

THE EFFECTS OF PARENTAL ACCULTURATION AND PARENTING
BEHAVIORS ON THE SOCIAL-EMOTIONAL
FUNCTIONING OF YOUNG HISPANIC CHILDREN

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ABSTRACT

Hispanics are the largest and fastest growing ethnic minority group in the U.S. Research has found that Hispanic children are at increased risk for mental health problems even when compared to other ethnic minority groups. Therefore, it is important to identify risk factors specific to Hispanic children and families in order inform intervention. Of particular interest for prevention and early intervention are factors involved in young Hispanic children's social-emotional functioning, such as parental acculturation level and parenting behaviors. However, research that examines the impact of acculturation and parenting behaviors on the social-emotional functioning of young Hispanic children is limited. There were two main goals for this study. The first was to determine the relationships between pairs of study variable: child gender, parental acculturation level, parenting behaviors, and children's social-emotional functioning (internalizing and externalizing problems). The second goal of the study was to examine the extent to which linear combinations of child gender, parental acculturation (low, bicultural, high), and parenting behaviors (nurturance, expectations, and discipline) predicted in-school internalizing and externalizing behaviors. Participants included 90 four-year-old preschoolers of Hispanic background from an urban public school district in central New Jersey. Correlation, multiple regression, and hierarchical multiple regression analyses were used to determine the relationships among these constructs and to identify the variables that predict internalizing and externalizing behaviors for this sample. Findings suggest that as parents of Hispanic preschool children become more acculturated to the U.S. culture, their children's externalizing behaviors increase. Hispanic preschool girls, in particular, are at greater risk for oppositional behaviors and anger problems if their

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parents are bicultural or highly acculturated. Implications for early intervention and prevention, as well as future research directions, are discussed.

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The Effects of Parental Acculturation and Parenting Behaviors on the Social-Emotional Functioning of Young Hispanic Children

Introduction

Hispanics are the largest and fastest growing ethnic minority group in the United States. As of July 1, 2006, Hispanics accounted for 15.4% of the total U.S. population (U.S. Census Bureau, 2008). By the year 2050, the Hispanic population is projected to increase to 24% of the total U.S. population (U.S. Census Bureau, 2004). Hispanic children make up 25% of children under the age of 6-years-old (National Center for Children in Poverty, 2008).

Hispanics in the U.S. face unique circumstances which limit their ability to succeed, including immigration process and status, language and cultural differences from mainstream American culture, discrimination, and low socioeconomic status (Caplan, 2007; Padilla & Borrero, 2006). According to the U.S. Census Bureau (2006-2008), 21.2% of Hispanics live below the federal poverty level compared to 9.2% of non-Hispanic Whites. Additionally, 62% of Hispanic American children live in low-income families compared to only 27% of European American children (National Center for Children in Poverty, 2008). Compared to other ethnic groups, Hispanic children are more likely to live in crowded homes and have parents with lower educational levels (Wilson, Hurtt, Shaw, Dishion, & Gardner, 2009). Hispanic children are less likely to participate in early childhood education than children from other groups (National Center for Education Statistics, 2005). Twenty-four percent of children between the ages of 5 and 9 speak Spanish at home and are not English proficient (National Center for Education Statistics, 2009).

Higher rates of mental health problems have been reported among Hispanic children compared to other ethnic groups in the U.S. Most of this research has been conducted with children ages 10 and above. The Department of Health and Human Services (2001) reported increased rates of mental health symptoms in Hispanic children and adolescents in both externalizing and internalizing behaviors. Other studies suggest that Hispanic youth have increased rates of depression and depressive symptomology compared to European American youth (Joiner, Perez, Wagner, Berenson, & Marquina, 2001; Loukas & Roalson, 2006; Roberts, Roberts, & Chen, 1997; Siegal, Yauncey, Aneshensel, & Schuler, 1999). Different levels of depression have been reported according to degree of acculturation, with less acculturated adolescents scoring higher on depression measures in some studies (Hill, Bush, & Ross, 2003). Similarly, numerous studies have found that Hispanic adolescent females have lower self-esteem (Carlson, Uppal, & Prosser, 2000; Moneta, Schneider, & Csikszentmihalyi, 2001) and increased mental health problems, including suicide attempts, than African American and European American adolescents (Centers for Disease Control and Prevention, 2002). Research has found that Hispanic adolescents are more likely to engage in problem behaviors (Loukas & Roalson, 2006; Vazsonyi & Flannery, 1997), experience greater school-related stress, and feel less connected to the school environment than White adolescents (Carlson et al., 2000; Munsch & Wampler, 1993).

Research on the social-emotional functioning of young Hispanic children, however, is limited. There is evidence to suggest that young Hispanic children have increased rates of mental health problems. Lequerica and Hermosa (1995) examined maternal reports of Hispanic preschool children's internalizing and externalizing

behaviors. They found that certain externalizing (i.e., hyperactivity, demanding attention, and impulsivity) and internalizing (i.e., clinging to adults, easily jealous, self-conscious, shy/timid, and fears of certain animals, situations and places) behaviors were higher for Hispanic preschool children than both community and psychiatric samples.

It is important to study early childhood social-emotional functioning. Research has consistently found that early childhood social-emotional and behavioral functioning predict mental health functioning later in life (Campbell, 1995; Campbell, Breaux, Ewing, & Szumowski, 1986; Lee, Lahey, Owens, & Hinshaw, 2008; Meagher, Arnold, Doctoroff, Dobbs, & Fisher, 2009). Additionally, early childhood developmental tasks, such as learning to regulate emotion and maintain appropriate attention levels, predict later success (Hill, Degnan, Calkins, & Keane, 2006).

One factor that has been found to influence the social-emotional functioning of young children is parenting behavior. Early childhood research has focused on the quality of parent-child relationship and parenting practices (Bennett, Bendersky, & Lewis, 2002; Chang, Schwartz, Dodge, & McBride-Chang, 2003; Connell & Prinz, 2002; Gadeyne, Ghesquiere, & Onghena, 2004). The quality of parent-child relationships and discipline strategies have consistently been found to be associated with childhood social-emotional adjustment (Barrerra et al., 2002; Caspi et al., 2004; Grant et al., 2002; Olsen, Ceballo, & Park, 2002). For instance, harsh parenting is associated with negative social-emotional and behavioral adjustment in young children (Anthony, Anthony, Glanville, Naiman, Waanders, & Shaffer, 2005; Bennett, Bendersky, & Lewis, 2002; Chang, Schwartz, Dodge, & McBride-Chang, 2003; Olsen, Ceballo, & Park, 2002).

Research has also found that parental expectations affect parent behaviors and parent-child interactions (Belsky, 1980; Dukewich, Burkewski, & Weitmann, 1996; Huang, Caughy, Genevro, & Miller, 2005; Hunt & Paraskevopoulos, 1980). In a study of parenting in African American preschool children, findings indicated that high expectations were associated with increased internalizing problems (Anthony et al., 2005). In addition, parental stress was associated with externalizing problems only if parents had high expectations. Gender differences were also found with girls having higher levels of social competence and lower levels of externalizing behaviors than boys. Similar to the current study, this study used the Parent Behavior Checklist (Fox, 1994) and the Social Competence and Behavioral Evaluation scale (SCBE; LaFreniere & Dumas, 1995).

Parenting and Hispanic Early Childhood Social-Emotional Functioning

Much of the literature on the relationship between parental factors and early childhood social-emotional adjustment involves non-Hispanic children. However, the research that is available with young Hispanic children has found similar results to those reported for non-Hispanic samples. In general, nurturing and positive parent-child relationships are associated with positive social-emotional functioning, while harsh discipline and negative parent-child relationships are associated with poor social-emotional functioning in young Hispanic children (de Leon Siantz & Smith, 1994; Lequerica & Hermosa, 1995; Lindahl & Malik, 1999; McLoyd & Smith, 2002; Perez & Fox, 2008; Rodriguez, Davis, Rodriguez, & Bates, 2006).

Positive, nurturing parenting behaviors predict better social-emotional functioning in young Hispanic children. Gamble and Modry-Mandell (2008) used the Social

Competence and Behavior Evaluation scale (SCBE; LaFreniere & Dumas, 1995) to examine the relationship between parenting behavior and young Mexican children's social-emotional functioning. They found that close and warm mother-child relationships (i.e., affection, warmth, and positive exchanges) were associated with decreased internalizing and behavior problems. Warm mother-child relationships were also associated with increased teacher ratings of emotional adjustment. Similarly, in a longitudinal study by McLoyd and Smith (2002), findings indicate that parental emotional support was negatively related with behavioral problems in ethnically diverse children. However, this relationship was weakest among Hispanic children. Furthermore, emotional support moderated the impact of spanking so that in high support families there was no difference between children who were spanked and not spanked. Perez and Fox (2008) examined the effect of parenting behaviors on young Hispanic children's externalizing behaviors in clinical and non-clinical samples using the Parent Behavior Checklist (PBC; Fox, 1994). Nurturing parent behavior was inversely related to both the intensity of externalizing behaviors and number of problem behaviors.

Research has also found that harsh parental discipline and low parental support are associated with increased behavior problems among young Hispanic children. In the longitudinal study mentioned above, it was found that over time children who were spanked more or experienced an increase in spanking had larger increases in behavior problems even after accounting for income, ethnicity and nurturance/emotional support (McLoyd & Smith, 2002). However, Hispanic children had the strongest relationship between spanking (both constant and increased levels) and increased behavior problems compared to White and African American children. In families with low levels of

parental support, children who were spanked more had more behavioral problems. Likewise, a different study examined parenting behaviors and young Hispanic children's externalizing behaviors in clinical and non-clinical samples using the PBC (Fox, 1994) (Perez & Fox, 2008). The results found that mothers in the clinical sample reported frequent use of verbal and corporal punishment and used nurturing strategies less frequently with their children. Similarly, families in the clinical group had lower ratings in parent-child relationship (appropriateness of parental expectations, warmth, reciprocity of the observed parent-child interactions, and limit setting). Discipline scores were positively related to children's problem and intensity scores.

Lindahl and Malik (1999) examined how various parenting styles affect boys' externalizing behavior problems in Hispanic American, European American, and Biethnic (Hispanic and European) families. They were particularly interested in examining a style of parenting termed hierarchical parenting. Hierarchical parenting occurs when parents act as the absolute authority figures. In other words, rules and punishment are set only by parents, and children's opinions about problems are either not solicited or are minimally considered. Hierarchical parenting style was more prominent in Hispanic families than in European American and Biethnic families. Additionally, hierarchical parenting style was not associated with behavioral problems in Hispanic children as it was for the other two ethnic groups. Instead, for Hispanic families, lax, inconsistent parenting was associated strongly with child behavioral problems.

However, not all studies have found that parental discipline, nurturance and expectations are associated with child social-emotional functioning. For instance, Fagan (2000) found that the addition of parenting style into a regression analysis did not

increase the prediction of social competence in Headstart Puerto Rican children after taking into account ethnicity, gender, and parent involvement.

In sum, the current literature in parenting and young Hispanic social-emotional adjustment has found that warm, nurturing parenting behavior is associated with decreased internalizing and externalizing problems as well as increased social competence. The literature has also found that harsh discipline (i.e., corporal and verbal punishment) is associated with increased problem behaviors in young Hispanic children. Lax and inconsistent discipline as well as inappropriate expectations have been found to be associated with behavioral problems in young Hispanic children. When comparing Hispanic young children to White and Black children, the relationship between the above variables and child social-emotional functioning differed in degree. For example, some studies, have found weak relationships between parental nurturance and decreased behavioral problems for Hispanic children compared to other ethnic groups. Also, different discipline styles were associated with behavior problems for Hispanic children than were for White and biracial children. Therefore, while the relationship between parenting behavior and Hispanic young children's social-emotional adjustment is similar to those found in other ethnic groups, there are differences that may be explained by culturally specific factors, such as parental acculturation level.

Parental Acculturation and Parenting Behavior

Acculturation is a major process Hispanics experience in adjusting to the culture of the U.S. Acculturation is defined as changes in cultural attitudes, values, and behaviors that result from contact between two distinct cultures (Berry, 1997). More recently, it has been described as a bidimensional interchange between the host culture and culture of

origin. One dimension is cultural maintenance, or the extent to which a person strives to maintain the native culture; the second dimension is “contact and participation,” or the extent to which members of a cultural group become involved with other cultural groups (Berry, 1997). It is the interaction between these two dimensions that determines a person’s acculturation.

Acculturation may have implications for young Hispanic children’s social-emotional development via Hispanic cultural values. Not surprisingly, Hispanic cultural values have been found in Hispanic parenting and socialization goals (Delgado & Ford, 1998; Julian, McKenry, & McKelvey, 1994). These values include *simpatia*, or keeping harmonious relationships; *familismo*, or the sense of close family connection, reliance on family for emotional support and emphasis on interdependence and cohesion within the family; and being *bien educado* or respectful and well-mannered (Crockett et al., 2007; Flores et al., 2004; Gamble & Modry-Mandell, 2008). For instance, Puerto Rican mothers of young children from varying socioeconomic levels reported long-term socialization goals as well as desirable and undesirable child outcomes that fit the “proper demeanor” pattern (i.e., emphasis on respectfulness, obedience, and acceptance by the larger community) (Harwood, Schoelmerich, Ventura-Cook, Schulze, & Wilson, 1996). Rodriguez and colleagues (2009) studied parenting styles of Hispanic parents with children between the ages of 4 and 9 years old ($M = 6.64$). Differences in parenting depended on the child’s gender. Parents granted daughters less autonomy than sons (e.g., “Parent takes child’s desires into account before asking the child to do something” and “Parent asks child’s opinion about decisions that will affect the child”). Parents also had higher demandingness/expectations for daughters than sons. The authors hypothesized

that cultural expectations of gender may have contributed to the differences in parenting for boys and girls. However, they did not look at cultural factors in their study.

Research has begun to examine the relationship between parental acculturation level and parenting behaviors. In one study, low acculturated Hispanic mothers of preschoolers from varying income levels had higher levels of discipline and lower levels of nurturing than White mothers, but were still within normal range (Cardona, Nicholson, & Fox, 2000). Hispanic mothers from higher socioeconomic status (SES) reported the highest discipline scores. Hispanic mothers scored higher on items of corporal punishment and use of religion as a form of discipline. White mothers reported reading to their child more frequently and allowing their children to engage in messy play than did low acculturated Hispanic mothers.

In another study, first generation immigrant Puerto Rican and Dominican mothers with children ages 2 to 6 were surveyed on parenting behaviors (Calzada & Eyberg, 2002). Based on their reported frequencies on various parenting behaviors, normative and non-normative parenting behaviors were calculated. Normative parenting behaviors included warmth, positive discipline, and positive communication and interaction. Non-normative parenting behaviors included ineffective discipline, such as physical discipline, and negative/harsh interactions. Parenting differences were found between Puerto Rican and Dominican parents. For Dominican families, parental acculturation was not related to parenting. However, for Puerto Rican families, acculturation was positively related to the warmth and involvement. Gender differences were also found in this study. Puerto Rican mothers of girls scored higher on the dimension of warmth and involvement than did

Puerto Rican mothers of boys. Dominican mothers of girls scored higher on the democratic dimension.

To summarize, research in the area of parental acculturation and its relationship to parenting is limited and contradictory. There is evidence that culture-specific parenting beliefs and socialization goals exist for parents of young Hispanic children, such as an emphasis on raising children who are respectful and obedient. Additionally, some studies indicate that for Hispanic families, parenting behaviors may differ according to child gender. However, the limited research on the relationship between acculturation and parenting is mixed. One study found that low parental acculturation was related to decreased nurturance and increased harsh discipline. On the other hand, another study indicated that whether there was a relationship between acculturation and parenting behaviors depended on country-of-origin. More research is needed to better understand if parental acculturation level affects parenting behaviors.

Parental Acculturation, Parenting, and Young Children's Social-Emotional Functioning

Research on parental acculturation level and its relationship to child outcome is minimal. As discussed above, culture plays an important role in parenting behaviors, attitudes, and beliefs. However, it is unclear how parental acculturation level and parenting behaviors in turn affect young children's social-emotional functioning. Some research has been conducted with older children and adolescents (Dumka, Roosa, & Jackson, 1997; Hill, Bush, & Roosa, 2003; Loukas, Suizzo, & Prelow, 2007). Dumka and colleagues (1997) studied depression and conduct disorder in fourth graders. They found that higher maternal acculturation was related to lower levels of inconsistent discipline, which was associated with less conduct disorders and depression. Also, higher maternal

acculturation was directly related to lower child depression scores. Boys exhibited higher rates of conduct disorder.

Similarly, Parke and colleagues (2004) found that higher acculturation was related to lower levels of hostile parenting for Mexican American mothers and fathers. Lower levels of hostile parenting were in turn related to lower levels of child adjustment problems. The direct association between parental acculturation and child social-emotional adjustment was not examined in this study. In a separate study, there was an unexpected finding given the above research. Among mothers with low linguistic acculturation, a better quality mother-son relationship contributed to more delinquent behaviors (Loukas et al., 2007). The authors suggest that perhaps as boys become more acculturated, they gain more awareness of stereotypes and discrimination against Hispanics. This awareness may increase their need for emotional support from family. They may feel angry about the discrimination and stereotypes and engage in more delinquent behaviors. Another possible explanation for this result could be that a positive mother-son relationship may not be enough to deter adolescent boys from engaging in delinquent behaviors in low-income inner cities. Additional parental factors, such as discipline, may be more important in preventing engagement in delinquent behaviors within this high risk environment.

In contrast, some studies have found that low parental acculturation is associated with better child social-emotional functioning. Hill and colleagues (2003) examined the relationships among parenting, maternal acculturation and children's mental health in low-income Mexican American families. Acculturation levels were measured according to language preference. Findings indicated that compared to the highly acculturated

mothers, there was a stronger negative relationship between maternal acceptance and conduct problems in low acculturated mothers.

Immigration status, a factor that is related to acculturation level, has also been found to affect children's social-emotional functioning. In a study involving 2-and-3-year-old Hispanic children, parental immigrant status predicted scores on both the total problems and externalizing problems scales of the Achenbach Child Behavior Checklist (Weiss, Goebel, Page, Wilson, & Warda, 1999). In other words, children of immigrant parents were more likely to have problems. Acculturation did not account for these relationships. However, the study sample was bilingual, which could indicate a more acculturated sample. Therefore, it is unknown whether this study was able to appropriately analyze the relationship between acculturation level and child social-emotional functioning. The researchers also found that parents from Central America were more likely to have children with internalizing problems than children from Mexico, highlighting the importance of conducting research with families from various countries of origin.

Some of the limitations in the research on parental acculturation and its relationship to parenting and social-emotional functioning of young children include measurement issues and lack of variance in acculturation levels. Most studies measure acculturation as a unidimensional variable (i.e., level of assimilation to American culture, and not measuring adherence to Hispanic culture) and/or by using proxy variables such as language preference and generation level. Currently, acculturation is viewed as a bidimensional construct, including degree of affiliation with both American culture and Hispanic culture. Another limitation in past research is the focus on low acculturated

parents. Therefore, knowledge of the relationships between parenting and child social-emotional functioning among bicultural and highly acculturated families are lacking.

In sum, research on the relationship between parental acculturation, parenting, and young Hispanic children's social-emotional functioning is limited. The majority of research has been conducted with older children and adolescents. Most studies found that low parental acculturation was related to negative parenting practices (i.e., increased negative discipline strategies) and increased internalizing and externalizing behaviors. However, one study found that there was a stronger negative relationship between maternal acceptance and conduct problems in low acculturated mothers than for high acculturated mothers. One study, however, that included parental acculturation and young Hispanic children's social-emotional functioning found no relationship. However, the sample in this particular study was bilingual and therefore lacked variance in acculturation level.

Overall, research has found associations among parental acculturation, parenting behaviors (i.e., discipline, expectations, and nurturance), and children's social-emotional outcomes. Although in its infancy, most studies in this area have focused on older children. Research involving young children is lacking and warranted given its prediction of later social-emotional functioning.

The Current Study

The current study seeks to extend the research on the effects of parenting behavior and parent acculturation level on Hispanic preschool children's social-emotional functioning. Research on social-emotional adjustment in young Hispanic children is sparse. However, it is well understood that early childhood development sets the stage for

later development and that parents play a major role in early childhood social-emotional adjustment. For the current study, social-emotional adjustment will be measured in terms of internalizing behaviors (i.e., depression and anxiety) and externalizing behaviors (i.e., attention problems, aggression, anger, and opposition).

This study will answer the following research questions:

1. What are the relationships between parenting behaviors (expectations, discipline, and nurturance), parental acculturation levels, and different indices of social-emotional functioning of young Hispanic children?
2. To what extent are different indices of young Hispanic children's social-emotional functioning accounted for by linear combinations of parenting behaviors (expectations, discipline, and nurturance) and parental acculturation?
3. Are there gender differences in the relationships among parental acculturation, parenting behaviors and different indices of young Hispanic preschool social-emotional functioning?

Given findings from past research studies, the authors hypothesize that positive parenting behaviors (high nurturance, low levels of harsh discipline, and age appropriate expectations) will be negatively associated with internalizing and externalizing problems. Also, negative parenting behaviors (low nurturance, high levels of harsh discipline, and inappropriate age expectations) will be positively associated with internalizing and externalizing problems.

Method

Participants

Participants in this study are a subsample of a larger study, Project Social Competence, which included 252 Hispanic American preschool children. The purpose of the larger study was to examine risk and protective factors in low SES, Hispanic preschoolers (Oades-Sese, Esquivel, Kaliski, & Maniatis, 2011). The participants were comprised of low-SES Hispanic parents and preschool children from an urban school district in the Northeast. The children were enrolled in various public schools in the area. The inclusion criteria for the study were: (a) children of Hispanic descent, (b) eligible to receive free or reduced lunch, and (c) no classification for special education. Ninety 4-year-old parent-child dyads had complete data for the variables being analyzed and were included in the current study. There were 41 girls and 49 boys in the sample. Demographic characteristics of parents are presented in Table 1.

Procedure

Teachers and parents received letters with a brief explanation of the study and a consent form. Written informed consent was obtained from parents and teachers, as well as verbal assent from child participants. All data were gathered using behavior rating scales. After receiving parental written consent, teachers were instructed to send research survey packages to parents. Parent packages contained a short demographic survey, an acculturation scale, and a parenting behavior scale. The measures were provided in both English and Spanish, allowing for parents to complete the surveys in their preferred language. No special instructions were given to parents aside from the instructions listed on the measures. Parents were not asked to indicate who completed the surveys.

Table 1

Parent Demographic Characteristics (N = 90)

Variable	Totals	
	<i>N</i>	%
Country of Birth		
Dominican	36	40
Mexican	22	24
United States	10	11
Puerto Rico	7	8
South America	8	9
Honduras	1	1
Cuba	1	1
Unknown	5	6
Level of Education		
6 th or 8 th grade	21	23
High school	25	28
1-2 years of college	12	13
3-4 years of college	3	3
College or higher	2	2
Unknown	27	30

Therefore, surveys could have been completed by mothers, fathers, both, or guardians. For parents who did not return the packages within two weeks, a second package was delivered to them by teachers. Forty-six percent of parents returned parenting behavior scales, while eighty-two percent of parents returned the acculturation scale. Forty-three percent of parents returned both parenting behavior scales and acculturation scales.

Teachers completed rating scales of children's social-emotional functioning in the classroom. They received \$1 for each rating scale completed in the form of a Barnes and Noble gift card to be used toward classroom purchases. Teachers were given a month to complete the measures. If they did not return completed surveys within a month, they were given additional survey copies each month until the end of the school year. The number of students each teacher was asked to evaluate varied depending on how many parents returned consent forms. Teachers returned forty-six percent and eighty-eight percent of the two behavior rating scales for children's social-emotional functioning.

Measures

Children's social-emotional functioning. The Attention Problems and Aggression scales of The Devereux Early Childhood Assessment Clinical Form (DECA-C; LeBuffe & Naglieri, 1999) were used to children's social-emotional functioning. The DECA-C evaluates positive (strengths) and negative (concerns) behaviors. Items are rated using a five-point Likert scale ranging from "1" for "never" to "5" for "very frequently." For the current study, scales from the Behavioral Concerns composite scale were used, specifically, the Attention Problems and Aggression scales. The Emotional Control Problems scale was not used due to the item overlap with the Aggression scale. The Withdrawal/Depression scale was not used because a different measure of depression will

be used that focuses less on withdrawal behavior. The Attention Problems scale evaluates children's difficulties in focusing on a task and ignoring environment stimuli. Children who score high on this scale tend to have difficulty with routines and following directions. They need frequent reminders. They also have a hard time sitting still, attending, and are easily distracted. Sample items include, "How often did the child have difficulty sitting quietly (for example, when listening to a story)." The Aggression scale evaluates children's use of hostile or destructive acts directed at other persons or things. Children who score high on this scale are typically hurting others physically or emotionally. A sample item is, "How often did the child grab things from other children."

The DECA-C was normed on a nationally representative sample with regards to age, gender, geographic region, race, ethnicity, and socioeconomic status. For the current sample the Cronbach's alpha for the Attention Problems scale was .90. For the current sample the Cronbach's alpha for the Aggression scale was .88. The DECA-C manual reports adequate content-related validity, criterion-related validity, and construct-related validity.

In addition, the Depressive-Joyful, Anxious-Secure, Angry-Tolerant, and Oppositional-Cooperative scales of the Social Competence and Behavior Evaluation (SCBE; LaFrenière & Dumas, 1995) were also used to measure children's social-emotional functioning. The SCBE is an 80-item teacher rating scale that measures emotional expression and adjustment in children ages 30 months to 78 months. There are eight basic scales based on diametrically opposing poles. For the current study, four of those scales were used to measure internalizing and externalizing behaviors. The other four scales were not used in order to avoid redundancy with the DECA-C scales and to

minimize the amount of statistical tests run by choosing scales that measure common internalizing and externalizing behaviors in the literature and in clinical populations.

Three of the scales measure the emotional expression of children in classrooms (Depressive-Joyful, Anxious-Secure, and Angry-Tolerant). The Depressive-Joyful scale measures children's overall mood. Children who score high are relatively joyful, usually in a good mood and participate readily in activities. Children who score low on this scale are relatively depressed, tend to be negative and difficult to motivate, and often show little interest in what goes on at school. Sample items for the scale include, "Maintains a neutral facial expression (doesn't smile or laugh)" (depressive) and, "Laughs easily" (joyful). The Anxious-Secure scale measures the extent to which children feel secure in the classroom setting. Children who score high on the scale tend to feel more secure, curious, confident and adjust well to novel situations. Children who score low on the scale are generally anxious. They are timid, worry excessively, inhibited, appear fearful and engage in behaviors that are considered immature, such as wetting themselves. Sample items for this scale include, "Timid, afraid (e.g., avoids new situations)" (anxious), "Easily adjusts to new situations" (secure). The Angry-Tolerant scale measures children's ability to deal effectively with challenges and frustrations that are typical in social situations. Children who score high on this scale have a high level of frustration tolerance, adapt to challenges and difficulties in a positive manner, and are capable of controlling negative emotions. Children who score low on this scale are generally irritable and short-tempered. They respond to difficulties by expressing negative emotions (i.e., screaming and whining) or by getting upset and angry at people. They

often have difficulty accepting limits or taking others' perspectives. Sample items for this scale include, "Easily frustrated" (angry), "Sensitive to another's problem" (tolerant).

The Oppositional-Cooperative scale measures the extent to which children are cooperative in interactions with adults. Children who score high on this scale have positive, conflict-free relationships with adults in school. They show respect for authority, appropriate compliance, helpfulness, and can be reasoned with. Children who score low on this scale tend to be oppositional and defiant toward adult authority. Sample items for this scale include, "Ignores directions and continues what he/she is doing" (oppositional), and "Helps with everyday tasks (e.g., distributes snacks)" (cooperative).

The frequency of various behaviors are rated by teachers using a scale ranging from "1," indicating that the child never exhibits the specific behavior, to "6," indicating that the child always exhibits the particular behavior. Scores are summed and a total of less than or equal to 37 indicates behavioral or emotional concerns. The standardization sample of the SCBE included 1,263 children between the ages of 30 and 78 months. There was an overrepresentation of African Americans; 20.6% compared to the national percentage of 15.0%. There was an underrepresentation of Hispanic children; 7.3% compared to 11.0% in the 1991 U.S. Census figures. For the current sample, the Chronbach's alphas for the Depressive-Joyful, Anxious-Secure, Angry-Tolerant and Oppositional-Cooperative scales were, .80, .84, .89, and .88, respectively. Content, criterion-related, and construct validity measures are reported to be adequate in the manual.

Parental acculturation. The Bidimensional Acculturation Scale for Hispanics (BAS; Marin & Gamba, 1996) was used to measure parental acculturation. This is a 24-item scale that measures behavior related to two cultural domains, Hispanic and non-Hispanic. There are 12 items for the Hispanic cultural domain and 12 items for the non-Hispanic cultural domain. Degree of association with each cultural domain is assessed using three language-related subscales: frequency of use of English and Spanish in different contexts (“How often do you speak English/Spanish with your friends?”), perceived proficiency in English and Spanish, (“How well do you write in English/Spanish”) and language-based media preferences and use patterns (“How often do you watch television programs in English/Spanish”). A four point Likert scale is used ranging from “Almost Never” to “Almost Always.” Coefficient alphas were .90 and .96 for the Hispanic domain and the non-Hispanic domain, respectively. For the current sample the coefficient alphas were .97 for the Non-Hispanic domain and .90 for the Hispanic Domain.

The subscales and overall scores were validated by analyzing subjects’ scores on seven acculturation criteria: generational status, length of residence in the United States, proportion of the respondent’s life lived in the U.S., age of arrival in the U.S., years of education, ethnic self-identification, and correlation with the acculturation score of the Short Acculturation Scale for Hispanics (SASH; Martin, Sabogal, Van Oss Marin, Otero-Sabogal, & Perez-Stable, 1987).

The BAS provides two scores, one for the Hispanic cultural domain and the second for the non-Hispanic cultural domain. Therefore, the BAS allows for the assessment of degree of adherence to each culture independently. The authors suggest

that a cut-off score of 2.5 can be used to indicate low versus high adherence to either cultural domain. For the current study, levels of parent acculturation will be low acculturation (scored “1”), bicultural (scored “2”), and high acculturation (scored “3”). The scores indicate the level of adherence to American culture, while taking into account both Hispanic and American cultures. Parents will be scored as “low acculturation” if they score high on the Hispanic cultural domain of the BAS (above 2.5) and low on the American cultural domain (below 2.5). Parents will be scored as “high acculturation” if they score low on the Hispanic cultural domain of the BAS (below 2.5) and high on the American cultural domain (above a 2.5). Parents will be scored as “bicultural” if they score high on both the Hispanic and American cultural domain of the BAS (above 2.5 on both). Scoring each participant in this way provides a single bidimensional acculturation score, which describes adherence to both cultures. Acculturation is conceptualized as a continuum from low acculturation to a culture to high acculturation to American culture, with bicultural being between low and high acculturation.

Parenting behavior. The Parent Behavior Checklist-Short Form (PBC; Fox, 1994) was used to measure parenting behavior. The PBC is a 32 item measure completed by parents of children up to 4 years and 11 months of age. The measure consists of three subscales that assess both strengths and weaknesses in parenting behavior. The three subscales are Expectations, Discipline, and Nurturance. Items on the Expectations subscale assess a parent’s developmental expectations of their child. Items include, “My child should be old enough to share toys.” Items on the Discipline subscale measure parents’ responses to problem child behaviors. Items include, “I yell at my child for whining.” Finally, items on the Nurturance subscale assess parent behavior that promotes

children's psychological growth. Items include, "I read to my child at bedtime." The parents are asked to rate the frequency with which they engage in particular behavior according to a four point scale ranging from "1" (never) to "4" (always).

Fox (1994) reports alpha coefficients of .93 for Expectation scale, .85 for Discipline scale, and .73 for Nurturance scale. The PBC was normed using a representative sample, based on child's sex and ethnic group, from a large urban community with a wide range of socioeconomic levels. The PBC raw scores are transformed into T scores that are normed according to child's age at 6 month intervals. Higher Expectation scores are associated with higher developmental expectations of parents for their children. Higher Discipline scores are associated with higher levels of parental use of verbal and physical punishment. Finally, higher Nurturance scores are associated with higher parental use of positive nurturing activities. The alpha coefficients for the current sample were, .60 for the Expectations scale, .76 for the Discipline scale, and .64 for the Nurturance scale.

Data Analysis

Preliminary descriptive statistical analyses and correlation analyses will be conducted. Regression analyses will be conducted to determine which linear combinations of parenting and acculturation variables best account for different indices of child social-emotional functioning. The regression analyses will also show what percentage of the variance in different indices of child social-emotional adjustment is accounted for by particular parent variables. Child gender will be dummy coded in the analyses, with 1 representing males, and 2 representing females. For the hierarchical regression analysis, child gender will be coded as 0 for males, and 1 for females in order

to minimize multicollinearity. Parental acculturation level will be scored as follows: 1 = low acculturation level, 2 = bicultural, and 3 = high acculturation level. As mentioned above, parental acculturation level will be analyzed as a continuous variable based on our conceptualization of acculturation as a continuum of low to high cultural adherence (see discussion above on the Bidimensional Acculturation Scale for Hispanics).

To answer research question 1, a correlation analysis will be conducted to determine the dyadic relationships among parenting behaviors (i.e., expectations, discipline, and nurturance), parental acculturation, and different indices of preschool social-emotional functioning.

To answer research question 2, a hierarchical regression analysis will be conducted. The different indices of social-emotional functioning variables will be analyzed to determine how much of their variance can be accounted for by all of the independent variables together (i.e., parent acculturation level, parenting behaviors, and gender). Child gender, parenting behaviors (i.e., expectations, discipline, and nurturance), and parent acculturation level will be entered in the first step of the regression analysis. If two or more independent variables uniquely explain variance in child social-emotional adjustment, they will be entered into the next step of the hierarchical regression analysis as interaction terms to examine moderation relationships.

Results

The current study's sample was taken from a larger study sample as discussed above. Participants were included in the current study if they had complete data for the variables to be analyzed ($N = 90$). In order to determine whether the current study sample ($N = 90$) differed from the larger study sample that had incomplete data on the variables

of interest ($N = 162$), t -tests were conducted. The analysis found no significant differences between the two groups on gender, parenting behavior, parental acculturation, and child internalizing and externalizing behaviors. Therefore, the sample of the current study was not significantly different from the larger study sample on the variables of interest. Table 2 shows both samples' descriptive statistics. The parental acculturation mean suggests that most of the parents were either low acculturated or bicultural. The means of the child behavior variables are all in the normal range, although the standard deviations indicate that some children were rated in the "concerning" range.

Correlations between the study variables of parenting behavior (expectations, discipline and nurturance), parental acculturation, child gender, and child internalizing (depression and anxiety) and externalizing (attention problems, aggression, anger, and oppositional) behaviors were conducted. Child gender was dummy coded for the analysis. Parental acculturation level was scored as 1 for low acculturation, 2 for bicultural and 3 for high acculturation. The results are presented in Table 3. As shown in Table 3, most of the significant correlations were among child variables. Parental acculturation level was related to three of the four externalizing variables. Parental acculturation was positively related to childhood attention problems ($r = .28, p < .01$) and aggression ($r = .29, p < .01$). Therefore, as parental acculturation level increased, child attention problems and aggression also increased. Parental acculturation level was negatively related to the oppositional-cooperative scale ($r = -.23, p < .05$). Therefore, as parental acculturation level increased, child oppositional behavior increased. The data suggest that higher parental acculturation is related to increased problem behaviors in children. Child gender was also significantly associated with outcome variables.

Table 2

Descriptive Statistics of Parent and Child Variables for Current Study Sample and Incomplete Data Sample

Sample							
Variable	Current study sample (<i>N</i> = 90)			Incomplete data sample (<i>N</i> =162) ^a			
	<i>M</i>	<i>SD</i>	Range	<i>N</i>	<i>M</i>	<i>SD</i>	Range
<i>Parent Variables</i>							
Acculturation ^b	1.50	.62	1.00 - 3.00	117	1.42	.61	1.00 – 3.00
Expectations	43.29	9.79	23.00 – 68.00	24	44.50	10.98	23.00 – 67.00
Discipline	42.30	8.04	32.00 – 72.00	25	42.72	8.12	28.00 – 58.00
Nurturance	46.17	9.19	24.00 – 70.00	24	42.71	9.99	23.00 – 61.00
<i>Child Variables</i>							
Depressive-Joyful	50.37	9.81	30.00 – 70.00	117	49.78	9.79	30.00 – 70.00
Anxious-Secure	49.96	8.96	30.00 – 70.00	117	49.95	8.99	30.00 – 70.00
Angry-Tolerant	49.42	8.63	30.00 – 68.00	117	48.89	9.59	30.00 – 70.00
Oppositional-Cooperative	47.71	8.09	30.00 – 68.00	117	48.15	8.54	30.00 – 70.00
Attention Problems	47.09	11.43	28.00 – 72.00	133	48.48	11.58	28.00 – 72.00
Aggression	43.21	10.43	30.00 – 72.00	133	45.46	10.54	30.00 – 70.00

Table 2 (Continued)

Descriptive Statistics of Parent and Child Variables for Current Study Sample and Incomplete Data Sample

Variable	Current study sample (<i>N</i> = 90)		Incomplete data sample (<i>N</i> =162) ^a
	<i>N</i>	%	<i>N</i>
Male	49	54	63
Female	41	46	54

Note. ^a Includes cases that had any of the above variables; total for each variable is different.
^b Raw scores. The other scores are standardized T-Scores.

Specifically, girls had increased levels of anger and oppositional behaviors as compared to boys ($r = -.22, p < .05$, $r = -.28, p < .01$, respectively). Surprisingly, there were no significant correlations between parenting behaviors and child internalizing and externalizing problems. There were also no significant correlations between parenting behaviors and parental acculturation level.

Predicting Adjustment: Multiple Regression

Multiple regression and hierarchical multiple regression were used to assess the ability of child gender, parenting behaviors, and parental acculturation to predict child internalizing and externalizing behaviors. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity. As with the correlational analysis, child gender was coded (1 = male, 2 = female) and parental acculturation levels were scored (1 = low acculturation, 2 = bicultural, and 3 = high acculturation) for the analysis. In order to minimize the number of models analyzed, standard multiple regression was conducted first. Hierarchical regression was conducted to test for interaction effects only if two or more predictor

Intercorrelations Between Parenting Behaviors, Parental Acculturation, and Child Internalizing and Externalizing Behaviors

Variables	2	3	4	5	6	7	8	9	10	11
<i>Parent Variables</i>										
1. Expectations	.20	.25*	.11	-.04	-.03	.02	.14	.12	-.15	-.04
2. Discipline		.02	-.18	-.12	-.04	.01	.04	.02	-.00	.08
3. Nurturance			.16	.06	.54	.76	.58	.30	.51	.37
4. Parental Acculturation ^a				-.02	-.16	-.15	.28**	.29**	-.20 [†]	-.23*
<i>Child Variables</i>										
5. Gender ^b					-.11	-.15	-.15	-.03	-.22*	-.28**
6. Depressive-Joyful						.77**	-.23*	-.33**	.58**	.43**
7. Anxious-Secure							-.27**	-.24*	.44**	.30**
8. Attention Problems								-.56**	-.53**	-.57**
9. Aggression									-.66**	-.73**
10. Angry-Tolerant										.75**
11. Oppositional-Cooperative										

Note. [†] $p < .10$. * $p < .05$. ** $p < .01$.

^a1 = low acculturation, 2 = bicultural, and 3 = high acculturation

^b1 = male, 2 = female

variables uniquely contributed to the variance in child internalizing and externalizing problems. Predictor variables were mean-centered for hierarchical regression analyses to avoid problem of multicollinearity. The results for the regression models are presented in Tables 4, 5, and 6. Adjusted R^2 values were used as a conservative estimate of variance accounted for by the models due to large differences between R^2 and Adjusted R^2 .

The first two regression analyses were conducted for the internalizing problems scales, depressive-joyful and anxious-secure. The models did not yield significant results. Predictor variables of gender, parental acculturation, and parenting behaviors (expectations, discipline, and nurturance) did not significantly predict child internalizing problems of depression and anxiety. See Table 4.

However, the attention problems and aggression models were both significant (see Table 5). The regression model for attention problems explained 8% of the variance in child attention problems, $F(5, 84) = 2.45, p < .04$. Parental acculturation was the only variable that made a significant unique contribution to the variance in child attention problems, ($\beta = .29, p < .008$). Similarly, the model also explained 8% of the variance in child aggression scores, $F(5, 84) = 2.26, p < .04$. As with the attention problems regression, parental acculturation was the only variable that made a unique contribution to the variance in aggression ($\beta = .31, p < .004$). Parental nurturance approached significance in direct contribution to aggression ($\beta = -.19, p < .078$).

For both angry-tolerant and oppositional-cooperative scales, a second model that included a gender and acculturation interaction term was tested due to these two variables making unique contributions in the initial model. The results for both models are presented in Table 6. In the first model for the angry-tolerant regression, 8% of the

Table 4

Regression Tables for Child Depression and Anxiety as Predicted by Gender, Parental Acculturation, and Parenting Behaviors

a. Depressive-Joyful Scale

Predictor	B	SE	β	sr^2	p	95% CI
Gender (1 = Male, 2 = Female)	-2.50	2.10	-.13	-.13	.24	[-6.67, 1.69]
Parental Acculturation ^a	-3.01	1.73	-.19	-.18	.09	[-6.46, .44]
Expectations	-.03	.11	-.03	-.02	.83	[-.25, .20]
Discipline	-.11	.14	-.09	-.08	.43	[-.38, .16]
Nurturance	.12	.12	.11	.11	.33	[-.12, .35]

Note. Adj. $R^2 = .000$, *ns*.

^a1 = low acculturation, 2 = bicultural, and 3 = high acculturation.

b. Anxious-Secure Scale

Predictor	B	SE	β	sr^2	p	95% CI
Gender (1 = Male, 2 = Female)	-2.87	1.92	-.16	-.16	.14	[-6.69, .95]
Parental Acculturation ^a	-2.51	1.59	-.18	-.17	.12	[-5.67, .64]
Expectations	.02	.10	.02	.02	.85	[-.19, .23]
Discipline	-.05	.13	-.05	-.05	.67	[-.30, .20]
Nurturance	.06	.11	.07	.06	.56	[-.15, .28]

Note. Adj. $R^2 = -.004$, *ns*.

^a1 = low acculturation, 2 = bicultural, and 3 = high acculturation.

Table 5

Regression Tables for Attention and Aggression Problems as Predicted by Gender, Parental Acculturation and Parenting Behaviors

a. Attention Problems

Predictor	B	SE	β	sr^2	<i>p</i>	95% CI
Gender (1 = Male, 2 = Female)	-2.87	2.35	-.13	-.12	.23	[-7.55, 1.81]
Parental Acculturation ^a	5.31	1.94	.29	.28	.01	[1.45, 9.17]
Expectations	.15	.13	.13	.12	.24	[-.10, .40]
Discipline	.07	.15	.05	.05	.65	[-.23, .37]
Nurturance	-.16	.13	-.13	-.12	.24	[-.42, .11]

Note. Adj. $R^2 = .08$, $p < .04$.

^a1 = low acculturation, 2 = bicultural, and 3 = high acculturation.

p values < .05 are boldfaced.

b. Aggression Scale

Predictor	B	SE	β	sr^2	<i>p</i>	95% CI
Gender (1 = Male, 2 = Female)	.05	2.15	.00	.00	.98	[-4.23, 4.32]
Parental Acculturation ^a	5.23	1.77	.31	.30	.004	[1.71, 8.76]
Expectations	.13	.12	.13	.12	.25	[-.10, .36]
Discipline	.07	.14	.05	.05	.62	[-.21, .35]
Nurturance	-.22	.12	-.19	-.18	.08	[-.46, .02]

Note. Adj. $R^2 = .08$, $p < .04$.

^a1 = low acculturation, 2 = bicultural, and 3 = high acculturation.

p values < .05 are boldfaced.

Table 6

Hierarchical Regression Tables for Angry-Tolerant and Oppositional-Cooperative Scales as Predicted by Gender, Parental Acculturation, and Parenting Behavior

a. Angry-Tolerant Scale

Predictor	B	SE	β	sr^2	<i>p</i>	95% CI
Step 1						
Gender (0 = M, 1 = F)	-4.31	1.77	-.25	-.25	.02	[-7.83, -.79]
Parental Acculturation ^a	-2.94	1.46	-.21	-.20	.05	[-5.84, -.03]
Expectations	-.15	.10	-.17	-.16	.13	[-.34, .04]
Discipline	-.05	.12	-.04	-.04	.70	[-.27, .18]
Nurturance	.15	.10	.16	.15	.14	[-.05, .35]
Step 2						
Gender	-4.15	1.70	-.24	-.24	.02	[-7.53, -.77]
Parental Acculturation ^a	.97	1.97	.07	.05	.62	[-2.94, 4.88]
Expectations	-.09	.09	-.11	-.10	.32	[-.28, .09]
Discipline	-.02	.11	-.02	-.02	.88	[-.24, .20]
Nurturance	.08	.10	.09	.08	.39	[-.11, .28]
Gender X Acculturation	-8.04	2.84	-.40	-.28	.01	[-13.68, -2.40]

Note. Step 1: Adj. $R^2 = .08$, $p < .032$. Step 2: Adj. $R^2 = .15$, $p < .003$. $\Delta R^2 = .08$, $p < .006$. M = male, F = female.

^a1 = low acculturation, 2 = bicultural, and 3 = high acculturation.

p values < .05 are boldfaced.

Table 6 (Continued)

Hierarchical Regression Tables for Angry-Tolerant and Oppositional-Cooperative Scales as Predicted by Gender, Parental Acculturation, and Parenting Behavior

b. Hierarchical Regression for Oppositional-Cooperative Scale

Predictor	B	SE	β	sr^2	p	95% CI
Step 1						
Gender (0 = M, 1 = F)	-4.72	1.63	-.29	-.29	.01	[-7.97, -1.47]
Parental Acculturation ^a	-3.32	1.63	-.29	-.25	.02	[-6.01, -.64]
Expectations	-.06	.09	-.07	-.07	.52	[-.23, .12]
Discipline	.01	.11	.01	.01	.95	[-.20, .22]
Nurturance	.15	.09	.17	.16	.11	[-.03, .33]
Step 2						
Gender	-4.53	1.54	-.28	-.28	.004	[-7.60, -1.48]
Parental Acculturation	1.03	1.78	.08	.05	.57	[-2.51, 4.56]
Expectations	.00	.08	.00	.00	.98	[-.17, .17]
Discipline	.04	.10	.04	.04	.71	[-.16, .24]
Nurturance	.08	.09	.09	.08	.39	[-.10, .25]
Gender X Acculturation	-8.95	2.56	-.47	-.33	.001	[-14.05, -3.86]

Note. Step 1: Adj. $R^2 = .11$, $p < .011$. Step 2: Adj. $R^2 = .22$, $p < .001$. $\Delta R^2 = .11$, $p < .001$. M = male, F = female.

^a1 = low acculturation, 2 = bicultural, and 3 = high acculturation.

p values $< .05$ are boldfaced.

variance in angry-tolerant scores was explained by gender, parental acculturation, and parenting behaviors (expectations, discipline, and nurturance), $F(5, 84) = 2.58, p < .032$. Both child gender ($\beta = -.25, p < .017$) and parental acculturation ($\beta = -.21, p < .05$) uniquely contributed to the variance in child angry-tolerant scores.

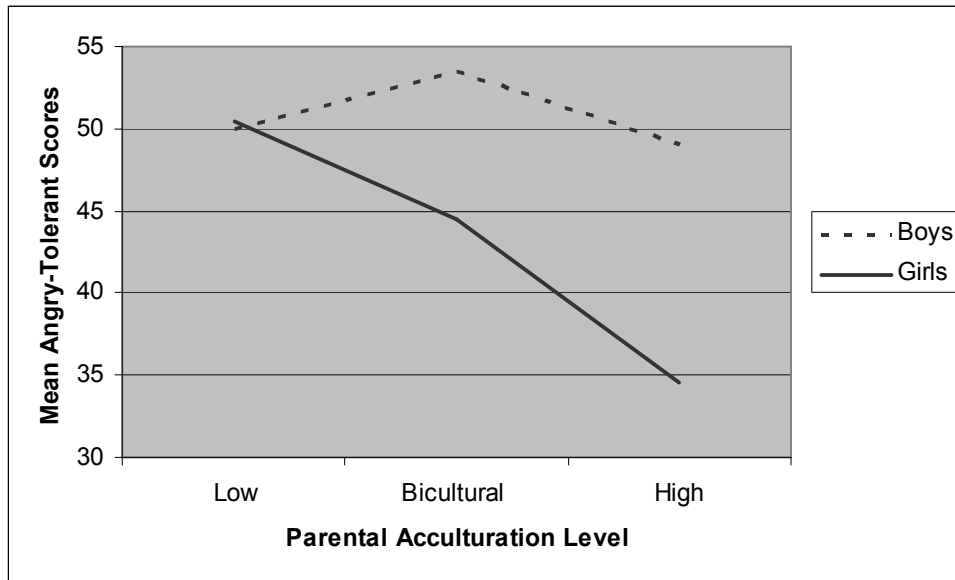
In the second step of the regressions, an interaction term, gender X parental acculturation, was added to the other predictor variables to determine if the interaction term increased the strength of the models. The second model was significant and accounted for 15% of the variance in angry-tolerant scores, $F(6, 83) = 3.67, p < .003$. The second model explained an additional 7.7% of the variance in angry-tolerant scores after taking into account gender, parental acculturation, and parenting behaviors (expectations, discipline, and nurturance), $\Delta R^2 = .077, \Delta F(1, 83) = 8.04, p < .006$. In the final model, only gender and the interaction term uniquely contributed to angry-tolerant scores in the context of the other independent variables, $\beta = -.24, p < .017$ and $\beta = -.398, p < .006$, respectively.

In order to interpret the significant interaction between gender and parental acculturation in explaining angry-tolerant scores, a simple line graph of the mean t-scores for angry-tolerant scale was plotted for low acculturated, bicultural, and high acculturated parents of boys and girls (see Figure 1a). From the graph, it can be seen that for children of low acculturated parents, angry-tolerant scores are similar for boys and girls, within the average range. However, as parents become more acculturated, girls' t-scores on the angry-tolerant scales decrease (indicating an increase in anger scores) and fall within the "concerning range," while boys' t-scores remain relatively stable across acculturation levels (indicating more tolerance or less anger than girls).

Figure 1.

Graphs of Parental Acculturation and Gender Interaction for Angry-Tolerant and Oppositional-Cooperative Scales

a. Parental Acculturation and Angry-Tolerant scores by Gender



b. Parental Acculturation and Oppositional-Cooperative Scores by Gender

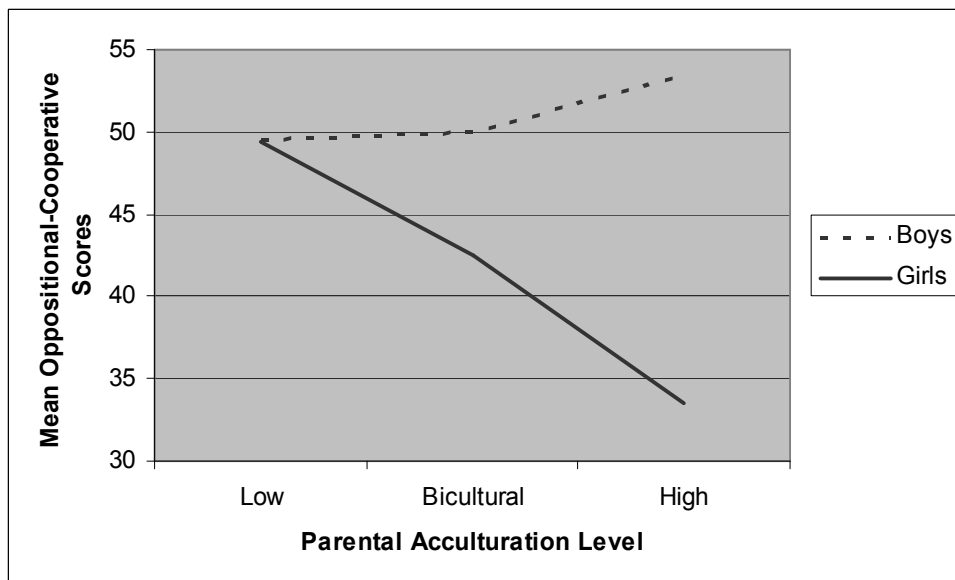


Figure 1. Depiction of the significant interaction of gender and parental acculturation for Angry-Tolerant and Oppositional-Cooperative scales. The mean scores of both Angry-Tolerant and Oppositional-Cooperative scales are plotted for each parental acculturation level (low, bicultural, and high), with separate lines for boys and girls.

Similar results were found for the oppositional-cooperative regression analysis. In the initial model in which oppositional-cooperative scores were regressed onto gender, parental acculturation, and parenting behavior, the predictor variables explained 11% of the variance in oppositional-cooperative scores, $F(5, 84) = 3.20, p < .011$. In this model both child gender and parental acculturation uniquely explained variance in oppositional-cooperative scores ($\beta = -.29, p < .005$ and $\beta = -.26, p < .016$, respectively). In the second model, a gender X parental acculturation interaction term was added to the initial model. The second model explained 22% of the variance in oppositional-cooperative scores, $F(6, 83) = 5.06, p < .001$. The second model explained an additional 11% of the variance in child oppositional-cooperative scores in the context of gender, parental acculturation, and parenting behaviors, $\Delta R^2 = .11, \Delta F(1, 83) = 12.22, p < .001$.

In the final model, both the gender and the interaction terms uniquely contributed to variance in oppositional-cooperative scores, $\beta = -.28, p < .004$ and $\beta = -.47, p < .001$, respectively. Figure 1b shows the interaction graph for child oppositional-cooperative scores. For children of low acculturated parents, boys and girls score similarly on the oppositional-cooperative scale, within the average range. However, as parents become more acculturated, girls increase in their oppositional behavior scores and fall within the “concerning range,” while boys’ scores remain relatively stable and in the normal range.

Discussion

The current study examined the relationships between parenting behaviors, parental acculturation, and child internalizing and externalizing behaviors; the extent to which parenting behaviors and parental acculturation accounted for child internalizing and externalizing behaviors; and whether there were gender differences in the

relationships among parental acculturation, parenting behaviors and child internalizing and externalizing problems. The study sample included low-income, 4-year-old parent-child dyads of Hispanic origin. Results indicated that higher parental acculturation predicts increases in anger and oppositional behaviors for girls. The study also found that taken together, child gender, parental acculturation, and parenting behaviors help predict attention problems and aggressive behaviors. Parental acculturation was the strongest predictor of attention problems and aggressive behaviors, with higher parental acculturation predicting increased problems. No evidence was found of parenting behaviors (expectations, nurturance, and discipline) being related to parental acculturation level and child social-emotional functioning. Finally, there was no evidence to suggest that child gender, parental acculturation, and parenting behaviors were related to or predicted internalizing problems

The finding that higher parental acculturation was associated with and predicted increased externalizing problems, especially for girls, contradicts most of the research on the relationship between acculturation and child social-emotional functioning as well as the relationship between gender and social-emotional functioning (Anthony et al., 2005; Dumka et al., 1997; Loukas et al., 2007, Park et al., 2004). Although limited, the majority of the research conducted with older children and adolescents suggest that low parental acculturation levels are associated with increased internalizing and externalizing problems in children either directly or indirectly through parenting behaviors (Dumka et al., 1997; Loukas et al., 2007; Parke et al., 2004). However, there are some studies that found that low parental acculturation was associated with either more positive child outcomes or was not associated with child social-emotional functioning (Hill et al., 2003;

Weiss et al., 1999). The results of the current study demonstrate the importance of conducting research involving young children as the relationship between parental acculturation and children's social-emotional functioning may differ from older children and adolescents. This study suggests that for young Hispanic girls, parental adherence to Hispanic culture is a protective factor, or in other words, that parental adherence to non-Hispanic culture is a risk factor for externalizing problems.

Possible explanations for higher parental acculturation being associated with increased externalizing behaviors, especially for Hispanic girls, are discussed below. One possibility is that positive or protective aspects of Hispanic culture are lessened as parents become more acculturated to American culture. One such aspect of Hispanic culture is *familism*, which refers to the sense of close family connection, reliance on family for emotional support, and emphasis on interdependence and cohesion within the family. The culture of the U.S. tends to be more individualistic, while the culture of various Latin American countries tends to be more collectivist. Although all cultures value family, individualistic cultures are oriented toward meeting individual needs and desires, while collectivist cultures are oriented toward maintaining the well-being of the group (i.e., family). The value of *familism* fits well within a collectivist culture, but may struggle to maintain its integrity within an individualistic culture like that of the U.S. Therefore, it may be that as parents become more acculturated to U.S. culture, the protective factor of *familism* decreases. The process of immigration may also unexpectedly disrupt the practice of behaviors associated with *familism*, such as frequent contact with family members, when family members immigrate separately. Therefore, it is possible that Hispanics continue to hold onto the value of *familism*, but are not able to experience it

(fully or partially) because they are separated from family members, which may be disappointing, lonely, and stressful.

Familism has been found to have positive effects on children's well-being and protect against negative outcomes. For instance, Gamble and Modry-Mandell (2008) found that close and warm family relationships coupled with the value of *familism* increased teacher ratings of emotional adjustment and positive peer relations in Hispanic preschoolers. Similarly, research has found that positive family relationships serve as a stronger protective factor against depression for Hispanic and Asian children (cultures in which family is strongly emphasized and prioritized) than for White or Black children (Moon & Rao, 2010). Differences among family members' adherence to *familism* has been found to be associated with increased suicide attempts for Hispanic adolescent females (Baumann, Kuhlberg, & Zayas, 2010). Therefore, it may be that as families or parents become more acculturated, the protective effect of *familism* decreases, which could help explain the increased susceptibility to externalizing problems for children whose parents are more acculturated. As mentioned in the introduction of this article, Hispanic families experience multiple stressors in the U.S.; a strong sense of family unity and support may serve as a protective factor against behavioral problems for children. It may be that girls are more negatively affected by the loss of this protective factor because they are socialized to be more relational than boys are and, therefore, may suffer more from the lack of strong familial relationships (Aries & Olver, 1985; Fagot, 1978; Fagot, Hagan, Leinbach, & Kronsberg, 1985; Pipp, 1990; Ross, Tesla, Kenyon, & Lollis, 1990).

Another possible explanation for high parental acculturation being associated with increased problem behaviors in girls is that families that are more acculturated may have

increased rates of maternal employment as compared to families that are less acculturated, which may in turn have a negative impact on young girls. Research on acculturative stress has suggested that for Hispanic females in the U.S., changing gender roles cause conflict both within couples and for Latinas themselves (Caplan, 2007; Flores, 2004; Padilla & Borrero, 2006; Smart & Smart, 1995). In traditional Hispanic culture, women's primary roles are mother and wife. However, life in the U.S. allows women more freedom in their role selection and often requires increased levels of maternal employment within families, both of which conflict with the traditional female roles of mother and wife. The value of *familism* may make maternal employment more stressful for Hispanic families because it forces mothers to be away from their families and children. Berger and colleagues (2008) found that among White, Black, and Hispanic families, only Hispanic families had significant associations between first-year maternal employment and elevated childhood behavior problems. Maternal employment may have more of a negative impact on Hispanic girls than boys because girls typically identify more strongly with their mothers at the preschool age than boys do (Chodorow, 1978; Miller, 1991). Also, as mentioned above, girls may be more affected by relational problems within the family than boys due to girls being socialized in more relational terms.

Finally, if it is presumed that child acculturation is similar to parental acculturation at the preschool age, then it may be that Hispanic girls that are more acculturated feel excluded or less accepted by their peers who are less acculturated. In the current study's sample, most parents were either less acculturated or bicultural and the community was predominantly Hispanic. One factor that has been found to be associated

with acculturation level is language (English, Spanish, or both). More acculturated students may speak less Spanish than their classmates and therefore feel isolated or lonely. Research has found that language ability for young Hispanic children is associated with peer acceptance and feelings of isolation (Daswson & Williams, 2010). Difference in acculturation level and feelings of isolation and rejection from their peers may contribute to more externalizing behaviors for highly acculturated girls. Again, girls may be more affected by language ability as girls tend to play and interact more verbally at this young age than boys (DiPietro, 1981; Mccoby, 1988; Prior, Smart, Sanson, & Oberklaid, 1993). Also, girls may be more negatively affected by peer rejection or feelings of isolation due to their relational gender socialization.

A possible explanation for the relationship between parental acculturation and childhood externalizing problems that was tested in the current study was differences in parenting behaviors. However, there was no evidence that parental acculturation level was related to parenting behaviors of expectations, nurturance and discipline. Neither was there evidence that parenting behaviors were associated with or predicted internalizing and externalizing problems. Although research findings on the relationship between parental acculturation and parenting and their combined effect on child social-emotional functioning are mixed, it was surprising that there was no evidence to suggest any relationships among these variables in our sample.

Previous research on the relationship between parental acculturation and parenting behaviors has been mixed. One study reported that Hispanic mothers with low levels of acculturation had decreased nurturance and increased discipline scores in relation to White mothers, yet still within the normal range (Cardona et al., 2000).

Another study found that for Dominican mothers of young children, there were no differences in parenting behaviors according to acculturation level, while more highly acculturated Puerto Rican mothers reported more warmth and involvement with their young children (Calzada, 2002). The current study found no evidence of differences in parental expectations, nurturance and discipline across acculturation levels for Hispanic parents of young children. It could be that other, more culturally sensitive or dependant parenting behaviors may vary according to parental acculturation level. It should be noted, however, that the acculturation measure used in the study was scored into three levels and measured mostly language preference and proficiency and not cultural beliefs, traditions and other cultural factors, which may have contributed to the lack of evidence for relationships between acculturation and parenting. Therefore, further research is needed to determine whether parental acculturation level is related to specific parenting behaviors.

The hypothesized relationships between parenting behaviors and child social-emotional functioning were not found in the current sample. It was hypothesized that positive parenting behaviors would be associated with less internalizing and externalizing behaviors; whereas negative parenting behaviors would be associated with increased internalizing and externalizing behaviors. The hypotheses were based on previous research findings that nurturing and positive parenting behaviors are associated with decreased internalizing and externalizing problems (Gamble et al., 2008; McLoyd & Smith, 2002; Perez & Fox, 2008), and that harsh discipline and inappropriate expectations are associated with increased child problems (Anthony et al., 2005; Bennett

et al., 2002; Chang et al., 2003; Olsen et al., 2002). However, the results did not find evidence to support these hypotheses.

A possible explanation for these results is the relatively low alpha coefficients for the scales of the Parent Behavior Checklist (PBC) (i.e., nurturance and expectations) in the study sample. However, this explanation does not account for the lack of findings regarding discipline, which had an adequate alpha coefficient. Another possible explanation is that the PBC does not capture important parenting behaviors for Hispanic families. The items on the PBC may be more pertinent to Caucasian Americans (i.e., focus on play, catering to the child, intellectual abilities, etc.) than Hispanic Americans. Previous research has indicated that Caucasian parents emphasize creativity and intellectual abilities, while Hispanic parents emphasize respectfulness, obedience, and acceptance by the larger community (Harwood, Schoelmerich, Ventura-Cook, Schulze, & Wilson, 1996). It may be that factors other than nurturance, harsh discipline, and expectations are more important to Hispanic children's social-emotional functioning. For instance, Lindahl and Malik (1999) found that lax and inconsistent parenting was more strongly associated with behavior problems for Hispanic children than White or biracial children and that hierarchical parenting (i.e., parents setting limits and establishing clear parent-child roles) was more prominent in Hispanic parents.

Another possible explanation for the unexpected lack of findings is that previous studies that have found positive and nurturing parenting behaviors to be associated with positive child social-emotional functioning may have been measuring something different from those measured by the Nurturance scale of the PBC. Previous studies emphasized positive parenting in the form of emotional support, warmth, and closeness; whereas the

items on the Nurturance scale of the PBC cover different positive parenting behaviors, such as fostering cognitive development, arranging positive activities or routines, and understanding child behavior. It may be that emotional support, warmth and closeness have more of an impact on child internalizing and externalizing problems than does Nurturance as measured in the PBC.

However, there is evidence to suggest that the parenting behaviors measured in the PBC are associated with child externalizing problems in Hispanic families. Perez and Fox (2008) examined parenting behavior and child social-emotional functioning in Hispanic families using the PBC and found that high nurturance, low harsh discipline, and appropriate expectations were associated with less externalizing problems.

Additional research needs to be conducted to determine whether the findings in this study and the Perez and Fox study (2008) can be replicated. In addition to replication research, future research should also compare the PBC to other parenting measures in Hispanic families. It is important to study parenting factors that may be more relevant to Hispanic children's social-emotional functioning, such as setting clear parent-child roles and rules. While research has found differences in parenting values for Hispanic parents, few studies examine whether these values are related to parent behavior and young children's social-emotional functioning. Instead, the limited research that has been conducted with Hispanic families with young children usually studies parenting behaviors that have been found to be important for non-Hispanic families. The current study did not find evidence that parenting behaviors of expectations, discipline and nurturance are related to young Hispanic children's social-emotional functioning. This may be a function of the instruments used in the current study.

Finally, the current study did not find evidence that child gender, parental acculturation, and parenting behaviors were related to or predicted internalizing problems. This may be due to the difficulty adults, including teachers, have in assessing internalizing problems. Teachers tend to notice child problems that involve disruptive behaviors (Anthony, Anthony, Morrel, & Acosta, 2005). Another potential explanation for the lack of findings is that younger children often express emotional disturbance with externalizing rather than internalizing problems, which tend to increase with age (Anthony, Anthony, Morrel, & Acosta, 2005; Janson & Mathiesen, 2008; Thomas & Guskin, 2001). The current study findings support the developmental presentation of social-emotional problems, suggesting that for preschool-aged Latinas, increased anger and oppositional problems (scores within the clinical range) are of more concern than internalizing problems.

There are limitations for the current study that should be discussed. First of all, low alpha levels for the Nurturance and Expectations scales of the PBC may have contributed to the lack of significant findings. Secondly, not knowing who filled out the acculturation measure, having only one family member complete the acculturation measure, and few parents reporting high levels of acculturation limited the study of acculturation. Different family members could have various levels of acculturation, which likely contributes to the acculturation level of the household in which the child lives. Finally, using self-report, behavioral rating scales to study parenting behaviors is less reliable and valid than using observational data.

Just as there were limitations to the study, there were areas of strength as well. One strength of the study is that an acculturation scale with strong psychometric

properties was used instead of proxies to acculturation level (e.g., generation status and language spoken). Additionally, the BAS measures adherence to both Hispanic culture as well as non-Hispanic culture, which allowed for the study of individuals who identify strongly with the Hispanic culture, including bicultural individuals, as well as individuals who identify less strongly. The majority of previous research on parenting, acculturation, and child social-emotional functioning has either used a single item to assess acculturation, such as generational level, language preference, country-of-origin, or a unidimensional scale that does not measure adherence to Hispanic culture (Calzada & Eyberg, 2002; Hill et al., 2003; Loukas et al., 2007; Weiss et al., 1999). Another strength of the study is that our sample included parents of different acculturation levels (mostly low acculturation and bicultural). Previous studies have had less variability in their sample in terms of acculturation (mostly low acculturated parents). Therefore, the current study allowed for a more in-depth and reliable analysis of acculturation, even though the sample skewed away from fully acculturated parents. Finally, our study focused on young Hispanic children, which is unique as most research in this area focuses on adolescents. It is important to examine how parenting and acculturation affect young children because early childhood adjustment predicts later social-emotional functioning. It is also important to study the parenting of young children because parenting may be different according to child age.

The current study informs future research directions in the area of parenting behavior, parental acculturation and child social-emotional functioning. First of all, future research should explore various, culturally sensitive parenting measures (including observational approaches) to help determine which measures, if any, are appropriate to

use when studying Hispanic families with different levels of acculturation. Future research should also obtain multiple informant data on acculturation level. Research has found that even within a family, family members differ in their levels of acculturation, which could contribute to multiple family dynamics that in turn affect young children (Caplan, 2007; Cervantes, Padilla, & Salgado de Snyder, 1991; Flores, 2004; Padilla & Borrero, 2006; Smart & Smart, 1995). In the same vain, future research should collect data on parenting behavior from all household members who provide child care, such as grandparents. The collection of multiple caregiver data on parenting and acculturation could help provide a better understanding of the relationship between parenting behavior, acculturation level, and child social-emotional functioning. Future research should pay particular attention to gender differences in social-emotional functioning, acculturation, and parenting within Hispanic populations. Parenting measures should include items that measure potential differences in parenting behaviors according to child gender to determine whether this helps explain the differences found in the current study. In light of some of the hypothesized reasons for the unexpected findings of the study, future research should study variables related to acculturative stress that may affect parents and in turn affect their young children, such as gender role conflicts and changing values.

The current study has implications for prevention and early intervention mental health programs for young Hispanic children, especially young Latinas. The main finding of the study was that higher parental acculturation predicted higher levels of externalizing problems. Additionally, higher levels of parental acculturation predicted oppositional behaviors and anger problems that were within the clinical range for girls. Social-emotional problems that develop in early childhood increase the likelihood of continued

and increased problems later in life (Campbell, 1995; Campbell, Breaux, Ewing, & Szumowski, 1986; Lee, Lahey, Owens, & Hinshaw, 2008; Meagher, Arnold, Doctoroff, Dobbs, & Fisher, 2009). Prevention and early intervention may help decrease problems that can become more severe over time. One such problem is the increased rates of suicide and depression for adolescent Latina (Centers for Disease Control and Prevention, 2002). Therefore, the current study sheds light on factors that may help identify and intervene with at-risk young Hispanic children before problems intensify. First of all, the study suggests that children of parents who are more acculturated may be at risk for externalizing problems (attention and aggression problems). The study also suggests that daughters of more acculturated parents are at risk for clinically significant oppositional behavior and anger problems.

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