of Justice, 2005). Although comprising only 11.2% of youth (U.S. Census Bureau, 2007b), 18% of juvenile offenders in the U.S. are Hispanic (U.S. Department of Justice, 2005). Increasing the likelihood of juvenile delinquency is the presence of Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) which account for 30% to 50% of referral in clinics (Steiner et al., 1997). Both disorders are linked to higher adult and juvenile incarceration rates, as well as higher incidences of antisocial behaviors in general (Mash & Barkley, 2003; Steiner & Dunne, 1997). Exacerbating this situation of high juvenile delinquency among Hispanic youth and high rates of ODD and CD contributing to the presence of delinquency are findings that up to 80% of all Hispanic children who suffer from mental illnesses are not receiving mental health services (Cauce et al., 2002).

Many factors contribute to the prevalence rate of antisocial behaviors in Hispanics. Hispanics are more likely than Anglo Americans to experience lower socioeconomic status (SES), to live in inner-city areas, and to drop out of school (U.S.

Census Bureau, 2007b), factors that are linked to the etiology of disruptive behavior problems such as ODD and CD (Burke et al., 2002; Loeber et al., 2000; Mash & Barkley, 2003).

Hispanic youth, particularly those of Mexican origin, experience a significantly higher number of mental health problems than Anglo Americans such as depression, substance use, and disruptive behaviors (US Department of Health and Human Services, 2001). Rates of depression for Mexican American children are 12% compared to 6% of Anglo American children even after accounting for sociodemographic factors (Roberts, Roberts, & Chen, 1997). When Swanson et al. (1992) examined a Mexican American population and compared them with a Mexican population, they found higher rates of drug use in the Mexican American population than in the Mexican population (21% vs. 4.95%). Even when factors such as SES are controlled, Hispanics have higher rates of antisocial behavior than Anglo Americans with some studies showing two-thirds of Hispanics engaging in antisocial behavior, compared to one-half of Anglo Americans. (Vazsonyi & Flannery, 1997). The authors of these studies suggested that, for Mexican Americans, problems with antisocial behavior were directly related to their experience living in the U.S.

Environmental risk factors for psychopathology are not unique to Hispanic children or to children of color, as Caucasian children who are poor are also more likely to experience clinical symptoms than their wealthier peers (Roberts, Roberts, & Xing, 2006). Explanations for why children of color are especially vulnerable to the influence of disadvantaged environments may be found in what makes them different from other children, namely Hispanic culture. Several studies give support to the notion that, due to

cultural differences, Hispanics are uniquely affected by the experience of living in the U.S. Santisteban and Mitrani (2003) state that, "White American culture places a relatively higher value on individuality and independence, whereas Hispanic culture values collectivism and gives precedence to the needs of the family rather than to the needs of the individual" (p.132). Santisteban and Mitrani and other researchers (Chun & Akutsu, 2003) suggest that the general trend, for both Hispanics who have immigrated to the U.S. and for U.S. born Hispanics, is to move from a more collectivistic perspective to a more individualistic perspective. This movement from collectivism to individualism is more salient in the earlier generations (e.g., first, second, and third generation), but has not been studied in later generations (e.g., sixth and seventh generation) (Chun & Akutsu, 2003, Santisteban & Mitrani, 2003). Researchers further state that a change from collectivistic to individualistic requires an alteration of the culture of origin to fit in with a new culture and that this shift can cause distress or psychopathology (Chun & Akutsu, 2003; Santisteban & Mitrani 2003; Swanson et al., 1992). Applied to Hispanic youth, this argument suggests that it is not necessarily being Mexican American, for example, that produces a negative effect on mental health and an increase in the prevalence of antisocial behaviors, but rather one's experience of shifting from the values of one culture (i.e., Mexican) to another (i.e., Anglo) that may produce psychopathology.

Rogler, Cortes, and Malgady (1991) define acculturation as the "process whereby people change their behavior and attitudes toward those of a host society" (p. 585). The literature suggests three main categories of acculturation: enculturation, acculturation, and biculturation (Rogler et al., 1991). *Enculturated* refers to an individual who is deeply entrenched in their culture of origin; for example, a Mexican American, now living in the

U.S., who only speaks Spanish, only associates with other Mexican Americans, and only watches Spanish language television programs. *Acculturated* refers to an individual who is more assimilated to the mainstream culture; for example, a Mexican American, who lives in the U.S., who only speaks English, only associates with Anglo Americans, and only watches English language television programs. *Biculturated* refers to an individual who embraces aspects of their culture of origin and aspects of another culture; for example, a Mexican American who visits family in both the United States and Mexico, has both Mexican and Anglo friends, and speaks both English and Spanish. Usually, first and second generation Mexican Americans are more enculturated, while Mexican-Americans who are third or later generations (i.e., both they and their parents were born in the United States) are more acculturated (Buriel, 1993, Cuellar et al., 1995). Researchers state that bicultural Hispanics are usually second or third generation (Cuellar et al., 1995; Rogler, Cortes, Malgady, 1991).

The experience of acculturation can bring with it increased stress on the individual, a phenomenon known as acculturative stress. Thoman and Suris (2004) described acculturative stress as the psychosocial stressors experienced as a result of shifting from one culture to another. Balls-Organista, Organista, and Kurasaki (2002) state that variables, such as receptiveness of the host society and degree of similarity between culture of origin and new culture, can affect the amount of stress a person experiences when shifting from one culture to another. Given the significant differences between U.S. and Mexican culture, those Mexican Americans in the U.S. who hold strong Mexican culture identification (i.e., enculturated) are more likely to experience

more acculturative stress while living in the U.S.. Moreover, Balls-Organista et al. report that the greater the acculturative stress, the greater a chance for psychological problems.

However, past research examining Hispanic children and acculturative stress shows mixed findings. For example, Gil, Vega, and Dimas (1994) examined 4,296 Hispanic children and adolescents, and found that higher acculturative stress was related to lower self-esteem. Perez, Voelz, Pettit, and Joiner (2002) found higher rates of bulimic symptoms positively correlated with higher acculturative stress in Hispanic females. Furthermore, Hovey (1998) reported that higher rates of depression and suicidal ideation were related to higher rates of acculturative stress.

Yet, other studies found that acculturative stress does not have a significant relation to pathology. For example, Holleran and Jung (2005) examined acculturative stress and antisocial behavior (e.g., gang activity, suicide, and substance abuse) among Mexican American youths and discovered no significant relation between the two. Vazquez and Garcia-Vazquez (1995) found no significant relation between acculturative stress and low GPA. Also, Weisskirch and Alva (2002) reported that children with high levels of acculturative stress did not differ from other children in terms of social interactions with peers. Tschann et al. (2002), when examining the link between risk behavior for Hispanic adolescents (e.g., substance abuse and sexual activity) and levels of acculturation found that parent conflict was significantly related to risk behavior and not acculturation level.

These conflicting findings in the literature can be attributed to a host of variables; however, the most likely cause is a measurement problem. That is, most studies that examine culture and its relation to mental health outcomes fail to properly account for or

measure acculturation. For example, the study that examined the role of acculturation as it relates to antisocial behavior (Bird et al., 2001) suffered from lack of a sensitive acculturation measure when interpreting its findings. The study included three groups (ages 9 -17): Hispanics (divided into island Puerto Ricans and mainland Hispanics), African Americans, and Anglo Americans. Antisocial behavior was separated into five levels of ODD and CD symptoms. Examples of Level 1 behaviors were lying, disobedience, and breaking rules; examples of Level 2 behaviors were stealing, truancy, and minor shoplifting; examples of Level 3 behaviors were torturing animals, running away from home overnight, and gang fighting; examples of Level 4 behaviors were using a weapon, rape, and assault; examples of Level 5 behaviors were two or more Level 4 behaviors. Among all the levels, the Puerto Rican islander children showed significantly less severe symptoms than all the other groups. Bird et al. used this to infer that the cultural norms of island Puerto Ricans acted as a protective factor against ODD and CD symptoms. However, the findings regarding acculturation may not be as meaningful as they could be because the measure for acculturation only consisted of geographic location. Acculturation, however, may have little to do with geographic location and, instead, rely more on traditional beliefs and value systems within an individual (Rogler et al., 1991). Therefore, without a clearer measure of acculturation, it remains unclear how one's culture of origin operates to influence the development of antisocial behavior. Contributing to this measurement problem is the inherent difficulty with categorizing groups of individuals with large within group differences (Dana, 1996). However, as Bird et al demonstrated, even very simplistic groupings, such as geographic location, can change the way psychologists interpret findings relating to antisocial behavior.

Given the mixed findings, the results from past research can be represented by five positions: a) acculturation leads to psychopathology; b) acculturation and psychopathology are not related; c) psychopathology leads to changes in acculturation patterns; d) there is an interaction between acculturation and psychopathology, that is, individuals with pre-existing psychopathology may be more likely to use an acculturation style that further exacerbates their psychopathology; and e) the relation between acculturation and psychopathology is unclear due to problems inherent in current measures of acculturation (Rogler et al., 1991). Rogler et al. attributed the presence of multiple positions directly to problems in how acculturation is measured and conceptualized in past research. They indicated that this problem exists because of the lack of consensus on what domains are important to measure in relation to acculturation (e.g., language, discrimination, immigration experiences, etc.) and because of a lack of empirical testing of different theoretical models (e.g., Padilla's unidimensional model vs. Berry's multidimensional model).

Before the field can test these five positions, a clearer understanding is needed of the ways acculturation groups are formed and the way acculturation is measured. The most common measurement problem occurs when acculturation is represented by a bipolar scale (e.g., acculturated vs. non-acculturated). Rogler et al. cited numerous assumptions in the literature on acculturation that point to a bipolar conceptualization as a very limited and, therefore, far less sensitive conceptualization of acculturation. For example, in their review of thirty studies, they found that the majority seemed to take a view of acculturation that places acculturation and enculturation on opposite sides of the same coin. It is also possible, however, to conceptualize acculturation as existing on a

continuum. This conceptualization of acculturation as dichotomous does not allow for the full spectrum of acculturation experiences, namely biculturalism. As Rogler et al. (1991) insists, immersion into U.S. culture in no way requires divorce from one's culture of origin, just as embracing one's culture of origin in no way requires completely rejecting the U.S. culture. Much of the argument surrounding these issues has been theoretical, with one side suggesting that people can be separated into meaningful culture groups and opponents suggesting that due to multifaceted, often non-behavioral, components of acculturation that it is not reasonable to categorize individuals according to labeled groups since these individuals may represent a wide variety of personal and historical experiences that defy categorization (Sam & Berry, 2006).

Within the side that suggests that people can be separated into meaningful culture groups, a bipolar conceptualization is prevalent. That a bipolar conceptualization pervades most of the literature is unfortunate, as most researchers agree that a multidimensional conceptualization of acculturation, which includes biculturation, more accurately captures the construct of acculturation (Berry, 2003; Zane & Mak, 2003). Moreover, research shows that biculturated individuals may have important strengths over acculturated or enculturated individuals. For example, Lopez, Ehly, and Garcia-Vasquez (2002) found that biculturated Mexican American students had higher levels of academic achievement than enculturated or acculturated Hispanics (Lopez et al. 2002). Also, Bautista de Domanico, Crawford, and DeWolfe (1994), using this same multidimensional conceptualization, found that biculturated Mexican American high school students had higher self-esteem, better social skills, and better psychological well-being than Anglo or acculturated Mexican American students. Bautista de Domanico et

al. (1994) used this to suggest that "bicultural adolescents may be better adjusted, more flexible, and better able to mediate acculturative stress" (p.197).

When Miranda and Umhoefer (1998) examined psychopathology and biculturation, they found that biculturated Mexican Americans scored lower on rates of alcohol consumption and depression than high or low acculturated Mexican Americans. Studies that took a multidimensional view of acculturation found that biculturalism played an important role (such as increasing self-esteem and allowing more flexible coping strategies) in a child's ability to demonstrate prosocial behavior and avoid psychopathology (e.g., Bautista de Domanico et al., 1994, Lopez et al, 2002, Miranda & Umhoefer, 1998). Biculturation appears to be related to positive outcomes for Hispanics, however, the relation between biculturalism and externalizing behavior such as antisocial symptoms is unclear. Past efforts to conceptualize and operationalize acculturation ranged from proxy variables such as geographic location to high scores on a measure of cultural awareness to the present method, a multifaceted approach that considers attitudes, behaviors, and values and argues that people of color, especially Hispanic people, can be separated in meaningful ways. This present method has been shown in the literature to describe a part of the Mexican American experience that has previously been unexamined. As a result, it provides an appropriate and logical starting point for research examining the effects of culture on antisocial and adaptive behaviors.

Limits of Past Research

Although past research has established a foundation, methodological problems hamper meaningful directions that follow from the findings. Since ODD and CD symptoms are linked to higher rates of antisocial behavior, and since Hispanic youth are

at a higher risk than Anglo Americans to be incarcerated, it would be beneficial to examine what possible factors might explain how Hispanic children might avoid this in the future. Bird et al. (2001) suggested that the benefits from the culture of origin may be a potential protective factor against ODD and CD symptoms, but failed to use a sensitive measure of acculturation. Those studies that did use a multidimensional measure and examined biculturalism (Bautista de Domanico, Crawford, & DeWolfe, 1994; Lopez, Ehly, & Garcia-Vasquez, 2002) have yet to address outcome variables related to antisocial behavior.

Rogler et al (1991) and Bautista de Domanico et al. (1994) both suggested that biculturalism may be a way to explore potential protective factors that could be operating in the native homeland culture. Biculturation appears to be associated with lower incidents of psychopathology (Miranda & Umhoefer, 1998), and also appears to provide prosocial behaviors such as better social skills and higher academic achievement (Bautista de Domanico, Crawford, & DeWolfe, 1994; Lopez et al., 2002; Mash & Barkley, 2003; Steiner et al., 1997). Because there exists multiple measurement approaches and debate regarding whether cultural groups are even valid, it is essential that empirical evaluation of these questions using theoretically sound measurements and inclusive, multifaceted groupings be conducted. A multidimensional measurement which includes the construct of biculturalism presents an opportunity to conduct such an evaluation. Because biculturalism is associated with lower incidents of psychopathology as well as higher levels of prosocial functioning, biculturalism might present a unique barrier to the development of antisocial behavior in a group of children that are already at risk for higher incidents of incarceration. Instead of living with one cultural perspective

(e.g., acculturation), bicultural individuals might be able to incorporate the best of two cultures to create some protection against the development of antisocial behavior.

Hypotheses

To extend the past research, the current study examined how levels of acculturation, biculturation, and enculturation were related to antisocial and adaptive behavior using a variety of approaches to group people into acculturation categories. Specifically, it was hypothesized that bicultural children will score lower on measures of antisocial behavior as well as higher on measures of adaptive behavior than enculturated or acculturated children. Analyses were performed to determine which, if any, of the different methods for inclusion into different groups produced different outcomes for Mexican American children.

<div align="center">Method</div>

Participants

Sixty-three self-reported Mexican American parents ($M = 39.37$, $SD = 5.67$) and seventy-six children and adolescents, ages 12-18, ($M = 14.89$, $SD = 2.13$) were sampled from churches and community centers in Lubbock, TX, Kansas City, KS, and Kansas City, MO. For information on gender, marital status, language preference, and generational status see Table 1. Approximately sixty families were solicited from the Kansas City area, while approximately one hundred fifty were solicited from the Lubbock area. Of those who participated, twenty-one children were from the Kansas City area (29%), while fifty-two were from the Lubbock area (71%). Children were excluded if their parents responded positively to questions that their child had a

developmental disability. Because the focus of the project was on adolescents, children under the age of twelve were excluded.

Measures

As an indicator of socioeconomic status (SES), family income and years of education were measured. Average income for the families was \$42,108 (*SD* = 30,058), with a range from \$7200 to \$198,000. Years of education was measured using information from the parents' ARSMA-II, which divides years of education into six separate categories: 1) 1st-6th grade, 2) 7th-8th grade, 3) 9th-12th grade, 4) 1-2 years of college, 5) 3-4 years of college, and 6) College graduate or higher. The majority (63.5%) of parents reported education levels as high school educated or 1-2 years of college (see Table 1).

To measure acculturation, the Acculturation Rating Scale for Mexican Americans, 2nd Edition (ARSMA-II) was administered to parents and children. The ARSMA-II consists of 48 questions and is designed to be administered in either English or Spanish (Cuellar et al., 1995). Each response is measured on a Likert scale (i.e., 1 to 5: 1 - not at all and 5 - extremely often or almost always). The ARSMA-II is made up of two scales, acculturation and marginalization. Together, these sections measure the constructs of assimilation, integration, separation, and marginalization. Assimilation is an indicator of acculturation, integration is an indicator of biculturation, separation is an indicator of enculturation, and marginalization is an indicator of disconnection from all cultures (Cuellar et al., 1995).

The acculturation scale is composed of two subscales: the Mexican Orientation Scale (MOS) consisting of 13 questions and the Anglo Orientation Scale (AOS),

consisting of 17 questions. An example of an AOS question is "I speak English" or "My friends, while I was growing up, were of Anglo origin." An example of an MOS question is "I write in Spanish," or "I like to identify myself as a Mexican American." Scores on the AOS and MOS were used to generate the following categories: acculturation, enculturation, and biculturation.

The marginalization scale was not used in the analyses. Cuellar et al. (1995) stated that the marginalization scale is an experimental scale and has not been adequately tested on either an adult population or a child population. As a result, information gathered from the current population using this scale would be questionable concerning reliability and validity.

For the initial analyses, scoring and cut off levels were computed according to the directions in Cuellars et al. (1995). Briefly, the sum of the AOS is divided by 13, while the sum of the MOS is divided by 17 to obtain mean values. A person was categorized as enculturated if they have a score one-half standard deviation above the mean on MOS (M = 3.28, SD = .84) and a score one standard deviation below the mean on AOS (M = 3.82, SD = .57). Means and standard deviations were taken from the original validation study of the ARSMA-II (Cuellars et al., 1995). A person was categorized as acculturated if they have a score one standard deviation below the mean on MOS and a score one-half standard deviation above the mean on AOS. A person was categorized as biculturated if they meet the following criteria: AOS score of 3.53 (which is one-half standard deviation below the AOS mean) or higher and MOS score of 2.86 (which is one-half standard deviation below the MOS mean) or higher.

A second series of analyses created group membership categories by using the means for Anglo orientation and Mexican orientation as the cutoff (AOS mean = 3.82; MOS mean = 3.28). A person was categorized as acculturated if they scored at the mean or higher on the AOS scale. A person was categorized as enculturated if they scored at the mean or higher on the MOS. A person was categorized as biculturated if they scored at the mean or higher on both the AOS and MOS. The last series of analyses compared children scoring high on the AOS to children scoring high on the MOS (high being defined as one standard deviation above the mean or higher)

.   The AOS and MOS show good internal reliability in the Cuellars et al. (1995) study, with an alpha of .86 and .88 respectively. Furthermore, the AOS and MOS demonstrated good test-retest reliability (time = 1 week) with r = .94 and r = .96, respectively. The ARSMA-II showed a significant correlation between acculturation and generational status (r = .61, $p < .001$), indicating good concurrent validity in measuring the overall construct of acculturation. Furthermore, the ARSMA-II showed significant mean differences between generations in the direction hypothesized by the literature (i.e., later generations more acculturated and earlier generations more enculturated) with $F(4,346) = 54.195$, $p < .001$.

The child's antisocial and adaptive behavior was assessed by parent and self-report on the Behavior Assessment System for Children, Second Edition (BASC-2, Reynolds & Kamphaus, 2004). The BASC-2 is available in both an English and Spanish version. The parent report BASC-2 for adolescents (BASC-2 PRS-A) is a 150 item, Likert scale measure used to assess three domains: externalizing, internalizing, and adaptive behavior for youths 12 to 21 years old. The externalizing domain consists of

three scales: hyperactivity, aggression, and conduct problems. The internalizing domain consists of three scales: anxiety, depression, and somatization. The adaptive domain consists of five subscales: adaptability, social skills, leadership, activities of daily living, and functional communication. The BASC-2 PRS yielded high internal consistency (α = .90 to .94) and test-retest reliability (r = .78 to .92). To measure antisocial behavior, the conduct problems scale and the aggression scale from the BASC-2 PRS-A were used.

Because the self-report BASC-2 does not provide scores on antisocial behavior (e.g., CD and ODD symptoms) only the adaptive composite score was included in the analyses. The self report BASC-2 for adolescents (BASC-2 SRP-A) is a 176 item, Likert scale measure used to assess four domains: school problems, internalizing problems, inattention/hyperactivity, and personal adjustment for youths 12 to 21 years old. The personal adjustment domain (a measure of adaptive behavior) consists of four scales: relations with parents, interpersonal relations, self-esteem, and self-reliance. The BASC-2 SRP yielded good internal consistency (α = .79 to .82) and test-retest reliability (r = .73 to .75). Adaptive behavior was measured by both parent and self-reports on the Adaptive composite from the BASC-2.

Procedure

Recruitment for the study took place in several phases. First, several locations in both Texas and Kansas with a majority of Mexican American (i.e., more than 50% of the population) were selected as target study sites. Of these locations, two agencies agreed to allow the research team to recruit participants and conduct data collection from members of their organization: The Catholic Church Diocese (in Kansas City, KS and Lubbock, TX) and El Centro, Inc. (a community mental health and outreach center that serves the

Kansas City area). Second, times for data collection were arranged between the primary investigator and the program coordinators for the respective organization. Third, the program coordinator agreed to notify families about the study in the context of regularly scheduled agency events. The Catholic Church locations posted bulletins of the scheduled time and location in their newsletter and then over the span of eight months made an announcement at the end of church Mass as to the time and location of the research study. El Centro would announce the time and location of the research study in the context of parent education classes. All participation was voluntary, with participating agencies offering no incentives for participation. Based on program director reports, of the total number recruited from the sites (60 families from Kansas City and 150 from Lubbock), approximately one-third (21 from Kansas City and 52 from Lubbock) indicated interest and came to the data collection time and location.

Fourth, once participants arrived at the designated location and time, consent forms were given before surveys were administered, with a Spanish translator present. Prior to data collection, all interested parents were asked if their child had a developmental disability. As a result approximately six parents responded positively. These parents were thanked for their time and did not complete the study measures. All forms were in Spanish and English versions. Forms that did not already have a pre-existing Spanish translation were translated by native Spanish speakers and were rechecked by different native Spanish speaking research assistants (one in Kansas and one in Texas). The ARSMA-II and the BASC-2 already contained a Spanish version. The consent form was translated by a native Spanish speaking clinical child psychologist and was rechecked by a native Spanish speaking counselor at El Centro, as well as by

Spanish speaking professionals who routinely perform translations (written and oral) for an engineering firm in Kansas City, KS. Analyses were conducted comparing differences in BASC-2 scores among Spanish and English raters. No statistically significant differences were found.

Fifth, parents and children were given consent forms in both Spanish and English. Each consent form allowed parents to check a box if they preferred forms written in Spanish rather than in English. Based on this information, the parents and children were administered forms in their language of choice. Of the families surveyed, 46 parents (74.2%) filled out the forms in English, while 16 parents (25.8%) filled out the forms in Spanish. Of the children who participated, 68 (90.7%) filled out the forms in English, while 7 (9.3%) filled out the forms in Spanish. The parents were instructed, via the consent form, that the parent who spends the most time with the child should complete the ARSMA-II and the BASC-2. Children were required to fill out the same forms. If a parent had more than one child, they were required to fill out an additional BASC-2 on the additional child. Data collection took approximately 45 minutes to an hour for each parent and child. Parents and children were debriefed by both the principal investigator and Spanish speaking research assistant after the family finished the surveys, and contact information for the principal investigator was given to both the permission granting agency (Catholic Church or El Centro) and to the families in case the families should have any questions about the study at a later time. Finally, each parent received a $5.00 gift card for each child they allowed to participate in the study. Furthermore, free lectures on child development and psychopathology were given by the principal investigator as an additional reward after the families completed participation.

Results

Descriptive statistics were calculated for the parents and children and can be found in Table 1. A preliminary analysis using an independent samples t-test was conducted to evaluate the relation between rating items on Spanish language as compared to English language forms among parents for the Externalizing Composite and Adaptive Composite on the BASC-2 and among children on the Adaptive Composite on the BASC-2. The t-test examining the parent-rated Externalizing Composite was not significant, $t(58) = -.867$, $p = .390$. The t-test examining the parent-rated Adaptive Composite was also not significant, $t(59) = .680$, $p = .499$. The t-test examining the child-rated Adaptive Composite was not significant, $t(73) = 1.696$, $p = .094$. This indicates that language in which the BASC-2 composites were endorsed likely did not significantly affect ratings.

A one-way between-subjects ANOVA was conducted to examine the relation between level of acculturation and conduct problems. The independent variable, acculturation status was calculated according to Cuellars et al.'s (1995) criteria and remained the same throughout all the following analyses. The first analysis included the following groups: Biculturated (n = 26), Enculturated (n = 12), and Acculturated (n = 5). A person was categorized as enculturated if they had a score one-half standard deviation above the mean on MOS (MOS score = 3.7 or higher) and a score one standard deviation below the mean on AOS (AOS score = 3.24 or lower). A person was categorized as acculturated if they have a score one standard deviation below the mean on MOS (MOS score = 2.44 or lower) and a score one-half standard deviation above the mean on AOS (AOS score = 4.11 or higher). A person was categorized as biculturated if they meet the

following criteria: AOS score of 3.53 (one-half standard deviation below the AOS mean) or higher and MOS score of 2.86 (one-half standard deviation below the MOS mean) or higher. The dependent variable was the T-score on the BASC-2 Conduct Problems subscale. The ANOVA was not significant, $F(2,38) = .609$, $p = .549$. A second one-way between-subjects ANOVA was conducted to examine the relation between level of acculturation and aggression. The dependent variable was the T-score on the BASC-2 Aggression subscale. The ANOVA was not significant, $F(2,39) = .504$, $p = .608$. A third one-way between-subjects ANOVA was conducted to examine the relation between level of acculturation and parent reported adaptive skills. The dependent variable was the parent-reported T-score on the BASC-2 Overall Adaptive Skills subscale. The ANOVA was not significant, $F(2,39) = 1.681$, $p = .199$. The last one-way between-subjects ANOVA was conducted to examine the relation between level of acculturation and child reported adaptive skills. The dependent variable was the child-reported T-score on the BASC-2 Personal Adjustment subscale. The ANOVA was not significant, $F(2,40) = 2.57$, $p = .089$.

As Cuellars et al. (1995) defined the bicultural groups as having to meet two distinct criteria (high on the AOS, and high on the MOS), the groups were redefined in the analyses using the means for Anglo orientation and Mexican orientation as the cutoff (AOS mean = 3.82; MOS mean = 3.28). Using the mean as a cutoff for biculturation has been standard procedure in other acculturation scales (e.g., Szapocznik et al., 1980 Bicultural Involvement Questionnaire), and Cuellars et al. (1995) did not explicitly state why they chose to break with this practice. Group 1 (Acculturated) scored at the mean or higher on the AOS scale (n = 24), group 2 (Enculturated) scored at the mean or higher on

the MOS (n = 24) and group 3 (Biculturated) scored at the mean or higher on both the

AOS and MOS (n = 12). The ANOVA's were repeated and none of the analyses were

significant using this alternative cultural grouping.

The majority of past research has depended on collapsing Anglo and Mexican

orientations to conceptualize the construct of biculturation (e.g., Franco, 1983 Children's

Acculturation Scale). However, proponents of a multidimensional model of acculturation

stress that its strength lies in being able to independently assess the dimensions without

need for collapsing the two (Cuellars et al., 1995, Berry, 2003). Therefore, further

analyses were conducted using the independent scales of the ARSMA-II (i.e., the AOS

and MOS). The first analysis compared children scoring high on the AOS to children

scoring high on the MOS (high being defined as one standard deviation above the mean

or higher) on aggression, conduct problems, parent-rated adaptive behavior, and child-

rated adaptive behavior. An independent samples t-test was conducted to evaluate

whether children who scored high on the AOS were rated differently on the Aggression

subscale than children who scored high on the MOS. The test was not significant, $t(41) =$

-1.25, $p = .218$. A second independent samples t-test was conducted to evaluate whether

children who scored high on the AOS were rated differently on the Conduct Problems

subscale than children who scored high on the MOS. The test was not significant, $t(40) =$

$-.434$, $p = .667$. A third independent samples t-test was conducted to evaluate whether

children who scored high on the AOS rated differently on the parent-rated adaptive

behavior than children who scored high on the MOS. This test was also not significant,

$t(41) = .897$, $p = .375$. A final independent samples t-test was conducted to evaluate

whether children who scored high on the AOS were rated differently on the child-rated

adaptive behavior than children who scored high on the MOS. The test was significant, $t(42) = 2.123$, $p = .04$. The results indicate that children who scored high on the AOS ($M = 55.18$, $SD = 11.25$) scored significantly higher on self-rated adaptive skills than children who scored higher on the MOS ($M = 48.45$, $SD = 9.72$).

Discussion

The current study sought to examine how levels of acculturation, biculturation, and enculturation were related to antisocial and adaptive behavior in Mexican American children. Specifically, it was hypothesized that bicultural children would score lower on measures of antisocial behavior, as well as higher on measures of adaptive behavior than enculturated or acculturated children. Mexican American children are at greater risk than Anglo American children for externalizing problems and are disproportionately represented in the juvenile justice system (Mash & Barkley, 2003, US Department of Health and Human Services, 2001). It is important to establish why negative outcomes may be especially likely for the nation's fastest growing population of children. The hypotheses, however, were not supported.

Initial analyses grouped the children according to the criteria originally set by Cuellars et al. (1995) in which they used a college aged sample and found no significant results. Cuellars et al (1995) stated that "the general rule [for grouping categories] was to be stringent, but not so much so that virtually nobody fit into a specific category" (p287). Because certain groupings were relatively exclusive (acculturated n = 5), additional analyses, using a more liberal definition of the three constructs, were conducted. As culture is a fluid construct that is difficult to categorize, there are varying definitions regarding how to construct cultural groupings. For example, Padilla (1980) relied heavily

on educational achievement in categorizing acculturation of Hispanics. Marin and

Gamba (1996) grouped Hispanic individuals according to language use and preference

for electronic media. Marin, Sabogal, VanOss Marin, Otero-Sabogal, and Perez-Stable

(1987) evaluated acculturation based on language and feelings of discrimination.

Furthermore, these methods vary on whether the respondents are grouped

unidimensionally (they can select either Hispanic or Anglo), or whether they are grouped

multidimensionally (they can select Hispanic, Anglo, both, or neither). The second set of

analyses stayed within Berry's (2003) multidimensional model, and grouped individuals

based on two independent scales of feelings toward Anglo culture and feelings toward

Mexican culture. Specifically, the requirements for group membership were relaxed by

including more individuals in the acculturated and enculturated groups. No significant

results were found using this model for acculturation. Proponents of a multidimensional

model of acculturation stress that its strength lies in being able to independently assess

the dimensions without need for collapsing them (Cuellars et al., 1995, Berry, 2003).

Because the previous set of analyses collapsed the two independent scales, another set of

analyses were conducted measuring elevations on the independent scales of AOS and

MOS, without requiring criteria being met for both scales.

The results for the analyses showed that bicultural children were not significantly

different from acculturated or enculturated children on scales of aggression, conduct

problems, parent-rated adaptive behaviors, and child-rated adaptive behaviors. No

significant differences were evident between the three groups on parent reported

measures of aggression, conduct problems, and adaptive skills. A significant difference,

however, did emerge when examining self-reported adaptive behavior in Anglo-oriented

children compared to Mexican-oriented children, with Anglo-oriented children scoring significantly higher on scales of self-reported adaptive behaviors. Several potential explanations may illuminate the present results.

One possibility is that the one significant result is spurious and represents a false positive. Adaptive behavior is likely best measured by outside observers, such as parents and teachers (Friedman, Leone, & Friedman, 1999; Winters, Collett, & Myers, 2005). Parents' ratings in the current study should have been significant if these children were exhibiting adaptive behaviors because research indicates that parents would be the best raters of this behavior. There were no significant findings using parent report. Considering the small difference between mean scores on parent-reported adaptive behaviors and child-reported adaptive behaviors the possibility of this one finding being spurious is likely. However, before this can be definitively concluded, a second possibility more consistent with the literature should be explored.

A second reason that may explain the findings concerns the meaning of the concept of adaptive behavior. Measures of adaptive behaviors are often based on an Anglo cultural framework (Santisteban & Mitrani, 2003). Past studies, the current one included, have used Western definitions of what is adaptive such as academic achievement (Lopez et al., 2002), self-esteem (Miranda & Umhoefer, 1998), and school adjustment with peers (Bautista de Domanico et al., 2002). Although these outcomes would likely be considered adaptive in Mexican American culture, Mexican American culture also includes specific values and behaviors expected toward family, religious practices (particularly Catholicism), Spanish language, and immigration adjustment (Sue & Sue, 2003, Bacallao & Smokowski, 2007). For example, traditionally oriented

Mexican Americans, because of the high priority of Catholic values in the Mexican culture may view enduring wrongs done against oneself as adaptive behaviors and strengths, whereas this might be viewed as passiveness when viewed from an Anglo-oriented perspective (Gonzalez, 1995). Although current behavioral scales do not preclude the inclusion of Hispanic cultural values, current measures do not include them, and therefore, may not capture some of the key aspects of what it means to be adaptive in the Mexican American culture.

Because no measurement tool for adaptive behavior in Mexican American culture currently exists for children and families (Achenbach & Rescorla, 2006), researchers recognize the lack of culturally sensitive measures and are currently taking steps to create measures with a universal or culture specific emphasis in assessing behavior problems. For example, Achenbach and Rescorla (2006) have conducted international renorming of the Child Behavior Checklist (CBCL) to better conceptualize behavior problems and adaptation from a non-Western perspective. Kamphaus (2007) is currently examining phenotypic patterns of behavioral adjustment in different Hispanic countries (e.g., Colombia and Spain) as a result of this concern over what adaptation means in a Hispanic cultural framework.

Sue and Sue (2003) have urged professionals working with Hispanic clients of the need to take into account traditional cultural values such as family, language, and religion when treating or assessing this population, as it can affect not only manifestation of psychopathology, but also the presentation of functional and adaptive behavior. For example, close family bonds (an adaptive construct in Hispanic culture) could be misinterpreted as the maladaptive construct of enmeshment (a lack of parent-child

boundaries) when working with a Hispanic family in a therapeutic context (Robbins, 2003). Until the conceptualization of adaptation is framed from a multicultural perspective, the more general conclusion that higher Anglo orientation predicts higher feelings of self-rated adaptive behaviors cannot be adequately supported. It would likely be more accurate to conclude only that higher Anglo orientation predicts higher feelings of Anglo conceptualized self-rated adaptive behaviors.

The results of the present study did not support the hypotheses regarding the relation between acculturation grouping and externalizing problems. This result may be due to several factors. First, the study design followed the general trend in the field to identify the presence of a construct (i.e., acculturation) and use this variable to create meaningful groups. However this practice may not be reflective of the cultural experience of Mexican Americans in the United States. Mexican American individuals may differ regarding what they see as important in defining an acculturation grouping. The diversity of opinions among researchers as to how to group Mexican American individuals is reflective of this (e.g., Berry, 2003, Marin & Gamba, 1996, Padilla, 1980). Until the field can agree on the nature of meaningful acculturation groupings, it may be premature to try to link the construct of acculturation to psychopathology.

Tripathi and Leviatan (2003) also take issue with cultural groupings, focusing on the collective/individualist dichotomy, claiming that grouping individuals by their collective or individual perspective may likely lose much of the information about within group differences and therefore, may not be of predictive value in social sciences research. Examples of information that is lost due to categorizing ethnic minority groups includes: the social context where ethnic minority individuals reside (Nguyen, Messe, &

Stollak, 1999), accounting for the presence of multiethnic individuals (Root, 1996), and concerning children, the impact of developmental changes (Schonpflug, 1997). Support for this notion is found in Verkuyten and de-Wolf (2002) where they found, when examining ethnic minority Chinese individuals, that their self-categorization was different from the theoretical constructs typically used to categorize ethnic minorities (e.g., language spoken and religion). Instead of these typical categorizations, individuals in this study categorized themselves according to dimensions of self-esteem and self-control rather than typical constructs such as language. They found that categorizing individuals according to groupings based on self-esteem and self-control retained information on interpersonal relationships among peers and self-reported feelings of adjustment in the individual's social context (e.g., school and work) that would have been lost when using typical groupings (e.g., language).

Because such groupings may not be meaningful in relation to psychopathology, Oppedal, Roysamb, and Heyerdahl (2005), in their study on ethnic groups, acculturation, and psychiatric problems in a multicultural 10th and 11th grade immigrant population took the opposite stance and measured only specific cultural concerns (e.g., perceived discrimination), choosing not to use traditional groupings found in the field. They found that this approach aided in detecting psychopathology in relation to ethnicity and acculturation.

However, despite this claim that groupings may not be meaningful, many researchers continue to group ethnic minorities and find significant results relating to both adaptive and maladaptive outcome. Bautista de Domanico et al. (1994) found that grouping high school students into biculturated Mexican American, acculturated Mexican

American, or Anglo predicted significant differences in self-esteem, social skills, and overall psychological well-being. Furthermore, Lopez et al. (2002) using the groupings of biculturated, enculturated, and acculturated predicted differences in levels of academic achievement among Hispanic teenagers.

The issue of whether to group or not to group ethnic minorities is further complicated by the fact that researchers using the same groupings find both significant and nonsignificant results when measuring the same construct. The results of research on intelligence testing is a good example. African American and Anglo American children often represent very different cultural perspectives, yet the findings regarding intelligence and the importance of group membership are unclear. The Wechsler-based intelligence tests are considered a gold standard in measuring IQ and therefore one would expect this test to reproduce similar results across diverse populations (Sattler, 2001). However, when Kush et al. (2001) compared WISC-III scores among a group of Anglo American children and a group of low-SES African American children referred for psychological evaluation, the two groups differed on testing results. Specifically, Kush et al. were unable to recreate the Freedom From Distractability and Processing Speed factors in the group of African American children even though both groups of children received the same subtests. This difficulty with replicating the WISC-III factors may be a result of a failure to be sensitive to how culturally diverse populations are grouped.

Certain studies, however, have attempted to group culturally diverse children using categories that are more multifaceted. Brooks-Gunn et al. (2003) examined Stanford-Binet and WPPSI scores among a group of 3-6 year old children, and found a 15-25 point difference in African American-Anglo American test scores at all ages.

These differences, however, between the same theoretical constructs on two separate measures of intelligence were reduced when a more multifaceted categorization of the child was taken into account, such as demographics (e.g., SES) and home environment (e.g. parental attitudes towards academics). For example, when Brooks-Gunn et al. took home environment into account, the difference in IQ scores between African American and Anglo American children was reduced to within a standard deviation (i.e., 4-13 points).

The inconsistent results indicate a number of possibilities. Similar to the field of acculturation, the above example highlights what happens when there is a gap between the theoretical and applied aspects of a construct (i.e., intelligence). Several studies have found evidence that measures of intelligence do not accurately assess in minorities the relation between intelligence and important real world constructs such as mental retardation (Naglieri & Rojahn, 2001), learning disorders (Greene, Sapp, & Chissom, 1990), and giftedness (Scott, Deuel, Beda, & Urbano, 1996). Like acculturation, another concern is the question of whether it is possible to adequately measure such a fluid construct as intelligence. Canino and Spurlock (2002) stated that the goal for test makers is cultural equivalence, but that this may not be a realistic goal. Canino and Spurlock (2002) go on to say that because culture is not a stable construct, and because children are rarely exposed to only one culture, these changes and interactions between cultures could have unforeseen effects on performance. Just as researchers in the field of intelligence agree that a form cannot adequately assess intelligence, researchers in the field of acculturation are finding that there are things that need to be measured to assess acculturation that go beyond what a paper and pencil survey can cover.

These concerns mirror the problems associated with categorizing ethnic minorities according to cultural groupings. Researchers have noted the gap between psychologist's theoretical models for acculturation (e.g., Berry, 2003) and the ability of those models to predict real world phenomena (Sam & Berry, 2006). Certain researchers believe it is important to test potential pathways whereby different cultural groupings could have different relations to psychopathology and adaptive outcomes (Achenbach & Rescorla, 2006; Kamphaus, 2007). Others believe that acculturation is such a fluid construct that to categorically group any ethnic minority would be a mistake and would result in a false representation of the experience of a very diverse group of individuals (Santiseban & Mitrani, 2003). The early researchers who examined the construct of intelligence set the necessary foundation for empirically based theories of intelligence which are in use today. Without that foundation, current assessment practices and measures of intelligence would not exist. Current researchers examining acculturation are in the process of building a foundation also. However, as with the field of intelligence research, the relation between acculturation, psychopathology, and adaptive behavior is likely to be much more complex than initially thought. Acculturation may not be adequately measured by self-reported behaviors and attitudes, and may, in fact, be more accurately represented by factors much more difficult to measure (e.g., patterns of familial relations). Fortunately, this is an empirical question that can be addressed through empirical means in future studies.

Limitations of the Present Study

Although the present study was the first to examine the effects of acculturation on antisocial and adaptive behavior in Mexican Americans using multiple raters across

multiple sites, it is not without limitations. First, acculturation, antisocial behavior, and adaptive behavior levels had a normal distribution. Not usually viewed as a limitation in most studies, in the current study the desire was to examine aggressive behavior and conduct problems specifically. The normal distribution may have limited the number of children who fit the cultural groupings. Previous research on acculturation has shown that the range of acculturation is limited and non-normal. For example, many researchers have noted that first generation Hispanics are more likely to be enculturated, second and third generation Hispanics are more likely to be biculturated, and fourth generation and beyond are likely to be acculturated (Buriel, 1993; Chun, & Akutsu, 2003; Cuellar et al., 1995; Marin & Gamba, 2003). Moreover, type of acculturation is related to outcomes. For example, first generation, and more enculturated, Hispanics are more likely to present with symptoms of somatization than more acculturated Hispanics and those in later generations (Escobar et al., 1987). First generation Hispanics, however, are less likely to present with symptoms of depression than Hispanics in later generations (Vega et al., 1998). By having a normal distribution, the current study might not be representative of the majority of research examining acculturation.

Second, there are very few acculturation measures specifically designed for children, and even fewer that use a multidimensional conceptualization of acculturation (Dana, 1996). The measure used (the ARSMA-II) was not designed for use on a child population, but currently there is no multidimensional measure designed for Mexican American children (Zane & Mak, 2003). This is a limitation not only of the current study, but of the present state of the field of cultural diversity research and is an area that numerous researchers have drawn attention to (Balls-Organista et al., 2003; Sue & Sue,

2003). In fact, there has been no comparison of measures of acculturation to examine whether they are measuring the same construct in children and adults (Arends-Toth & Fons, 2006). However, in the absence of a satisfactory multidimensional measure, it was believed that theory should guide research and so a measure representative of the most current and inclusive method of cultural grouping was used.

Several child acculturation measures for Hispanics exist (e.g., Bicultural Involvement Questionnaire, Children's Acculturation Scale, Children's Hispanic Background Scale). However, it was believed that using the theoretical foundation behind the ARSMA-II would be the proper starting point as it attempts to be more inclusive in its theoretical orientation using two dimensions (Anglo and Mexican orientation) rather than using only one (Anglo or Mexican orientation). Pre-existing child acculturation measures lack a strong theoretical foundation, and though the ARSMA-II is not without its limits, other child acculturation measures lack both a multidimensional orientation and a multifaceted definition of culture (e.g., focusing only on language usage). As this is a downward extension of the adult literature, future research needs to examine whether using multidimensional adult measures with a child population is valid.

Future Research

The present results also suggest several areas for further examination. First, it is not clear if a downward extension of acculturation measures (i.e., using adult acculturation measures for children) is an acceptable solution, or if separate assessment methods are required to examine acculturation in children and adults. A first step towards answering this question would be to examine multiple acculturation measures

with parents and children and see if construct validity remains intact. Such research might provide a multifaceted definition of acculturation and would allow researchers to make more specific and definitive conclusions concerning the relation between acculturation and adaptive and maladaptive behaviors in children and families.

Second, future studies need to be cognizant of how adaptation and psychopathology across different cultural groups is defined. The current study found that individuals with elevated Anglo orientation rated higher on self-reported adaptive behaviors. As current measures of adaptive behavior do not account for non-Anglo conceptualizations of adaptation this may mean that Western conceptualizations of adaptation may yield outcomes biased in favor of Western oriented individuals. A Mexican conceptualization of adaptation (e.g., importance of family and spirituality) needs to be examined as rigorously as an Anglo conceptualization of adaptation when research with Mexican American populations is conducted. To ignore a Mexican American conceptualization of adaptation is to miss a key aspect of the experience of what it means to be Mexican American. This area provides a fertile area for future studies, specifically in the possibility of using cultural norms (e.g., traditional Mexican value systems) to reassess current measures of both psychopathology as well as adaptive behavior.

Finally, research should continue to address how ethnic minority populations are grouped in relation to psychopathology and adaptive behaviors, or even if they should be categorically grouped. The potential for missing key relations between culture and psychopathology is great considering the diversity of opinions in how ethnic minority populations should be categorized. As many of these methods of categorization have not

been well researched, examination of these methods indicates a starting point for future studies. Researchers must be aware, however, that it may not be possible to categorically group such a fluid construct as culture. The current study sought to group Mexican American children into biculturated, enculturated, and acculturated culture statuses. These groupings, however, did not aid in predicting outcome behaviors and instead alternate methods for grouping yielded a significant finding. Although such groupings may have predictive power, the relation between psychopathology and adaptive behaviors may be more complex and subtle than current acculturation measures can detect. Similar to the relation between IQ and academic performance, other factors may need to be included in the current models of acculturation to accurately assess the relation between acculturation and behavior. Before the field can conclude that acculturation cannot or should not be measured, possible confounding factors must be empirically tested as a routine part of cultural research.

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Table 1

Descriptive Statistics (Parent – n=63; Child – n=76)

	Percent (Parent)	Percent (Child)
Gender	25.4% Father (n=16) 74.6% Mother (n=47)	59.2% Male (n=45) 40.8% Female (n=31)
Marital Status	77.4% Married (n=48) 22.6% Not Married (n=14)	NA
Language	74.2% English (n=46) 25.8% Spanish (n=16)	90.7% English (n=68) 9.3% Spanish (n=7)
Years of Education	4.8% 1st-6th Grade (n=3) 7.9% 7th-8th Grade (n=5) 39.7% 9th-12th Grade (n=25) 23.8% 1-2 Years of College(n=15) 6.3% 3-4 Years of College (n=4) 15.9% College Graduate or Higher (n=10) 1.6% Missing (n=1)	NA
Generational Status	25.4% 1st Generation (n=16) 15.9% 2nd Generation (n=10) 23.8% 3rd Generation (n=15) 20.6% 4th Generation (n=13) 14.3% 5th Generation (n=9)	19.7% 1st Generation (n=15) 11.8% 2nd Generation (n=9) 10.5% 3rd Generation (n=8) 23.7% 4th Generation (n=18) 34.2% 5th Generation (n=26)

	Mean	Standard Deviation
Parent Age	39.37 (n=63)	5.67
Child Age	14.89 (n=76)	2.13
Income	$42,108 (n=61) (Missing, n=2)	$30,058
Parent AOS	3.75 (n=63)	.89
Parent MOS	3.76 (n=63)	.70
Child AOS	3.76 (n=73) (Missing, n=3)	.65
Child MOS	3.23 (n=73) (Missing, n=3)	.76
BASC-2 PRS-H	50.25 (n=62) (Missing, n=1)	10.11
BASC-2 PRS-A	48.8 (n=62) (Missing, n=1)	9.77
BASC-2 PRS-CP	50.14 (n=62) (Missing, n=1)	9.86
BASC-2 PRS-EC	49.51 (n=62) (Missing, n=1)	9.76
BASC-2 PRS-AC	49.88 (n=62) (Missing, n=1)	10.46
BASC-2 SRP-AC	52.83 (n=76)	10.2

Note: AOS=Anglo Orientation Scale, MOS=Mexican Orientation Scale, BASC-2 = Behavior Assessment System for Children - 2 (Reynolds & Kamphaus, 2004), PRS=Parent Rating Scale, SRP=Self-Report of Personality, H=Hyperactivity, A=Aggression, CP=Conduct Problems, EC=Externalizing Composite, AC=Adaptive Composite