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ORIGINAL PAPER

The Impact of Acculturative Stress and Daily Hassles on Pre-adolescent Psychological Adjustment: Examining Anxiety Symptoms

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Abstract Acculturative stress in relation to anxiety symptoms has not been examined empirically in young Hispanic populations. The present study, conducted with 138 pre-adolescent Hispanic youngsters, investigated this relationship. The findings suggested that acculturative stress was related to physiological, concentration, and worrisome symptoms of anxiety. After decomposing acculturative stress, it became evident that perceived discrimination accounted for a large proportion of the variance in the relationship between acculturative stress and anxiety. Immigration-related stress was mostly associated with worry symptoms. Finally, total daily hassles were an independent predictor of concentration and physiological anxiety symptoms. Implications for prevention interventions and future research are discussed.

Keywords Acculturation · Acculturative stress · Daily hassles · Anxiety · Hispanic

Ethnic minorities may be exposed to life circumstances and stressors that may put them at risk for poor psychological adjustment, including behavior problems, depression, and anxiety (Attar et al. 1994; Barreto and McManus 1997; Garbarino et al. 1991; Guerra et al. 1995). Minority children, who often live in impoverished areas with limited resources, substandard housing, and high crime rates, are likely to experience a high number of life event stressors and daily hassles. In one study

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(Attar et al. 1994), the number of stressors reported by minority children (i.e., African-American and Hispanic [mostly Mexican-American]) living in moderately disadvantaged neighborhoods was twice as high as the number of stressors reported in another study by predominantly Caucasian, middle-class children (Dubow et al. 1991). Hispanic children, in particular, represent a large subgroup of minorities living within disadvantaged backgrounds. For example, a high percentage of Hispanic children (23.4%), compared to Caucasian children (9.3%), live in families below the poverty level (U.S. Census Bureau 2007a). Individuals of Hispanic heritage also compose the largest and fastest growing ethnic minority group in the United States, with a population of nearly 44.3 million individuals, 40% of whom are under 20 years of age (Ramirez and de la Cruz 2003; U.S. Census Bureau 2007b). Given such dramatic growth in the Hispanic population and the stressful conditions that a large proportion of this population experience, the field of child psychology is challenged to develop preventive interventions to thwart the development of mental health problems.

Acculturative Stress

Many Hispanic families, in addition to daily hassles and life stressors, are faced with acculturative stress, which refers to the psychological adjustment that occurs when culturally distinct groups and individuals come into contact with another culture (Berry and Kim 1988). At the individual level, acculturation has been broadly defined as a process of change experienced by individuals of a racial and ethnic minority group during the adoption of the culture of the majority group (Berry 1994). This process assumes that an individual maintains some aspect of her/his culture of origin as s/he acquires aspects of the dominant culture (Berry 1994). Consequently, acculturative stress originates from attempts by individuals to resolve the differences between their culture of origin and the dominant culture (Born 1970). In addition, the process of acculturation often is accompanied by a number of stressful psychosocial experiences; personal and institutional discrimination, leaving family and friends behind in the country of origin, and the stressor of learning a new language (Fuertes and Westbrook 1996). Some studies have shown that discrimination in particular has a strong negative effect on various aspects of the well being of young immigrants (Gil et al. 1994; Phinney and Chavira 1995; Vega et al. 1995), although evidence suggests that not all youth who experience discrimination have related psychosocial difficulties (Rumbaut 2005; Spencer et al. 2006).

Although acculturative stress and its influence on mental health outcomes in adults has been the focus of several investigations (Balls Organista et al. 2003; Hunt et al. 2004; Rogler et al. 1991), this construct is understudied in Hispanic children and adolescents. The limited research on acculturative stress and psychological adjustment in Hispanic youth is mixed as well as limited to few areas of inquiry. For example, some studies have found that acculturative stress is associated with delinquent behaviors (Vega et al. 1993, 1995) and depression in youth (Hovey 1998; Hovey and King 1996). In contrast, a recent study found that adoption of American

cultural practices was related to less acculturative stress, which in turn was protective against externalizing symptoms (Schwartz et al. 2007). To date, however, research that examines the relationship of acculturative stress and anxiety has not been conducted with populations of young Hispanics. Although experiencing certain levels of anxiety is adaptive and even normative in youth, maladaptive levels of anxiety are problematic and may lead to other problems in functioning, such as school refusal, biased processing of social information, and poor problem solving (Haugh 2006; Kearney 2006; Suarez-Morales and Bell 2006). The current study examined whether Hispanic pre-adolescents who report acculturative stress as well as other sources of stress are at increased risk for experiencing anxiety symptoms.

Childhood Anxiety and Stress

Studies with community samples have found a positive association between anxiety and stressful life events (Compas et al. 2001; DuBois et al. 1992; Johnson and McCutcheon 1980; Rowlinson and Felner 1988). Indeed, psychosocial stress is associated with anxiety and somatic complaints in children from disadvantaged backgrounds (White and Farrell 2006). However, little is known about the association between stress and childhood anxiety in young Hispanic populations. In terms of anxiety symptoms, some studies have found several similarities between Hispanic and Caucasian youth. For example, Silverman and colleagues (1995) found that Hispanic youngsters reported a similar number of worries as did Caucasian youngsters, and Pina and Silverman (2004) reported that Cuban and American parents reported their youths as having less somatic symptoms than Hispanic parents of other nationalities. In contrast, Mexican and Mexican American youngsters reported significantly more physiological and worry symptoms, as well as state anxiety, than Caucasian youngsters (Valera et al. 2004; Tschann et al. 2002). These disparate findings, however, may be due to different levels across Hispanic subgroups of acculturation or acculturative stressors, which were not measured in these studies.

Regarding acculturation related stress and perceived discrimination, few published reports exist on their relationship to anxiety in Hispanic youth. A search of PsychInfo using terms such as anxiety, acculturation, and acculturative stress, yielded only one study, which reported that factors such as being born outside of the U.S. and being less fluent in English were associated with higher levels of anxiety in Mexican American youth (Glover et al. 1999). The scant literature with adults, which has pointed to a relationship between acculturative stress and anxiety (Finch and Vega 2003; Hovey and Magaña 2002), suggests that as individuals acculturate, the way they appraise stressors associated with the acculturation process determines whether they experience anxiety or other psychological problems (Hovey and Magaña 2002). An example would be a child who interprets attending school and learning a new language as threatening, rather than viewing these stressors as opportunities for growth; thus, he/she would be more likely to experience anxiety.

Similarly, perceived discrimination, which is an aspect of acculturative stress (Suarez-Morales et al. 2007) and a common experience for Hispanic adolescents,

has been found to correlate with psychological well being (Brown et al. 2000; Fisher et al. 2000; Szalacha et al. 2003). Although no studies were found regarding perceived discrimination and anxiety in particular, researchers have documented a positive relation between perceived discrimination and internalizing problems in a cross-sectional study of Mexican, Central and South American adolescents (Smokowski and Bacallao 2007), as well as depressive symptoms in Mexican-origin adolescents (Romero and Roberts 2003; Umaña-Taylor and Updegraff 2007) and Puerto Rican children and adolescents (Szalacha et al. 2003). The mechanism through which perceived discrimination works to make children susceptible to experiencing anxiety is similar to that of any stressor. Thus, in this study, we expected that higher acculturative stress, including perceived discrimination, would be related to more anxiety symptoms above and beyond other sources of stress in Hispanic youth. As another source of stress in the youths' lives, we included a measure of daily hassles.

Method

Participants

The sample for the present study consisted of 138 pre-adolescent Hispanic children (72 girls, 66 boys) from the urban area of Miami-Dade County. Hispanics, particularly Cuban Americans, have resided in this area for at least two generations. We recruited participants from five public schools, which covered a vast area of the county, with at least one school located in an agricultural area, where many of the families were from Mexican descent. The mean family income was $30,000–$39,000, ranging from $10,000 to more than $80,000. The participants were in the 5th grade and ranged in age from 9 to 12 years ($M = 10.43$).

The sample analyzed for this article is a subset of the sample collected, consisting of only those participants identifying themselves as Hispanic. The complete sample, described in detail in Suarez-Morales and Bell (2006), is 43% Hispanic, 28% Caucasian, 19% African American, and 10% biracial or from another ethnic group. These figures are consistent with the ethnic distribution of Miami-Dade County.

Procedures

All students were given a package containing a letter requesting informed consent, a consent form, and a demographic form, each written in both English and Spanish, to deliver to their parents. Approximately 55% of parents returned their packets and volunteered to have their child participate in the study during school hours. Once informed consent was obtained from parents, students completed an assent form and questionnaires during 60-min sessions at school. Students completed the assessment measures in English. After completion of the study, each participant was given a coupon for a restaurant visit and school supplies for his/her participation.

Measures

Demographic Information

A parent-report questionnaire completed as part of the consent process assessed child age, gender, ethnicity, race, and socioeconomic status (SES). Information pertinent to SES included household size, mother's and father's employment status, mother's and father's level of education (1 = first grade–18 = doctorate degree), and yearly household income (1 = $5,000 or below, 2 = $5,001–$9,999 to 10 = over $80,000). An SES index was created using the mother's level of education (i.e., indicator of human capital that is rarely missing in surveys and correlates highly with father's education) and income, as recommended by Entwisle and Astone (1994). For the few participants for whom income was missing, we used the mean group value.

Acculturative Stress

We measured acculturative stress using the Acculturative Stress Inventory for Children (ASIC; Suarez-Morales et al. 2007). The ASIC is a 12-item questionnaire empirically derived from the Societal, Attitudinal, Familial, and Environmental Acculturative Stress for Children (SAFE-C; Chavez et al. 1997). Factor analysis indicated that the scale is composed of two factors, *perceived discrimination* (8 items) and *immigration-related stress* (4 items). Each item is rated on a 5-point Likert scale (0 = "doesn't apply" and 5 = "bothers me a lot"). A sample perceived discrimination item states, "Because of the group I am in, I don't get the grades I deserve," whereas an immigration-related stress item reads "I don't feel home here in the United States." Higher scores reflect higher levels of perceived acculturative stress. The subscales of the ASIC have good internal consistency (i.e., Perceived Discrimination $\alpha = .79$ and Immigration-Related Stress $\alpha = .72$) and 2-week test retest reliability, as well as acceptable convergent, discriminant, and predictive validity (Suarez-Morales et al. 2007).

Stress

Daily hassles were measured using a shortened version of the Daily Hassles Questionnaire, developed for school-age children and adolescents (DHQ; Rowlinson and Felner 1988; adapted by DuBois et al. 1994). Using the shortened version of the DHQ allowed for decreasing participant burden and for sensitivity to time constraints at the schools. This version includes 71 of the original 81 self-report items. Participants rate on a 4-point Likert scale (0 = "not at all a hassle" to 3 = "a very big hassle") the extent to which each event was a hassle during the last 2 weeks. To be consistent with prior literature (Rowlinson and Felner 1988; Dubois et al. 1994), we used the total daily hassles score, which is computed by summing the ratings on all listed items. Consistent with published reliability estimates (Rowlinson and Felner 1988), we found excellent internal consistency ($\alpha = .93$) in the current sample. Construct validity has been supported by

significant relations with adjustment indices (i.e., self-reported distress, physical symptomatology and parent and teacher reports of maladaptive behaviors) (Rowlinson and Felner 1988).

Child Anxiety

The Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds and Richmond 1978) was used to assess general symptoms of anxiety. The RCMAS is a 37-item instrument designed for youth in 3rd–12th grades, in which the youth responds 'yes' = 1 or 'no' = 0 as to whether a descriptive item describes him or her. The RCMAS contains four subscales derived by factor analysis: Physiological Anxiety (10 items), Worry/Oversensitivity (11 items), Social Concerns/Concentration (7 items), and Lie (9 items) (Reynolds and Richmond 1979). Sample items of the Physiological Anxiety subscale include "Often I feel sick in my stomach;" of Worry/Oversensitivity subscale, "I often worry about something bad happening to me;" and of the Concentration subscale, "It is hard for me to keep my mind on my schoolwork." Individual subscale scores can be obtained by summing the responses to the relevant items. Adequate indexes of reliability, validity, and normative data have been reported (Reynolds 1981, 1982; Reynolds and Paget 1983). The RCMAS has been used widely with normative and clinical Hispanic samples; thus establishing its cultural appropriateness with this ethnic minority group (Pina and Silverman 2004; Varela and Biggs 2006). In the present study, a small proportion of participants (13.8%) fell within the clinical range on total anxiety (Reynolds and Richmond 1985). The internal consistency for the RCMAS subscales in our sample was consistent with previous reports in normative samples (Worry: $\alpha = .75$; Physiological: $\alpha = .63$; Concentration: $\alpha = .63$) (Reynolds and Paget 1983).

Data Analysis Strategy

The data analysis plan consisted of two steps. First, bivariate correlations were performed to identify associations between stress (i.e., acculturative stress and daily hassles) and child anxiety (i.e., concentration, physiological symptoms, and worry). Second, hierarchical regression was used to examine the relationship between stress and anxiety outcomes with demographic variables controlled (i.e., SES and gender). Separate regression models were conducted for each RCMAS subscale outcome (i.e., concentration, physiological symptoms, and worry). Predictor variables were entered as blocks into the model in a stepwise fashion irrespective of the size of the correlation with the outcome. Demographic variables (i.e., SES and gender) were entered together in step 1, total DHQ score was added in step 2, and ASIC subscales (i.e., perceived discrimination and immigration-related stress) were added in step 3. Finally, interactions between demographic variables and DHQ and ASIC subscales were tested in models where demographic variables were significant predictors of anxiety symptoms. SPSS 15.0 was used for all analyses.

Results

Table 1 presents the means and standard deviations for the main study measures. Correlations between stress (i.e., acculturative stress and daily hassles) and child anxiety (i.e., concentration, physiological symptoms, and worry) are presented on Table 2. With only one exception, all measures of daily hassles and acculturative stress were positively and significantly correlated with concentration, physiological, and worry symptoms of anxiety. Immigration stress and physiological symptoms were the only measures of acculturative stress and anxiety that were not correlated.

Anxiety and Total Daily Hassles and Acculturative Stress Subscales

Regression analyses examined the association between anxiety (i.e., concentration, physiological symptoms, and worry) and total daily hassles and acculturative stress

Table 1 Means and standard deviations for sample variables

Variable	*M* (SD)
SES	10.72 (4.05)
Discrimination	18.06 (9.50)
Immigration	4.43 (4.79)
Total DHQ	24.20 (13.26)
Concentration	2.59 (1.84)
Physiological	3.88 (2.28)
Worry	5.18 (2.69)

Note: Discrimination = perceived discrimination subscale from ASIC. Immigration = immigration-related stress subscale from ASIC. Total DHQ = Total score on Daily Hassles Questionnaire. Concentration = Social Concerns/Concentration subscale from Revised Children's Manifest Anxiety Scale. Physiological = Physiological Anxiety subscale from Revised Children's Manifest Anxiety Scale. Worry = Worry/Oversensitivity subscale from Revised Children's Manifest Anxiety Scale

Table 2 Correlations between acculturation stress, daily hassles, and anxiety symptoms in Hispanic youth

	Discrim.	Immigrant	DHQ total	Concent.	Physical	Worry
Discrim.	–					
Immigrant	.40**	–				
DHQ Total	.58**	.25**	–			
Concent.	.48**	.32**	.55**	–		
Physical	.35**	.16	.42**	.49**	–	
Worry	.52**	.37**	.36**	.48**	.46**	–

Note: Discrim = perceived discrimination subscale from ASIC. Immigrant = immigration-related stress subscale from ASIC. DHQ Total = total score on Daily Hassles Questionnaire. Concent = Social Concerns/Concentration subscale from Revised Children's Manifest Anxiety Scale. Physical = Physiological Anxiety subscale from Revised Children's Manifest Anxiety Scale. Worry = Worry/Oversensitivity subscale from Revised Children's Manifest Anxiety Scale

** $p < .01$

Table 3 Childhood anxiety regressed on daily hassles and acculturative stress subscales

Variable	Step 1	Step 2	Step 3
RCMAS concentration subscale			
SES	−.013 (.040)	−.015 (.033)	.004 (.033)
Gender	−.457 (.323)	−.156 (.272)	−.205 (.267)
DHQ		.030 (.004)***	.022 (.005)***
ASIC			
Discrimination			.040 (.018)*
Immigration			.033 (.031)
R^2	.017	.324	.365
Adjusted R^2	.000	.308	.338
ΔR^2	.017	.308***	.041*
RCMAS physiological subscale			
SES	.027 (.053)	.026 (.048)	.044 (.050)
Gender	.151 (.426)	.450 (.392)	.404 (.391)
DHQ		.029 (.006)***	.021 (.007)**
ASIC			
Discrimination			.046 (.026)$^+$
Immigration			.014 (.046)
R^2	.003	.179	.204
Adjusted R^2	−.013	.159	.170
ΔR^2	.003	.176***	.024
RCMAS worry subscale			
SES	−.125 (.058)*	−.126 (.053)*	−.072 (.049)
Gender	.402 (.470)	.738 (.431)$^+$	.596 (.393)
DHQ		.033 (.006)***	.011 (.007)
ASIC			
Discrimination			.104 (.027)***
Immigration			.108 (.046)*
R^2	.044	.220	.367
Adjusted R^2	.029$^+$	.201	.340
ΔR^2	.044	.176***	.147***

Note: Predictor and demographic variables are presented in the order they were entered into the regression model. Results presented are unstandardized regression coefficients with their standard error in parenthesis. DHQ = Total score from the Daily Hassles Questionnaire. Discrimination = perceived discrimination subscale from Acculturative Stress Inventory for Children (ASIC). Immigration = immigration-related stress subscale from ASIC

$^+$ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

(i.e., perceived discrimination and immigration-related stress). Results of the regressions are presented on Table 3. Demographic variables were entered first, followed by total daily hassles and acculturative stress subscales. Results indicate that total daily hassles were a significant predictor of all three symptoms of anxiety [i.e., concentration ($\Delta R^2 = .308$), physiological symptoms ($\Delta R^2 = .176$), and worry

($\Delta R^2 = .176$)], with SES and gender in the model. When acculturative stress subscales were entered into the model, perceived discrimination was a significant predictor of concentration ($\Delta R^2 = .041$; $\beta = .21$) and worry ($\Delta R^2 = .147$, $\beta = .38$) symptoms, whereas there was a significant trend for physiological symptoms ($\beta = .19$, $p = .08$). Immigration-related stress, in contrast, was only a significant predictor of worry symptoms ($\Delta R^2 = .147$, $\beta = .19$). Because SES was a significant predictor of worry symptoms with total daily hassles in the model (step 2), the interaction of SES and total daily hassles on worry symptoms was tested. This interaction was not significant.

Discussion

To our knowledge this is the first study to examine the link between acculturative stress and anxiety. Instead, past research in this area has focused on externalizing problems and depression. The results of this study clearly demonstrate that higher acculturative stress is related to Hispanic youngsters' experience of more symptoms of anxiety, including concentration, physiological, and worrisome symptoms. These relationships are evident after controlling for SES, gender, and daily stress unrelated to acculturation. Implications of these findings are explained in the following section.

In this study, acculturative stress was conceptualized as immigration-related stress and perceived discrimination, as measured by the ASIC (Suarez-Morales et al. 2007). The findings suggest that perceived discrimination accounted for more variance than immigration-related stress in explaining symptoms of anxiety in this population of pre-adolescent Hispanic children. Perceived discrimination was particularly predictive of Hispanic youth's reports of concentration problems and worrisome symptoms of anxiety. These symptoms of anxiety manifest themselves in cognitive and social aspects. Thus, the fact that perceived discrimination is also a perception of the social surroundings and relations through similar cognitive mechanisms may be related to these findings. This may also explain why the relationship between perceived discrimination and physiological symptoms of anxiety felt short of significance. Worrisome and concentration symptoms of anxiety may have repercussions for youth's school functioning and academic performance. To demonstrate, anxiety has been found to increase risks for school problems, including school refusal and test anxiety (Kearney 2006), which in turn may affect the students' academic performance. These findings together with findings from other studies, which indicate that Hispanic adolescents' report of perceived discrimination has been linked with poor school performance (Stone and Han 2005), suggests that future studies should examine the interplay of factors such as acculturative stress and perceived discrimination, anxiety, and school functioning with this minority population.

Furthermore, these findings are consistent with studies examining other markers of psychological adjustment and their relationship with perceived discrimination in Hispanic youth (e.g., depression: Romero and Roberts 2003; Szalacha et al. 2003; Umaña-Taylor and Updegraff 2007; aggression: Smokowski and Bacallao 2006).

Although further work in longitudinal samples is needed to examine the direction of this association, evidence from research on the link between perceived discrimination and mental health problems, such as depression and conduct problems, suggests that the direction of the association is from perceived discrimination to child maladjustment (e.g., Brody et al. 2006). Thus, it seems important that future research also examine the causal effects of perceived discrimination on Hispanic youth's experiences of anxiety.

Immigration-related stress, in contrast, was associated with worrisome thoughts. Therefore, it seems that preoccupations with language issues and with leaving their country of origin are mostly reflected in worrisome symptoms of anxiety in pre-adolescent Hispanic youth. Given that worry is the most common symptom of anxiety in children (Bell-Dolan et al. 1990), it is not surprising that both sources of acculturative stress were related to worry. Because immigration-related stress may provoke unwanted arousal, worry may serve as a way to deal with the arousal (Borkovec and Roemer 1995) until the youth is able to adjust to the new culture and acquire increased English language skills. From these findings, it is suggested that when working with Hispanic youth, attention should be placed on the sources of worry, and appropriate problem solving skills should be utilized as preventive interventions to teach these youngsters adaptive ways to cope with the anxiety.

In general, the findings of this study may serve to expand the current understanding of the link between acculturation experiences, the stress related to cultural adjustment, and internalizing factors. Further clarification of the internalizing factors associated with cultural processes in Hispanic populations may not only help mental health professionals understand how culture relates to the development or prevention of psychopathology but also aid in the deployment of effective coping strategies.

Limitations of the Present Study

The main caveat of this study is its cross-sectional nature, which does not allow for determination of causal relationships between acculturative stress and anxiety. Therefore, future research using prospective designs, in which stressors and anxiety are measured in at least two time points, are needed to determine whether acculturative stress predicts later anxiety symptoms, anxiety symptoms predict later acculturative stress, or if this relationship is bidirectional (Grant et al. 2004). These designs may also allow for controlling prior levels of symptoms to examine the relation between acculturative stress and changes (increases or decreases) in anxiety symptoms over time.

A second limitation of the current study involved over-reliance on youth's self-report, which prevented the assessment of additional cultural information, such as immigration status. This information would have allowed for additional analyses to determine the relationship between acculturative stress and experiences of anxiety in different generations of immigrants. Our sample was drawn from an area where Cuban Americans have resided for at least two generations and where there are growing numbers of new immigrant groups from other Hispanic nationalities. Thus, this sample likely encompasses youth who have resided in the U.S. their entire lives

as well as those who have resided in the U.S. for a short period of time. Differences in the number of years residing in the U.S. may have contributed to different rates of acculturative stress in our sample, which may have concealed potential and important differences in the association between daily stressors, acculturative stress, and anxiety symptoms. Future research should expand on the current methodology and include the assessment of additional cultural variables from both the youths and their parents.

Finally, the alphas for the subscales of the RCMAS physiological and concentration subscales are not very strong. Although the RCMAS has been used widely in samples of Hispanic youth (Pina and Silverman 2004; Varela and Biggs 2006), findings suggest that reports of anxiety symptoms may vary by acculturation. Pina and Silverman (2004) found significant differences by language choice (a crude measure of acculturation) in the reporting of anxiety symptoms. For example, Cuban-American youth who elected to complete assessments in English reported somatic symptoms as less distressing than non-Cuban-American Hispanic youths who completed assessments in English. In contrast, Cuban-American youth who elected to complete assessments in Spanish reported somatic symptoms as more distressing than non-Cuban-American Hispanic youths who completed assessments in Spanish. The heterogeneity in the years of residence in the U.S. in our sample may have resulted in acculturation related differences in the reporting of anxiety symptoms and influenced the reliability of the RCMAS measure.

Implications for Preventive Interventions

Because the present study used a normative sample, the findings regarding a relationship between acculturative stress and anxiety symptoms does not necessarily imply that interventions are warranted. Instead, they imply that clinicians should also consider assessing anxiety symptoms and determine their potential impairment of youth's functioning. In the case that interventions are warranted, family interventions may be an effective method to reduce/prevent anxiety. Family processes have been found to be protective for children against the negative effects of acculturation (Plunkett and Bámaca-Gómez 2003). On the other hand, acculturating parents may also be experiencing distress, and their ability to assist youth with coping with the negative consequences of stress has therefore been questioned (Zivcic 1993). Nevertheless, literature suggests that parenting practices (e.g., socializing their children to be proud of their race) may be particularly helpful to prepare youth to deal with discrimination (Knight et al. 1993; Phinney and Chavira 1995; Spencer 1983). Again, additional research is needed to examine the role of parenting practices in protecting youth from negative effects of acculturative stress.

An important aspect to consider when working with Hispanic populations is whether the intervention can be maintained given the low utilization of services in the Hispanic population (Miranda et al. 1996) or whether the intervention is culturally sensitive to meet the needs of this ethnic minority group. To deal with the first challenge regarding engaging families into services, a group of researchers in Miami has designed preventive interventions for Hispanic families, which have

been shown to increase participation of Hispanic families of different nationalities in interventions (Coatsworth et al. 2001; Prado et al. 2006; Santisteban et al. 1996). These interventions (e.g., Brief Strategic Family Therapy and Familias Unidas) emphasize the importance of joining with the family during the initial contact as well as throughout the intervention and capitalizing on the family's momentum to deal with their problem by scheduling the first appointment as close to the initial contact as possible (Tapia et al. 2006). Within the context of the family intervention, joining refers to a clinician's ability to show a genuine interest in the families' problem and use their clinical skills to explain services and ease the concerns of the participating families (Prado et al. 2006). These simple practices may be implemented in any program working with Hispanic families.

With respect to achieving positive treatment outcomes, a culturally sensitive intervention designed for Puerto Rican youth may serve as a guide for working with Hispanic youth with increased anxiety levels. For example, Malgady and colleagues (1990) have shown that incorporating culturally adaptive heroic role models into interventions delivered in group format in a school setting has demonstrated immediate decreases in anxiety symptoms in eighth graders. Similar results have been demonstrated in younger populations using culturally adapted folktales (Malgady et al. 1990). Although the mechanisms of change in these culturally sensitive interventions have not been thoroughly studied, these interventions are designed to increase the youth's ethnic pride and identity, and provide a culturally similar model of adaptive coping with stress.

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