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## ACCULTURATION, SOCIAL ACCEPTANCE, AND ADJUSTMENT OF EARLY ADOLESCENTS

by

JENNY L. KLEIN B.S. University of Florida, 2001

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in the Department of Psychology in the College of Arts and Sciences at the University of Central Florida Orlando, Florida

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## **ABSTRACT**

A majority of research regarding disruptive behavior disorders in youth has focused primarily upon Caucasian children and adolescents. As a result, more investigation of the unique characteristics of youth from ethnically diverse backgrounds, particularly those from Hispanic American and African American backgrounds, is needed (Balls Organista, Organista, & Kurasaki, 2003). This study investigated the relationships between several characteristics (e.g., ethnic identity, socioeconomic status, social acceptance, and emotional and behavioral symptoms) of early adolescents belonging to diverse ethnic groups. Results suggested that socioeconomic status and degree of early adolescents' social acceptance were important factors in predicting the development of internalizing and externalizing behavior problems in this age group. Additionally, perceived social acceptance moderated significantly the relationships between SES and depression, anxiety, and self-concept. Considering these results, useful treatments may be developed that enhance early adolescents' abilities to assess realistically their own social skills and interact appropriately within different social spheres. Increased selfappraisals of acceptance within social situations may modify negative effects (e.g., higher reports of anxiety and depression) of extreme socioeconomic circumstances, particularly for early adolescents experiencing low-income or poverty conditions within their family and/or their community.

This project is dedicated to my mother, Maria, my father, Jerry, and my two brothers, Benjamin
and Randy. Your unconditional love and support have seen me through many difficult points in
my life, and I thank you.

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### INTRODUCTION

A majority of research regarding disruptive behavior disorders in youth has focused primarily upon Caucasian children and adolescents. As a result, more investigation of the unique characteristics of youth from ethnically diverse backgrounds, particularly those from Hispanic American and African American backgrounds, is needed (Balls Organista, Organista, & Kurasaki, 2003; McNeil, Capage, & Bennett, 2002). Based on existing literature regarding ethnically diverse youth, several factors are hypothesized to affect the development of their ability to navigate successfully within the majority culture in the United States. For example, the acculturation process, marked by the beginning of development of one's ethnic identity, is a particularly important and potentially influential process that ethnically diverse children and adolescents experience. Ethnic identity formation has been studied as a developmental process, concurrent with the process of ego identity development (Ericksen, 1968), and both processes are thought to occur primarily during the period of mid- to late-adolescence (Phinney, 1992). In contrast with this view, children and adolescents from ethnically diverse backgrounds who are recent immigrants or are members of a minority group may begin this process at an earlier age as a result of various environmental and social influences. While navigating through changes in ethnic identity, these children and adolescents must learn the skills necessary to interact successfully with other individuals, including those who are ethnically similar and dissimilar to themselves

The combination of these factors likely creates a challenging environment for youth from ethnically diverse backgrounds, particularly those who may have parents who are recent immigrants to the United States or who are immigrants themselves. These children and adolescents likely encounter obstacles related to their ethnic background and their unfamiliarity with cultural values and/or customs of the majority culture, an added stressor not present for their counterparts from the majority culture. The difficulties that they encounter and the effectiveness with which these children and adolescents interact with peers likely will be related to the occurrence of internalizing and externalizing behavior problems along with self-appraisals of their competencies (e.g., Ciarrochi, Scott, Deane, & Heaven, 2003; Ebata, 1986; Lochman and Lampron, 1986; Segrin, 2000). This study was conducted to supplement the limited knowledge regarding the unique experience of youth from ethnically diverse backgrounds by examining the adjustment of these youth during the early stage of emerging adolescence.

Definitions: Acculturation and Ethnic Identity

Acculturation.

Although no universally accepted definition of the construct of acculturation exists currently, the term has been defined broadly as the change that occurs within an individual based on his or her interaction within two distinct cultures. More specifically, Sam and Berry (1995) defined acculturation as "a concept used to refer to behavioral and psychological changes that occur as a result of contact between people belonging to different culture groups" (p. 10). Berry (2003) proposed a contemporary framework for the measurement of acculturation that incorporates factors observed both at the cultural and individual psychological level. This author suggested that, at the cultural level, many issues must be considered, including important features of each cultural group (e.g., dominant and minority groups) that are independent of

contact between the groups, the nature of the contact between the two groups (e.g., immigration of a minority group into a host country versus conflict between existing ethnic groups within a region), and the resulting cultural changes that occur within both groups involved in the acculturative process. At the individual level, factors that must be considered include the psychological and behavioral changes and the effects of adaptation that individuals undergo throughout the process of acculturation (Berry, 1997, 2001, 2003).

Berry (2003) suggested that, although such changes may be relatively easy for some to experience, others may encounter significant "acculturative stress" (i.e., a particular kind of stress related directly to the acculturation process). This author further asserted that adaptation may be measured in psychological terms (e.g., changes that affect self-esteem and/or psychological symptomatology) and sociocultural terms (e.g., adaptive changes that connect the individual to the new culture). One example of sociocultural adaptation might be an increase in an individual's social competence during interactions with individuals from a different culture. Similarly, Trimble (2003) suggested that investigation of "situational acculturation" is necessary to account for the reciprocal interaction between situational and social factors and personal characteristics (e.g., the behavior, cognitions, and affect) of individuals belonging to diverse cultural backgrounds. In other words, the level of acculturative stress experienced by an acculturating individual will likely vary depending on the various environmental characteristics that are present (Trimble, 2003). Provided that many factors relate to acculturation, it is important to consider models used to describe the acculturative process to gain a comprehensive understanding of this experience.

## Models of Acculturation

Based on ideas proposed in previous research (e.g., Berry, 1970; Sommerlad & Berry, 1970), Sayegh and Lasry (1993) outlined three theoretical models for understanding the process of acculturation: linear, bidimensional, and orthogonal. Linear (also referred to as unidimensional) models imply that the acculturation status of immigrants is divided into two categories. In one category, the ethnic values and beliefs of the group dissolve, or assimilate, into the host culture. In contrast, individuals in the other category retain their value system and independence, thus being "marginalized as unassimilable" (Sayegh & Lasry, 1993).

In contrast, bidimensional models suggest that there is an interaction between the dimension of cultural or ethnic identity maintenance and the dimension of relations between cultures or groups. According to this model, four possible modes of acculturation are possible: assimilation, integration, marginalization, and separation. *Assimilation* describes when an individual from the ethnic minority identifies completely and solely with the dominant or host culture while rejecting their ethnic identity. *Integration* implies a state in which an individual from the ethnic minority retains strong traditions of their ethnic group but also identifies well with the dominant culture. *Marginalization* refers to the occurrence of an ethnic minority group rejecting or being uninvolved with either their ethnic culture or the dominant culture. *Separation* is a mode by which the ethnic minority group identifies only with their ethnic group while excluding interaction with the dominant culture. Based upon bidimensional models, Sayegh and Lasry (1993) hypothesized an orthogonal model in which the aforementioned four modes of acculturation are defined within a 2X2 graphical representation. In this model, heritage group identification is compared with host culture identification, and each category is distinct.

The conceptualization of a bidirectional process of acculturation accounts for the notion of "biculturalism," a state in which an individual incorporates two or more cultures into their self-concept. In particular, bicultural individuals often select components of the newly introduced culture and incorporate them into their traditional cultural characteristics (Trimble, 2003). This incorporation yields a bicultural self-identification that often has produced positive outcomes (e.g., LaFromboise, Coleman, & Gerton, 1993). Szapocznik, Kurtines, and Fernandez (1980) proposed that individuals learn behaviors needed to succeed in the majority culture prior to identifying with the values of the majority culture. The length of time in the majority culture, gender, and age are all factors affecting acculturation according to this conceptualization. The assumption is that greater exposure to the majority culture will lead to cultural competence.

These researchers (Szapocznik et al., 1980) described that, as some individuals become increasingly more acculturated into the majority culture, many are still able to retain their own cultural values that may even be opposite to the values of the majority culture.

## Measuring Acculturation

In viewing acculturation within a bidirectional context, Berry (2003) offered two choices of measurement, which together yield a comprehensive framework describing the acculturative process. He asserted that acculturation may be assessed by (1) examining "own group" versus "other group" preference or (2) examining the four sectors of this space (utilizing single or multiple items for each attitude: assimilation, integration, separation, and marginalization). For the purposes of this study, the first of the two strategies will be employed. More specifically, group preference will be defined within the context of the development of ethnic identity.

## Ethnic Identity

Erickson (1968) described the process of identity development as a unidirectional progression toward individuation. Further, individuation has been assumed to relate to psychological well-being. Unsuccessful resolution of certain stages of identity development may result in distress that creates problematic behavior or exacerbates preexisting mental health problems (Aldarondo, 2001). Individuals who belong to ethnic, racial, or culturally diverse groups within the United States must not only navigate through the process of general identity development, but they also experience simultaneously the emergence of their ethnic identity. Ethnic identity has been described as a "dynamic, multidimensional construct that refers to one's identity or sense of self as a member of an ethnic group" (Phinney, 2003, p. 63). Phinney (2003) asserted that ethnic identity is an integral component of the psychological functioning of members of ethnic or racial minority groups. This author suggested that ethnic identity can best be described and measured by three aspects: (1) the ethnic self-label used by individuals to identify themselves ethnically; (2) the subjective feelings about and sense of belonging to a particular ethnic group; and (3) the level of ethnic identity development (i.e., "the extent to which their feelings and understandings about their group have been consciously examined and issues surrounding ethnicity have been resolved, leading to an achieved ethnic identity;" p. 65).

The development of an individual's ethnic identity is influenced by several factors, such as the cultural practices of the family and siblings, contact with and the quality of the relationship with extended family members, contact with other cultures including "their own," contact with majority values, and contact with social institutions such as schools, churches, youth organizations, and cultural organizations (Thornton, 1996). These factors suggest that social expectations of group identity also are assumed commonly by each member of the group;

however, an individual's race is said to be related merely to social location and should not imply the kinds of experiences that an individual will have within their societal surroundings (Thornton, 1996). For individuals belonging to ethnic or cultural minority groups, mobility between groups of different social status (i.e., their own culture and the majority culture) may be difficult. In all likelihood, many variables, including social and familial influences, may play a pivotal role in their ability to navigate social interactions successfully with individuals from other ethnic groups, particularly those of the host culture. Throughout the process of developing ethnic identity, people of diverse racial or ethnic heritage will likely encounter many obstacles to seeking personal and social acceptance.

## Ethnic Identity Formation Models

The development of ethnic identity is widely thought to emerge during the period of middle adolescence (Phinney, 1992). For example, a longitudinal study by Phinney and Chavira (1992) examining ethnic identity development showed "consistent movement toward achievement of ethnic identity" occurring between the ages of 16- and 19- years. This study lent support for the developmental nature of ethnic identity formation; however, the authors noted that these data are arbitrary in age of onset.

This theory, however, may neglect differential and unique experiences of youth who have parents who are immigrants to the United States or who are immigrants themselves. Also, the experience of an individual born in the United States who belongs to a minority group likely will differ from that of an individual born in another country who later emigrates to the U.S. (Phinney, DuPont, Espinosa, Revill, & Sanders, 1994). A variety of theories and models exist to explain the process of ethnic identity formation. Many of these explanations include suggestions to aid in ameliorating psychological deficits resulting from maladaptive identity formation or to

resolve adequately developmental identity conflicts that may or may not arise. Second-Culture Acquisition Models (which involve making decisions regarding social behavior based on cultural contexts) describe developmental process theories that require an individual to make decisions regarding his or her social behavior based on the cultural contexts in which he or she is immersed. Individuals undergoing a process of second-culture acquisition are assumed commonly to not be connected ethnically to the second culture; however, this may or may not be true.

It is essential to view the development of ethnic identity as an important component of the process of acculturation. One might assume that youth of diverse ethnic backgrounds may be forced to begin the development of their ethnic identity at a younger age, depending upon the level of acculturative stress that they and their families experience. Taken one step further, the children of immigrants also may begin the process of ethnic identity development at a younger age as a result of the pressure they feel from by the majority culture in which they live. This idea has not been investigated thoroughly with emerging adolescents, illustrating the need for examination of early adolescents' unique perspective, particularly the perceptions of belonging within multiple groups (e.g., cultural and minority) and the effectiveness with which they navigate between cultures. Investigation of the understanding and adherence to the values of one's ethnic or cultural background (i.e., a measure of ethnic identity) along with generation and/or immigration status appears to be the most appropriate method of measuring this dimension of acculturation for this young population.

Ethnicity, Acculturation, Ethnic Identity, and Adjustment

Ethnicity and Adjustment

Before examining acculturation as a factor, it is important to consider the relationship between the ethnic and/or cultural origins of immigrants and/or minority groups and psychological outcomes. According to Sayegh and Lasry (1993), the behavior of recent immigrants varies greatly; however, these individuals and families eventually develop a comfortable lifestyle and a stable pattern of behavior within their new country of residence. Family dynamics and early adolescents' emotional and behavioral functioning may vary depending on a variety of factors. In particular, family and child functioning have been shown to be qualitatively different among families of differing ethnic, racial, and socioeconomic backgrounds. For example, child-related values of Latino parents differ from those of their Anglo-American counterparts in various ways that are primarily culture-specific (Arcia & Johnson, 1998). In a study examining the relationships between Puerto Rican mothers and their children, the mothers' reports placed more emphasis on the child's ability to maintain proper respect and demeanor and less emphasis on individual autonomy. Socioeconomic status (SES) and ethnic culture also contributed to explaining differences between Puerto Rican and Anglo American groups. Ethnocultural influences, however, were deemed to have a stronger influence since the differences between the groups examined in this study remained significant even after controlling for SES (Arcia & Johnson, 1998).

Similarly, Mexican mothers tended to place a high value on child behavior that expresses respect, responsibility, and compliance. In the same study, immigrant Mexican mothers demonstrated agreement among the constructs of desirable child characteristics and their schemas of children's nature and development (Arcia & Johnson, 1998). For example,

compliance was rated as highly desirable because, in the mothers' worldview, children learn from direct instruction. Therefore, agreement among mothers and consistency between values and schemas support the idea that a cultural basis is related to the types of characteristics that are deemed desirable in children.

Though it is apparent that values and schemas of differing ethnic or cultural groups vary, the influence of ethnic or cultural background upon outcomes is yet unclear. Evans and Lee (1998) presented mixed findings concerning the relationships between aspects of child behavior (e.g., internalizing and externalizing problems) and outcomes in children of diverse ethnic or cultural backgrounds. Some studies have supported the notion that ethnic differences (i.e., immigrant or ethnic minority status) may heighten or exacerbate psychological symptoms. For example, a study examining a group of 181 undergraduate college students (100 "foreign" and 81 native Irish individuals) found that the immigrant students endorsed significantly higher rates of somatic, anxious, and social dysfunction (i.e., subscales of the General Health Questionnaire) than those belonging to the host culture (Glennon & MacLachlan, 2000). In contrast, results of a study of 92 immigrant children ranging in age from 9- to 12-years revealed that this group of ethnically diverse children did not differ from their counterparts from the host country in selfperceptions of global self-worth, social competence, and loneliness (Leondari, 2001). In this study, however, individual peer interactions were influenced by immigrant status, indicating that race and ethnicity were important with regard to peer relationships. These are only a few examples of the contradictory literature in this area.

In general, research in this field has focused particularly upon group differences between children who live in different parts of the world. Less information is available concerning differences between groups of ethnic minorities who live within the United States, regardless of

immigration status. Also, more research is needed examining the unique experiences of youth whose parents are immigrants or who are immigrants themselves.

### Acculturation and Adjustment

The relationship between acculturation and outcomes (e.g., psychological and behavioral health) is not yet a clearly defined and thoroughly investigated area of research. Sue (2003) suggested that several issues must be considered when examining this relationship, such as the impact of fit between an individual's personal characteristics and his or her environment, the behavioral strategies used to navigate between two or more cultures (rather than merely the acquisition of knowledge concerning both cultures), and the cost that acculturation may have upon certain aspects of an individual's life experience, particularly for those who adhere strongly to aspects of their minority culture. Sam and Berry (1995) asserted that the acculturative stress that individuals encounter in relation to the acculturation process may be related to certain negative psychological outcomes, in particular more anxiety and depression. Overall, investigations of the relationship between acculturation status and mental health outcomes have yielded varying results (e.g., Rogler, Cortes, & Malgady, 1991).

McLatchie (1997) suggested that there are a number of influential factors in acculturation, including developmental stage, language skills, temperament, differential rates of parent-child acculturation, and family structure and belief systems. According to social learning theory, an individual's own behavior is influenced greatly by the attitudes, behaviors, and interactions observed in others, particularly those with whom the individual has frequent contact (e.g., family members). Given the likelihood that children and adolescents belonging to ethnically diverse groups experience social and cultural norms of behavior within their families (e.g., amongst siblings) that may be dissimilar to that of the mainstream culture, it is likely that

these youth may experience difficulty in the development of social skills. This difficulty, in turn, will affect their self-appraisal of peer acceptance. Some initial studies appear to support this conclusion generally.

Huang, Leong, and Wagner (1994) conducted a study examining the role of acculturation in coping with stress for a group of 264 Chinese American children (with a mean age of 10-years). After categorizing the children into two acculturation groups (i.e., "low" and "high") for the purpose of analyses, results of this investigation found that the coping strategy of "retaliation" was employed significantly more frequently for the "high" acculturation group as compared to the "low" acculturation group. In contrast, the "low" acculturation group used more "suppression" in response to peer stressors. The groups were similar in other coping strategies. Additionally, within the "high" acculturation group, levels of perceived physical competence were higher for boys than girls. Within the "low" acculturation group, levels of perceived cognitive competence also were higher for boys than for girls. With regard to psychological adjustment, the results indicated that "high" acculturated children who perceived themselves as high in social competence experienced more dysphoria in response to peer difficulties than "high" acculturated children who perceived themselves as lower in social competence (Huang et al., 1994).

Further, an investigation by Liebkind and Jasinskaja-Lahti (2000) examined a sample of 588 ethnically diverse immigrant adolescents ranging in age from 11- to 20-years. Results suggested that the relationship between the acculturative process and resulting adjustment for this group was complex. In general, results indicated that perceived discrimination increased the level of acculturative stress and behavior problems and decreased life satisfaction and self-esteem. Another study, conducted by Ward and Kennedy (1993), which included a sample of

178 students from New Zealand residing in foreign countries, found that life change, locus of control, homesickness, and sociocultural adaptation (i.e., acculturation) were related significantly to problematic psychological adjustment. These combined factors also were the best predictors of psychological well-being. These findings support the notion that negative acculturation experiences may impact negatively the psychological health of adolescents.

In a study by Sam (1994) examining the frequency of psychological and somatic symptoms of a group of immigrants in Norway and native Norwegians of similar age, results showed that level of symptomatology appeared to be related to mode of acculturation, with integration being the most adaptive of all four categories. For example, children who held marginalization as their acculturation style endorsed lower levels of self-image, higher depressive symptomatology, and more psychological and somatic symptoms than those subscribing to the integration style. Further, Boyce and Boyce (1983; as cited in LaFromboise et al., 1993) utilized health records to study the psychological and physical health of Navajo students who were sent to boarding schools in order to facilitate acculturation into the European-American society in the years prior to 1970. Findings from this study suggested that the imposition of acculturation onto the minority group by the majority culture was detrimental to the psychological and physical health of the minority individuals.

Weiss, Goebel, Page, Wilson, and Warda (1999) examined the impact of cultural context and acculturation on the incidence of emotional and behavioral difficulties of children, as reported by the parents of 42 Latino preschool children ranging in age from 2- to 3-years. Parents completed Achenbach's Child Behavior Checklist and the Short Acculturation Scale, a questionnaire that yields measures of the parents' use of the English language, ethnic relations, and media. Results of this study showed that the greatest predictor of children's overall

emotional and behavioral functioning was parental immigration status, indicating that the children whose parents were not born in the U.S. were more likely to have higher levels of total behavior problems. Parents' immigrant status, regardless of the length of time that they had been living in the U.S., was also the only variable that predicted significantly externalizing behavior problems (i.e., primarily aggressive behavior). Previous research has shown that the experience of immigration may have a potentially negative impact on the behavior problems of immigrant children. Further results revealed that internalizing behavior problems were predicted significantly by cultural heritage, with children of parents from Central America showing higher levels of internalizing behavior problems than children of parents of Mexican descent. The circumstances under which the migration to this country occurred may be an important factor with regard to this difference, given the divergent experiences of immigrants fleeing their native country seeking political exile (i.e., Central Americans) relative to those immigrating voluntarily (i.e., Mexicans). As noted by Weiss and colleagues (1999), however, none of the children included in the study were immigrants themselves. Therefore, the findings may possibly illustrate an indirect impact of the parents' immigration experience upon their children.

Another notable, yet unexpected, finding of this study was a lack of influence of parental acculturation upon children's emotional and behavioral difficulties. The authors suggested that the lack of a parental acculturation effect might have been explained by "inadequate variance in acculturation scores" due to the fact that the entire sample was bilingual. Had the group varied more in acculturation scores, an effect upon ratings of children's emotional and behavior problems may have been found (Weiss et al., 1999). The findings also illustrate the necessity of acknowledging probable differences among Spanish-speaking ethnic groups and call attention to the potential error in combining these individuals into one group referred to as "Hispanic," a

commonality in current research. In fact, research examining characteristics of Spanish-speaking individuals from differing cultural backgrounds has found differences in predicting factors of self-esteem, such as perceived discrimination, achievement motivation, familism, and ethnic and American influence (Portes & Zady, 2002).

Pawliuk and colleagues (1996) conducted a study examining the acculturation status and psychological functioning of 34 immigrants, the majority being Asian, and their 48 children. The results of this study indicated that children's and parents' acculturation status predicted the children's level of social competence and self-esteem. The existence of children's behavior problems were not, however, predicted by this model. Finally, in contrast to some findings, a study by Leondari (2001) examining 92 primary school children ranging in age from 9- to 12-years found that acculturation did not appear to have a significant relationship with global self-worth and perceived social competence. Given such discrepancies in the literature, these relationships deserve further study.

## Ethnic Identity and Adjustment

As an important dimension of the acculturation process, ethnic identity should be examined to determine its unique contribution to the relationship between acculturation and psychological outcomes. Martinez and Dukes (1997) examined the effects of ethnic identity and ethnicity upon the well-being of adolescents. Results revealed a significant positive relationship between ethnic identity and outcomes including self-esteem, self-confidence, and purpose in life, particularly for those with ethnically diverse backgrounds. The authors noted that ethnic identity, although endorsed to a lesser degree for Caucasian participants, also increased their reports of well-being beyond their "already high" scores. Similarly, Sam (2000) examined various predicting factors upon the psychological adaptation of a group of 506 adolescents with

immigrant backgrounds. Results of this study suggested that the combination of family values, social group identity, and acculturation strategies accounted for a significant portion of the variance of the mental health status, life satisfaction, and self-esteem of these adolescents. More specifically, social group identity (including ethnic identity and majority culture identity) was identified as having the greatest predictive power upon the three outcome domains (Sam, 2000).

Phinney and colleagues (1994) found that ratings of ethnic identity were significantly higher for African American high school and college students as compared to their Caucasian and Latin American counterparts. In addition, ethnic identity was related positively to self-esteem across ethnic groups (e.g., Caucasian, Latin American, and African American). Ethnic identity and self-esteem appear to be related constructs; however, correlational significance between these factors appears to vary by ethnic group (Phinney, 1992). For example, in a study examining groups of 417 high school students and 136 college students, a positive significant correlation between self-reported ethnic identity and self-esteem was found within both age groups for all ethnic backgrounds examined (e.g., Asian Americans, African Americans, Hispanics, American Indians, and "Other") except for White groups. This relationship, however, may result more directly from minority (versus ethnic) group status, as supported by a significant correlation between ethnic identity and self-esteem within a White sample group that was identified as a minority group within the demographic context.

Although a link between ethnic identity and psychological well-being has been documented, existing research in this area is limited in that a majority of such studies have only examined certain outcome variables such as self-esteem and achievement (Yasui, Dorham, & Dishion, 2004). One study examined the role of ethnic identity in behavioral outcomes of 77 European American and 82 African American adolescents (their mean age was 12.3-years).

Ethnic identity was found to not only be related significantly to both self-reported and parent-reported internalizing and externalizing behavior, but higher levels of ethnic identity also were shown to be a protective factor against psychological maladjustment in European American and African American youths (Yasui et al., 2004).

It seems that the development of ethnic identity often relates significantly to various outcomes; however, more research in this area is needed. For instance, although the literature suggests, in general, that ethnic identity development begins in adolescence, it is likely that children who have arrived recently from other countries (i.e., have recent immigration/generation status) may experience acculturative stress earlier than their American counterparts, possibly leading to an earlier development of ethnic identity. Also, the relationship between ethnic identity and emotional and behavioral outcomes may be related to the minority or majority status of the group examined. For example, for those belonging to a majority group, ratings of personal ethnic attitudes and attitudes toward the dominant culture may overlap (Phinney, 1992), thus high ethnic identification in a majority group may not serve as a protective factor against negative outcomes. Furthermore, it is important to investigate other characteristics of early adolescents that may affect these ethnicity-related factors (e.g., acculturation, ethnic identity, minority status, generation/immigration status) and possibly contribute to healthier mental health outcomes in diverse populations.

Social Competence, Self-Esteem, and Outcomes

Given the sometimes variable nature of the relationship between acculturation, ethnic identity, and adjustment of individuals, it seems natural to seek possible moderators that may affect significantly this relationship. One possible factor that may impact this relationship is the self-perceived social competence of ethnically diverse children and adolescents. According to a

literature review by Rose-Krasnor (1997), the term "social competence" has been operationalized in previous research in multiple ways and can be viewed using four general methods: 1) social skills appraisals, 2) peer status approaches, 3) relationship approaches, and 4) functional approaches. The social skills appraisal of social competence refers to attainment of a set of desirable skills that may be determined on the basis of a particular theory, social values, competence correlates (i.e., behaviors that are correlated with other social competence indices) and/or normative data regarding "sociable" versus "nonsociable" groups. The peer status approach to social competence refers to the sense of popularity or peer acceptance felt by an individual, which accounts for judgments of peers as well as the behavioral and affective components of social competence. The relationship approach to measuring social competence focuses on the quality of relationships that individuals have with others, which, inevitably, is dependent upon the behaviors of both partners. The last method of assessing social competence is the functional approach, which refers to the ability to engage in context-specific social problem-solving in an attempt to achieve specified social goals and outcomes. In general, Rose-Krasnor asserts that social competence is transactional, content-specific, and goal-oriented construct that can be viewed in multiple ways.

Similarly, Cavell (1990) proposed an integrative, tri-component model of social competence in which this construct is viewed within a "multi-level" context, thus bringing forth a comprehensive evaluation of this term. In this investigation, social adjustment, social performance, and social skills were all considered integral in the evaluation of an individual's social competence. In examining social competence from this perspective in relation to outcomes, research has supported the notion that the development of competence in children and adolescents within a social context is related to positive outcomes later in life (e.g., Ebata, 1986).

In fact, Hoffman and Schwarzwald (1992) conducted a study examining the moderating effects of self-esteem on the use of ethnicity as a determinant of interpersonal acceptance, an element of social competence. The sample included 722 students ranging in age from 12- to 13-years in twelve integrated junior high schools serving a large cross section of ethnic and socioeconomic areas in Israel. The students were administered an adaptation of the Kaplan self-concept scale and the Interpersonal Relationship Assessment Technique, a measure of social acceptance, at two time intervals six months apart. Results showed that ethnicity of classmates proved to have a significant influence on interpersonal acceptance, and this influence was moderated by the students' self-evaluation. Overall, students endorsed a preferential acceptance for classmates of Western ethnicity, indicating a strong ethnic bias. Further results indicated that this preferential acceptance was greater for the group with "high" self-esteem, and these findings remained consistent over time.

Further, a study by Lochman and Lampron (1986) examined the self-esteem and social problem-solving skills between 20 boys categorized as "aggressive" and 18 boys categorized as "nonaggressive." Significant differences in behavior were found between nonaggressive and aggressive boys. The boys completed the Perceived Competence Scale for Children, a measure that derives subscales for Cognitive Competence, Social Competence, Physical Competence, and General Self-Worth. Results showed that the boys' self-worth was related inversely to aggression, in that boys with higher levels of aggressive behavior rated themselves as having lower self-worth than the nonaggressive boys. Also, with regard to social problem-solving, aggressive boys displayed significantly less overall verbal assertion and significantly more direct action in certain situations, particularly hostile provocative conflicts with others. This finding indicated that the aggressive boys were more likely to handle those situations with physical

aggression rather than by using verbal reasoning. Youth who display characteristics such as less adequate social problem-solving skills likely may be considered less socially competent. In fact, these boys rated themselves as having lower perceived social competence as well.

Chan (2000) also found that Chinese children living in the United Kingdom (UK) reported higher rates of self-esteem than their matched counterparts in China. Furthermore, they showed no significant differences in rates of self-esteem than Caucasian children in the UK, indicating that immigrant status may not imply inherently that children will develop lower self-esteem than their peers of mainstream ethnic groups. This finding illustrates the need for examining acculturation as a possible factor that influences more strongly the outcomes of immigrant children and children of ethnic minority groups. Another study found that self-esteem along with parental problem-solving support, peer competence, and externalizing behavior problems accounted for 32% of the total variance of high school adjustment (Carlson et al., 1999). A similar study examining the self evaluations made by adolescents found that the ratings of this group of young individuals changed significantly when the social comparison group was changed (Crabtree & Rutland, 2001).

In addition, Tashakkori (1993) conducted a study including a group of 637 (299 African American and 338 Caucasian) middle school students examining an attitude theory approach to measuring overall self-esteem, including various self-belief components (e.g., competence, popularity, perceived control, powerlessness, and self-efficacy). Results indicated that, although significant differences in perceived self-belief components of self-esteem between ethnic groups were found, certain aspects of the self-esteem structure were endorsed at different levels within each group. Despite the group differences, however, the one self-belief dimension that proved to be the most important predictor of overall self-esteem across ethnicities was endorsements of

competence (Tashakkori, 1993). Thus, self perceptions of competence, in particular, perception of social acceptance, may be a pivotal factor in psychological outcomes, particularly for children from ethnically diverse backgrounds.

Socioeconomic Status and Outcomes

Additionally, other factors (e.g., socioeconomic status and economic hardship) also have demonstrated a relationship with the cognitive and behavioral development of children and adolescents (e.g., Duncan, Brooks-Gunn, & Klebanov, 1994; Szapocznik, Scopetta, Kurtines, & Aranalde, 1978) and, therefore, also should be examined as potential moderator variables. For example, one study examined longitudinally (i.e., between 1979 and 1984) the impact of economic deprivation on childhood development in an initial sample of 568 Black and 796 Caucasian children who were between ages 0- and 3-years in 1980 (Duncan, Brooks-Gunn, & Klebanov, 1994). The researchers investigated the effects of poverty and poverty correlates (e.g., parental education, family income, and ethnicity), the effects of timing and duration of poverty, and differential influences of economic deprivation within the family versus the surrounding neighborhood upon developmental outcomes in children. Results of this investigation indicated that family income and poverty status demonstrated strong correlations with the cognitive development and behavior of children. Also, results suggested that the timing or onset of poverty did not prove to be as important a factor as the duration of economic deprivation in the prediction of childhood behavior problems. Additionally, intellectual abilities measured at the outset of the study were higher for children living in generally affluent neighborhoods as compared to their counterparts living in economically disadvantaged areas. Children living in areas with more low-income neighbors also displayed significantly more behavior problems. Additionally, the experience of poverty within the family context was more

common amongst African American children than Caucasian children. This study described various aspects of childhood functioning that were related significantly to several social and economic influences both with the family unit and surrounding environment. These findings suggested that socioeconomic status is an important factor in predicting future outcomes of children, particularly for those children who experience extreme poverty.

Similarly, Counts, Nigg, Stawicki, Rappley, and von Eye (2005) examined a group of 206 children between the ages of 7- to 13-years and their parents regarding the relationships between family adversity and symptoms and subtypes of Attention Deficit Hyperactivity Disorder (ADHD; i.e., externalizing behavior problems). With family adversity defined as the combination of low SES, maternal and paternal psychopathology, marital conflict, and stressful events, results indicated that higher rates of family adversity were found among groups of children with ADHD symptoms as compared to children in the control group, and, within a predictive model, adversity predicted significantly symptoms of Conduct Disorder, in particular, low SES and high maternal psychopathology were associated significantly with CD symptoms.

Although previous research has shown that children experiencing extreme economic disadvantage are at "high risk" for the development of problematic outcomes, other research has indicated that youth experiencing highly advantaged circumstances also may experience elevated disturbances in various areas of functioning. Luthar and Latendresse (2005) examined three "cohorts" of youth from both inner-city (i.e., low-income) and affluent areas (i.e., high-income) and found various similarities and differences in adjustment patterns between these groups. For example, affluent youth (i.e., 264 adolescents attending the tenth grade) in the first cohort reported significantly higher levels of substance use (e.g., cigarettes, alcohol, marijuana, and "hard" drugs) and anxiety than the inner-city group (i.e., 244 adolescents in the tenth grade).

Additionally, the higher levels of substance use within the affluent group were related significantly to higher levels of reported symptoms of depression and anxiety. In the second cohort that included early adolescents in the sixth and seventh grades, evidence of disturbance was present in the older group, particularly for girls whose clinically significant depression rates were more than double those experienced by the normative sample. Also, results for this middle-school sample supported previous findings of correlations between rates of substance use and higher levels of depression and anxiety. In the third cohort, preliminary data suggested that affluent sixth-graders reported lower levels of depression and anxiety than their inner-city counterparts, but further investigation is pending.

Although affluent youth have been thought commonly to be at "low risk" for the development of emotional and behavioral difficulties, the results of this study suggested that the influence of certain factors (e.g., pressure to achieve and isolation from working parents) potentially may increase the likelihood that early adolescents will develop problems (Luthar & Latendresse, 2005). In support of these findings, Silverman and Ginsburg (1995) also found that higher rates of children clinically-referred for anxiety were from middle to higher SES families. Overall, the results of these investigations illustrated that affluence also may predict disturbances in child and adolescent functioning; therefore, the relationships between socioeconomic status and outcomes for children and adolescents from both economically advantaged and disadvantaged circumstances should be examined.

### The Current Study

Given the aforementioned literature, the current study examined the experience of early adolescents from diverse ethnic backgrounds (e.g., Hispanic, African American) at the individual level (i.e., identifying the relationships between ethnic identity, socioeconomic status,

competencies, and psychological health in several racial/ethnic groups). In particular, this study utilized the hypothesis that early or emerging (rather than middle to late) adolescence may be a pivotal turning point in the adaptive process that ethnically diverse early adolescents undergo as they begin to construct their sense of self within social, ethnic, and cultural arenas. This study attempted to ascertain the level to which diverse early adolescents identify with their family's ethnic background versus that of the mainstream American culture during the early stages of identity development, the social and economic circumstances to which these groups belong, and the link between these variables and these early adolescents' self-perceptions of competence and psychological well-being was examined.

The first goal of the present study was to investigate the relationships among levels of ethnic identity ratings (i.e., a component of acculturation status), socioeconomic status of the family based on parental characteristics (i.e., achieved education level and current occupation), self-appraisals of competencies within various areas (e.g., social acceptance and self-esteem), and child ratings of depression, anxiety, anger, disruptive behavior, and self-concept. The level of ethnic identity ratings, socioeconomic status, self-reported competencies, and frequency and severity of psychological symptoms were compared across ethnic groups and genders. Also, the incidence of emotional difficulties, behavior problems, and self-reported competencies of early adolescents belonging to ethnically diverse groups, in particular those of Hispanic American and African American backgrounds, were described.

Significant correlational relationships were expected between the independent variables (i.e., ethnic identity, socioeconomic status, competencies, and self-esteem) and the dependent variables (e.g., emotional and behavioral functioning). Self-reports of ethnic identity were expected to be higher for early adolescents of diverse cultural backgrounds (e.g., Hispanics and

African Americans) in contrast to Caucasian early adolescents (e.g., Martinez & Dukes, 1997). It was initially unclear what differences would occur in the reported levels of psychological symptoms between these groups; however, it was hypothesized that, due in part to the acculturative stress that ethnically diverse early adolescents (e.g., Hispanic and African Americans) experience, they would endorse more depressive and anxious symptoms as compared to their Caucasian counterparts.

This study also attempted to investigate the moderating utility of perceived social acceptance in the relationship between ethnic identity (i.e., a component of acculturation status) and self-reported aspects of psychological adjustment (i.e., the severity of symptoms of depression, anxiety, anger, and disruptive behavior, as well as the quality of self-concept). For the purposes of this study, social acceptance was operationalized as "the degree to which the early adolescent feels accepted by peers or feel popular amongst the group of peers" (Harter, 1985). Given the discrepant findings discussed previously, the level of ethnic identity or acculturation was not hypothesized to be specifically directional in its relationship with psychological adjustment; however, a significant relationship was hypothesized to exist. This study intended to demonstrate that the relationship between ethnic identity and psychological adjustment would be related significantly to the level of social acceptance perceived by early adolescents of varying ethnic groups. Specifically, a moderational model (see Figure 1) was hypothesized whereby the relationship between ethnic identity and child adjustment would be moderated by perceived social acceptance. It was hypothesized that a significant relationship would exist between ratings of ethnic identity and each outcome variable, particularly with respect to early adolescents from Hispanic and African American backgrounds. Further, this relationship would be moderated by the strength of self-perceived social acceptance.

Since the relationships among ethnic identity, acculturation, and psychological adjustment have yielded varying results, a secondary moderational model (see Figure 2) examining the possible moderational impact of ethnic identity upon the relationship between social acceptance and outcomes also was proposed. This model was hypothesized to potentially be more valuable in describing these relationships. It was expected that, if the first model did prove significant, the relationship between perceived social acceptance and psychological outcomes would be moderated significantly by the rating of ethnic identity.

Additionally, since socioeconomic status also has demonstrated a strong link with the emotional and behavioral functioning of children and adolescents, it was hypothesized to replace ethnic identity in the moderational model as a strong predictor of the outcomes in this study (i.e., depression, anxiety, anger, disruptive behavior, and self-concept) if ethnic identity did not demonstrate the expected relationships.





Step 2.

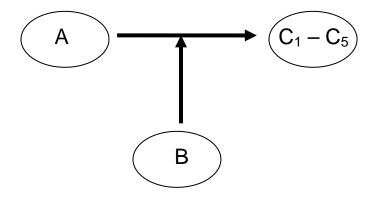


Figure 1. Proposed Primary Moderational Relationship.

For this moderational model to be valid, the following criteria must be met: In Step 1, the relationship between ethnic identity (or socioeconomic status; A) and adjustment ( $C_1 - C_5$ ; i.e., depression, anxiety, anger, self-concept, and disruptive behavior) must demonstrate significance. In Step 2, social acceptance (B) must moderate the significant relationship between ethnic identity (or socioeconomic status) and adjustment. That is, according to Baron and Kenny (1986), the moderating variable affects this relationship such that the impact or the nature of the predictor on the criterion variable varies according to the strength of the moderating variable.

Step 1.



Step 2.

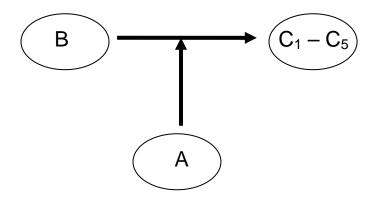


Figure 2. Proposed Secondary Moderational Relationship.

The description described for Figure 1 also applies to this secondary moderational model; however, ethnic identity (or socioeconomic status; A) serves as the moderating variable between social acceptance (B) and adjustment  $(C_1 - C_5)$ .

### **METHODS**

## **Participants**

Two hundred seventy eight early adolescents (148 females and 116 males, 14 unreported sex) participated in this study. The early adolescent participants ranged in age from 10- to 14-years with a mean age of 11.86-years (SD = 0.6-years). This group of participants was recruited from seven sixth grade classrooms of five middle schools in the Miami-Dade County Public School System (i.e., the southern region of Florida). With regard to racial self-identification, a majority (56.8%) of the early adolescent participants considered themselves to be White (Hispanic), 9.4% identified as White (NonHispanic), 5.4% were Black (Hispanic), 15.5% were Black (NonHispanic), 1.4% were Asian, 0.4% were Native American, 0.4% were Middle Eastern, 0.4% were Indian, 4.6% reported they were either Bi-racial or Other, and 5.8% did not provide a response. For those early adolescent participants who reported belonging to a Hispanic ethnic group, 25.9% considered themselves to be Cuban, 18.0% were Central American, 7.6% were Puerto Rican, 5.8% were South American, 2.2% were Mexican, and 2.9% identified themselves as Other.

In addition, the generation status of the early adolescent participants also varied. In particular, 23.4% of the early adolescents were first generation (i.e., they were born in another country), 44.6% were second generation (i.e., they were born in the U.S. and had one parent born in another country), 4.7% were third generation (i.e., they were born in the U.S., had both parents

who were born in the U.S., and had all grandparents born in another country), 6.1% were fourth generation (i.e., they were born in the U.S., had both parents born in the U.S., and had one grandparents born in another country), 14.0% were fifth + generation (i.e., they reported all family members having been born in the U.S.), and 7.2% did not report their generation status.

Of the 278 parents who provided consent for their early adolescents to participate, 270 parents (206 mothers and 64 fathers) provided demographic information and/or ratings regarding their own ethnic identity. Two hundred and sixty parent participants reported their age, which ranged from 19- to 64-years with a mean of 40.07-years (SD = 6.86-years). Given that some parents reported being at or below the age of 30-years (i.e., 6 parents) and the mean age of early adolescent participants was 11.86-years, it is possible that some respondents may have been parents within blended families (e.g., step-, adoptive-, or foster-parents); however, this was not assessed. Similar to their early adolescents' reports, a majority (59.7%) of parent participants considered themselves to be White (Hispanic), 14.4% identified as White (NonHispanic), 1.8% were Black (Hispanic), 16.2% were Black (NonHispanic), 2.2% were Asian, 0.4% were Middle Eastern, 3.6% considered themselves to be either Bi-racial or Other, and 1.8% did not provide a response. For those parent participants who reported belonging to a Hispanic ethnic group, 23.7% considered themselves to be Cuban, 15.8% were Central American, 9.0% were South American, 6.1% were Puerto Rican, 1.4% were Mexican, and 2.9% identified themselves as Other.

Parents varied in their level of achieved education. Mothers reported the following educational achievement: 2.4% had completed less than high school, 8.3% had completed some high school, 24.8% had earned a high school diploma, 10.2% had completed vocational training, 16.0% had completed some college, 17.0% had earned a college bachelor's degree, 15.0% had

completed graduate/professional training, and 2.4% had completed post doctorate education. Fathers also ranged in their level of achieved education (6.3% had completed less than high school, 6.3% had completed some high school, 20.3% had earned high school diploma, 3.1% had completed vocational training, 20.3% had completed some college, 21.9% had earned a college bachelor's degree, 17.2% had completed graduate/professional training, and 1.6% had completed post doctorate education). Additionally, the parents varied in marital status, with a majority (57.2%) reporting they were married, 16.9% were divorced, 13.7% were single, 5.0% were separated, 3.2% were remarried, 1.4% were widowed, and 2.5% did not select a response. Families also varied in estimated yearly household income as well (12.6% earned less than \$10,000, 11.9% earned \$10,000-\$20,000, 15.5% earned \$20,000-\$30,000, 10.1% earned \$30,000-\$40,000, 9.7% earned \$40,000-\$50,000, 7.9% earned \$50,000-\$60,000, 4.7% earned \$60,000-\$70,000, and 19.8% earned more than \$70,000), and income information was not received from 22 families.

#### Measures

Parents were provided with three forms prior to data collection (a permission form for early adolescent participation, a demographic information questionnaire, and a measure of ethnic identity). The early adolescent questionnaire packets included the following components: a demographics questionnaire, a measure of ethnic identity development, a self-esteem inventory, a measure of social acceptance, and measures of early adolescents' emotional and behavioral characteristics.

#### Demographic Information

Parents and early adolescent participants completed separate forms requesting general demographic information regarding ethnic and racial background, average household income,

parental education, parental occupations, and other household characteristics. In this study, socioeconomic status was calculated utilizing Hollingshead's (1975) four factor index of social status which incorporates educational and occupational information for one (or both) parents. Information gathered from parents and/or adolescent participants regarding two parents was included only when complete information (i.e., both education and occupation) was available for each parent. If information was provided for only one parent, this was utilized alone to calculate SES. If incomplete or no information was reported for either parent, these cases were not included in subsequent analyses.

# Ethnic Identity/Acculturation

Two weaknesses of many measures of acculturation used in current research studies are that they depend highly upon language acquisition and utilization factors, making measurement of acculturation difficult among populations where English is the native (or first) language. Also, many measures are created primarily for use with adult populations (i.e., very few exist that are designed for or used specifically with youth). This study utilized the MultiGroup Ethnic Identity Measure (MEIM; Phinney, 1992) as a measure of parents' and early adolescents' identification and/or adherence to the customs and traditions of their ethnic origin as an indication of one aspect of the acculturative process. The MEIM was developed to assess components of ethnic identity common to all ethnic/cultural groups, including an individual's sense of group membership/affiliation and attitudes toward one's own ethnic group. In this study, parents' ratings on the MEIM ( $\alpha$  = .88) and early adolescents' ratings on the MEIM ( $\alpha$  = .80) demonstrated adequate internal consistency. Possible ranges of response totals on the MEIM are between 12 (i.e., all item reports of disagreement/low ethnic identity) and 48 (i.e., all item reports of agreement/high ethnic identity). According to the results of this study, parental

ethnic identity ranged between the minimum and maximum scores, with a mean of 35.97 (SD = 6.87) and a median of 36.00. Early adolescent ethnic identity ranged between the minimum score and a maximum of 47, with a mean of 36.19 (SD = 5.48) and a median of 37.00.

## Competence

Early adolescent participants completed the Self-Perception Profile for Children (SPPC; Harter, 1985) as a measure of their own ratings of competencies across various domains. The SPPC provides subscale scores within six areas: scholastic competence, social acceptance, athletic competence, physical appearance, behavioral conduct, and global self-worth. This study focused particular interest upon the social acceptance domain, as the item content addresses whether the early adolescent feels accepted by his or her peers and does not necessarily refer to actual or perceived social skills. This measure has demonstrated adequate internal consistency reliability with four independent sample groups (Harter, 1985). In this study, the internal consistency reliability for each subscale of the SPPC was adequate (scholastic competence,  $\alpha = .78$ ; social acceptance,  $\alpha = .74$ ; athletic competence,  $\alpha = .75$ ; physical appearance,  $\alpha = .82$ ; behavioral conduct,  $\alpha = .76$ ; and global self-worth,  $\alpha = .76$ ).

#### Self-Esteem

Early adolescent participants completed the Rosenberg Self-Esteem Inventory (RSEI; Rosenberg, 1965) as an additional measure of their self-perceived sense of self-worth and acceptance. In previous studies, this scale has exhibited adequate psychometric properties (a Guttman reliability coefficient of .92 and concurrent validity with like measures ranging from .56 to .83; Rosenberg, 1965). In this study, the RSEI demonstrated an adequate internal consistency reliability of Cronbach's  $\alpha = .77$ .

# Emotional and Behavioral Functioning

The Beck Youth Inventories of Emotional and Social Impairment (BYI; Beck, Beck, & Jolly, 2001) are a compilation of five self-report measures that are used to assess early adolescents' experience of depression, anxiety, anger, disruptive behavior, and self-concept. The combination of measures may be administered to children ranging in age from 7- to 14-years, and completion time is approximately 5 to 10 minutes per questionnaire, with a total administration of approximately 30 minutes. The authors provide national normative data based on a stratified sample of children within the United States.

The BYI included independent measures, each assessing one area of functioning as mentioned above. As a measure of depressive symptomatology, early adolescent participants completed the Beck Depression Inventory for Youth (BDI-Y). This questionnaire identifies symptoms of depression in youth and includes items that reflect negative thoughts about themselves, their lives, and their future, feelings of sadness, and physiological manifestations of depression. To assess early adolescent participants' current level of anxiety, the Beck Anxiety Inventory for Youth (BAI-Y) was administered. This measure includes items that reflect children's and adolescents' fears (e.g., about school, getting hurt), worrying, and physiological manifestations of anxiety. Early adolescent participants completed the Beck Anger Inventory for Youth (BANI-Y) to asses their perceptions of mistreatment by others, negative thoughts about others, feelings of anger, and physiological arousal. The Beck Disruptive Behavior Inventory for Youth (BDBI-Y) measures attitudes and behaviors similar to those observed commonly in youth with Oppositional Defiant Disorder and Conduct Disorder. The Beck Self-Concept Inventory for Youth (BSCI-Y) measures self-perceptions including competence, potency, and positive selfworth.

T scores for each measure have a mean of 50 and a standard deviation of 10. The four qualitative ranges defined by units of .5 standard deviations indicated by T scores on the BDI-Y, BAI-Y, BANI-Y, and BDBI-Y are as follows: Extremely elevated (T = 70+), Moderately elevated (T = 60-69), Mildly elevated (T = 55-59), and Average (T < 55). Within the standardization sample for these four measures, fewer than 25% of the participants obtained T scores above 55, less than 15% of the sample obtained T scores above 60, and less than 5% obtained T scores equal to or higher than 70. The qualitative ranges for the BSCI-Y differ from the other measures and are listed as follows: Above average (T = >55), Average (T = 45-55), Lower than average (T = 40-44), and Much lower than average (T = <40). Within the standardization sample for this measure, T scores above 55 were obtained by 45% of the participants, T scores below 45% were obtained by 25% of the sample, and T scores below 40 were obtained by 16% of the sample.

In this study, the internal consistency reliability for each subscale of the BYI using Cronbach's alpha statistic was adequate (Beck Anxiety Inventory for Youth,  $\alpha$  = .90; Beck Depression Inventory for Youth,  $\alpha$  = .93; Beck Anger Inventory for Youth,  $\alpha$  = .93; Beck Disruptive Behavior Inventory for Youth,  $\alpha$  = .86; and Beck Self-Concept Inventory for Youth,  $\alpha$  = .88).

#### **Procedure**

#### Phase 1: School Recruitment

Upon receipt of approval from the Institutional Review Board (IRB) of the University of Central Florida (see Appendix) and the Miami-Dade County Research Review Committee, the principals of 6 urban middle schools were contacted (via telephone and/or in person) to explain the study and request permission for their students' participation. These schools were selected

based upon diverse demographic information regarding the ethnic and socioeconomic composition of the student body. No specific schools were required to participate in the study despite previous school board approval; therefore, each principal was informed that they retained the option to refuse participation. Five of the six school principals that were contacted agreed to participate by providing written approval. Once written consent was obtained from principals, specific sixth grade teachers were selected by each principal, and their contact information was obtained. Each teacher was then contacted by telephone and/or in person to request participation in the study.

# Phase 2: Participant Recruitment

Teachers who agreed to participate were provided with forms to be handed out to each early adolescent at the end of a class period. Each early adolescent (regardless of racial or ethnic background) had an opportunity to participate and was given a Permission Form, a Demographics Questionnaire, and an Acculturation Questionnaire to be taken home for their parents to complete. The Permission Form included a brief synopsis of the rationale for this research study, the procedures for the study, and the researchers' contact information. The parent forms were returned by the student directly to their teacher, who then collected and kept the forms until the date of early adolescent data collection. Collection of the parent forms took place over the course of three to five weeks (starting on the date they were dispersed to the classes) to allow sufficient time for the parents to complete the forms and for early adolescents to return them to their teachers. Parent consent was obtained from at least one legal guardian of each early adolescent participant to be eligible for participation.

### Phase 3: Data Collection

Once a sufficient number of parent packets were received, the researcher arranged dates with individual teachers to attend their class to administer the questionnaire packets to those students whose parents consented to their participation. Early adolescents whose parents did not consent to participation were provided with an alternative activity during the data collection session (as determined by each teacher). At some schools, the early adolescent participants remained in the classroom during participation. At other schools, early adolescent participants were asked to leave the classroom to attend a data collection session in a large auditorium, lunchroom, or library area. Each packet of questionnaires required approximately 45 minutes for each early adolescent to complete. The early adolescent packets included the Assent Form, the Demographics Questionnaire, and the aforementioned informational questionnaires. The Assent Form requested each early adolescent's assent to participate in the research study. There were no foreseeable costs or risks for participation in this study. Immediately following participation, early adolescent participants were provided with a Debriefing Form which discussed further the purpose of the study, provided references for relevant research literature, and assured that all answers would remain confidential. Contact information for the researchers also was provided. Ethical Considerations

This study was approved by both the Institutional Review Board of the University of Central Florida and the Research Review Committee for Miami-Dade County Public Schools before commencement of data collection. All participants were treated in accordance with the ethical guidelines for research participants of special populations established by the American Psychological Association. One parent of each early adolescent participant signed a written consent form, including any possible risks involved in participation, before the early adolescent

was approached for assent for participation. All questionnaires became completely anonymous, using only participant numbers for family identification, once the consent forms were removed from them. All questionnaires are being stored in a locked file cabinet in the Understanding Children and Families (UCF) Laboratory at the University of Central Florida. Consent forms are stored separately from the questionnaire responses to maintain the confidentiality of participants' responses.

### **RESULTS**

All statistical analyses were conducted using the Statistical Package for the Social Sciences, Version 12.0 (SPSS, 2004). Unless otherwise stated, an alpha level of .05 was used for analyses.

## Descriptive Statistics

First, descriptive statistics were calculated for the overall group and separately by early adolescent sex. Table 1 displays means and standard deviations of the outcome variables for the overall sample and by early adolescent sex. To evaluate the clinical significance of group means on measures of anxiety, depression, anger, disruptive behavior, and self-concept, *T* scores were calculated separately by gender. For both females and males, all ratings of emotional and behavioral functioning fell within the Nonclinical range (i.e., for anxiety, depression, anger, and disruptive behavior, *T* scores were at or below 50; for self-concept, *T* scores were at or above 50). Nonclinical levels of emotional and behavioral outcomes were expected given the community (versus clinical) sampling of early adolescents.

#### Mean Differences

To examine the relative differences in the ratings provided by boys and girls, independent samples t-test comparisons were made between the sexes with regard to early adolescents' ratings on all outcome variables (see Table 1). Results indicated that girls reported significantly less athletic competence (M = 15.49, p < .001) and physical competence (M = 16.09, p < .01) than boys (M = 17.85 and 17.97, respectively). No significant differences were found between

sex groups on measures of anger, disruptive behavior, or self-concept; however, girls reported significantly more depression (M = 11.40, p < .05) and anxiety (M = 16.24, p < .01) than boys (M = 8.92 and M = 13.25, respectively). Additionally, girls also reported significantly higher ratings of ethnic identity (M = 37.39; p < .001) as compared to the boys (M = 11.40). No significant difference was found in socioeconomic status between boys and girls. Levene's Test for Equality of Variances was nonsignificant for all variables except for depression; therefore, all comparisons were made assuming equal group variances except for depression, for which equal variances were not assumed.

Additionally, independent t-test comparisons were made between the reports of ethnic identity of parents who completed English and Spanish versions of the Multigroup Ethnic Identity Measure. Results indicated that parents who completed the Spanish version reported significantly higher levels of ethnic identity (M = 38.72; p < .001) than parents who completed the English version (M = 35.02), indicating that the primarily Spanish-speaking parent group reported experiencing a higher understanding of and adherence to the customs and traditions of their cultural and/or ethnic background.

Table 1. Means and Standard Deviations Overall and by Early Adolescent Gender

	Overall		Ma	les	Fem	ales	
Variable	M	SD	M	SD	M	SD	t
Ethnic Identity	36.18	5.48	34.75	5.17	37.39	5.46	-3.98***
Scholastic Competence	16.54	4.27	16.41	4.26	16.67	4.32	49
Social Acceptance	18.13	4.05	18.24	3.96	18.07	4.12	.33
Athletic Competence	16.53	4.16	17.85	3.92	15.49	4.09	4.71***
Physical Competence	16.90	4.72	17.97	4.46	16.09	4.68	3.29**
Behavioral Competence	16.77	4.18	16.25	4.30	17.22	4.07	-1.86
Global Self- Worth	18.73	3.99	18.91	3.85	18.59	4.11	.64
Self- Concept	40.00	9.10	39.96	9.51	40.09	8.72	12
Anxiety	14.92	9.11	13.25	8.06	16.24	9.69	-2.67**
Depression	10.33	9.30	8.92	8.26	11.40	9.94	-2.20*
Anger	13.78	9.76	13.38	9.99	14.14	9.63	63
Disruptive Behavior	7.00	5.60	7.70	5.83	6.48	5.40	1.75
Self-esteem	21.13	4.67	21.22	4.85	21.15	4.51	.12

*Note.* \* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

## Relationships Among Variables

Next, the correlational relationships among all continuous variables were examined for the group as a whole (Table 2) and separately by early adolescent sex (Table 3). Results regarding the whole group indicated that parents' and early adolescents' reports of ethnic identity were correlated significantly and positively, and higher levels of early adolescent ethnic identity were correlated significantly with higher ratings of self evaluations (e.g., self-esteem and selfconcept) and social acceptance. Self-esteem also was correlated significantly and positively with all dimensions of competence (scholastic, social acceptance, athletic, physical, and behavioral), global self-worth, and self-concept, and correlated significantly and negatively with anxiety, depression, anger, and disruptive behavior. All aspects of competence were correlated significantly and positively as well (i.e., higher levels of each competence area were related to higher competencies in other areas). Internalizing behaviors (e.g., depression, anxiety, and anger) demonstrated significant negative correlations with all five dimensions of competence, with the exception of a nonsignificant correlation between anger and athletic competence. Similarly, disruptive, or externalizing, behavior also demonstrated significant negative correlations with three dimensions of competence (scholastic, physical, and behavioral) as well as with the self evaluation variables (e.g., self-esteem, global self-worth, and self-concept). Additionally, socioeconomic status was correlated significantly and positively with ratings of self evaluations (e.g., self-esteem, global self-worth, and self-concept) and scholastic competence, and correlated negatively with anxiety, depression, and disruptive behavior.

When examined separately, boys and girls exhibited similar patterns of correlational relationships; however, there were several important differences. For males, ratings of ethnic identity were correlated significantly and positively with social acceptance and self-concept, but

no significant correlation was found with parent ethnic identity. For females, ethnic identity was correlated positively with self-esteem and global self-worth as well as parent ethnic identity. For both boys and girls, self-esteem was correlated positively with all competence and behavior variables; however, for females, self-esteem did not exhibit a significant correlation with athletic competence, indicating that girls' sense of self-esteem was not tied meaningfully to their sense of competence in athletics. Social acceptance was correlated significantly and positively with athletic and physical competence as well as global self-worth and self-concept for males. Boys' social acceptance also was correlated negatively with reports of anxiety and depression. For females, social acceptance demonstrated similar positive correlations (e.g., athletic and physical competence, global self-worth, and self-concept) as well as with behavioral competence and also was correlated negatively with anxiety and depression. Socioeconomic status was correlated significantly and positively with global self-worth and self-concept in boys; however, for girls, SES was correlated positively with self-esteem, scholastic and behavioral competence, and self-concept and was correlated negatively with disruptive behavior.

Table 2. Correlations for Overall Sample

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
1. Parent Eth. Id.	1														
2. Ethnic Identity	.24**	1													
B. SES	04	04	1												
I. Self-Esteem	.01	.14*	.26**	* 1											
. Scholastic	01	.02	.24**	.38***	1										
5. Social	02	.14*	.10	.38***	.21**	1									
. Athletic	06	02	.11	.23***	.19**	.34***	1								
3. Physical	.05	.01	.12	.32***	.29***	.39***	.35***	1							
. Behavioral	.04	.12	.10	.29***	.51***	.17**	.08	.29***	1						
0. Self Worth	01	.08	.15*	.51***	.42***	.43**	.31***	.60***	.48***	1					
1. Self-Concept	00	.14*	.23**	.63***	.43***	.33***	.28***	.45***	.30***	.52***	* 1				
2. Depression	.04	.04	15*	60***	24**	*26**	*21**	30***	*21**	48**	*50**	** 1			
3. Anxiety	03	.05	16*	48***	27**	*25**	*21**	30***	*19**	37**	**35**	** .75**	** 1		
4. Anger	.05	.04	11	44***	14*	14*	10	20**	25***	*-35**	*37*	** .79*	** .65*	** 1	
5. Disruptive Behavior	01	01	18**	*38***	22**	*02	.04	16**	37***	*35**	'*41* <sup>;</sup>	** .50**	** .32*	** .59*	** 1

Note. Variables 2 and 4-15 refer to early adolescent characteristics, and variables 5-9 refer to competence areas. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 3. Correlations by Early Adolescent Sex

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
1. Parent Eth. Id.	1	.13	18	13	17	09	.00	07	08	16	07	.15	.04	.14	.09
2. Ethnic Identity	.31***	* 1	11	.09	.00	.21*	.16	.10	.02	00	.23*	.06	.03	.12	.06
3. SES	.04	.04	1	.20	.17	.06	.13	.14	.03	.25*	.22*	20	15	06	12
4. Self-Esteem	.11	.18*	.31**	* 1	.46***	.48***	.35***	.27**	.28**	.54***	.65***	·59**	*40**	**38**	*30**
5. Scholastic	.09	.02	.29**	.30***	1	.20*	.16	.29**	.61***	.48***	.45***	·37**	*37**	**25**	-34***
6. Social	.03	.11	.14	.28**	.21*	1	.52***	.44***	.12	.51***	.43***	·41**	*35**	**23*	06
7. Athletic	10	04	.06	.14	.24***	.22**	1	.52***	.16	.48***	.40***	30**	26**	17	13
8. Physical	.15	.03	.10	.34***	29**	* .32**	*.16*	1	.31**	.62***	.42***	30**	32**	25**	14
9. Behavioral	.12	.15	.18*	.29***	.43***	.21**	.07*	. 31***	* 1	.44***	.32***	28**	28**	34**	*44***
10. Self Worth	.10	.17*	.07	.50***	: .39***	.37***	*.19*	.60***	.54**	* 1	.52***	55**	*39**	**42**	*38***
11. Self-Concept	.06	.07	.26**	.61***	.40***	.22**	.19*	.49***	.29**	.51***	1	55**	*37**	**35**	*43***
12. Depression	03	03	10	62**	*16*	015	10	26**	19*	42**	*46**	* 1	.77***	.75***	.48***
13. Anxiety	09	00	16	54**	*22**	17*	12	23**	17*	39**	*34**	* .73**	* 1	.70***	.36***
14. Anger	02	04	15	50**	*04	105	03	14	18*	29**	*39**	* .83**	* .63**	** 1	.59***
15. Disruptive Behavior	08	03	24**	·49**	*13	.00	12	26**	31**	*34**	*41**	** .57**	** .34**	·* .62**	* 1

Note. Correlations for females are below the diagonal; males are above. \* p < .05, \*\* p < .01, \*\*\* p < .001

# Potential Confounds for the Planned Analyses

Next, multivariate analyses of variance (MANOVA) assessed for statistically significant differences between groups for all categorical variables. Cases were excluded by pairwise deletion in these analyses. The first MANOVA included early adolescent racial categorization, early adolescent sex, early adolescent generation status, and school as the independent variables. Early adolescent racial categorization included five groupings: White (Hispanic; n = 142), White (NonHispanic; n = 26), Black (Hispanic; n = 11), Black (NonHispanic; n = 38), and Other (i.e., incorporating those early adolescents who identified themselves as Asian, Native American, Middle Eastern, Indian, Bi-racial or any other ethnic/cultural group; n = 15). Early adolescent generation status included the five categories outlined previously (see *Participants* section) and included the following group sizes:  $1^{st}$  Generation, n = 58;  $2^{nd}$  Generation, n = 112;  $3^{rd}$ Generation, n = 12;  $4^{th}$  Generation, n = 16; and  $5^{th}$ + Generation, n = 34. Data was obtained from early adolescents at five different schools. The analyses included the variables of interest in this study (i.e., self-esteem, social acceptance, global self-worth, self-concept, anxiety, depression, anger, and disruptive behavior). For means and standard deviations for each outcome variable by sex and school, see Tables 1 and 4, respectively.

Using Wilks' Lambda criterion, results indicated that the combined dependent variables were affected significantly by the interaction between early adolescent sex and school attended, F(28, 510) = 1.77, p < .05, but not by race, sex, generation status, or school independently or by any other interaction. These findings indicated that the interaction between sex and school demonstrated a significant effect on the pooled outcome variables. To investigate further the significant interaction between sex and school in predicting outcomes, the two variables were combined to identify ten groupings: 1) Males from School #1; 2) Males from School #2; 3)

Males from School #3; 4) Males from School #4; 5) Males from School #5; 6) Females from School #1; 7) Females from School #2; 8) Females from School #3; 9) Females from School #4; and 10) Females from School #5. A series of One-Way Analysis of Variance (ANOVA) was conducted utilizing the sex/school groups as the independent variable to identify potential between-group differences in each outcome variable. A significant main effect of sex/school grouping was found for depression, F(9, 244) = 3.57, p < .001, anxiety, F(9, 245) = 3.50, p < .001, anger, F(9, 243) = 2.54, p < .01, disruptive behavior, F(9, 243) = 2.44, p < .05, and self-concept, F(9, 245) = 3.59, p < .001.

Scheffe's post-hoc analyses revealed that Males from School #2 (M = 7.05, SD = 7.21) reported significantly lower levels of depression (p < .05) than Females from School #4 (M = 20.81, SD = 12.04). With regard to anxiety, post-hoc results revealed that Males from School #2 (M = 10.40, SD = 6.65) also reported significantly lower levels of anxious symptoms (p < .01) than Females from School #4 (M = 25.55, SD = 10.20). These same two groups also differed significantly (p < .05) in self-concept with the Males from School #2 reporting higher levels than Females from School #4 (M = 43.03, SD = 9.37 and M = 30.00, SD = 8.11, respectively). Post-hoc analyses revealed no specific between-group differences with regard to anger or disruptive behavior.

Additionally, a One-Way Analysis of Variance (ANOVA) revealed significant differences in socioeconomic status among all schools (except for School #1 compared with School #5), F(4, 228) = 22.43, p < .001. This fact may explain partially differences in certain outcomes by school given that SES was correlated significantly with many variables (e.g., anxiety, depression, disruptive behavior, and self-concept) when examining the complete sample. In particular, the largest significant difference (p < .001) in SES was found between School #2

(M = 47.55, SD = 9.17) and School # 4 (M = 25.19, SD = 8.98), illustrating the considerably higher combination of achieved parental education level and current occupation (i.e., the two components of the SES variable in this study) of the parents of early adolescents from School #2 in this sample.

In addition to the influence of SES upon differences in reports of emotional and behavioral characteristics between schools, the significantly lower reports of depression and anxiety accompanied by higher self-concept for Males from School #2 as compared to Females from School #4 may relate partially to other descriptive differences exist between School #2 and School #4. Schools in Florida are assigned "performance grades" that are determined according to a formula accounting for various characteristics of the student body, including the percentage of students meeting high standard scores on the reading, writing, and mathematics sections of the annual Florida Comprehensive Assessment Test (FCAT), the percentage of students achieving "learning gains" according to yearly increases in FCAT scores, and the determination of "adequate progress" being made by the lowest 25% (i.e., according to FCAT scores) of the early adolescents in the school. In 2005, School #2 was considered an "A" school, whereas School #4 was rated as a "C" school (Florida Department of Education, 2005), indicating that the students at School #4 did not perform as well on the measures related to the standardized testing of achievement.

Additionally, 43% of the student population of School #2 received "free and reduced lunch," indicating that less than half of the students met low-income criteria to be eligible for this program. In contrast, 88% of the student population of School #4 participated in this program, demonstrating the extreme economic disadvantage experienced by a large majority of those students (Florida Department of Education, 2005). The results of this study were consistent with

this characteristic of the overall school populations, with a One-Way Analysis of Variance (ANOVA) yielding significant differences between schools on estimated yearly income,  $F(4, \frac{1}{2})$ (243) = 30.56, p < .001. In particular, Scheffe's post-hoc analyses revealed that the families of the early adolescents sampled from School #2 experienced significantly higher (p < .001) reported income levels than families from School #4. Interestingly, both schools were similar in the percentage of students belonging to "minority" groups (i.e., School #2 reported 80% and School #4 reported 96%; Florida Department of Education, 2005), suggesting that minority status (as determined with regard to national population statistics rather than comparison to the immediate area population statistics) likely had less impact on the psychological outcomes of these early adolescents as compared to the impact of the differences in economic resources. Supporting this notion, neither racial categorization nor generation status demonstrated main effects on outcomes; in contrast with the hypotheses (means and standard deviations are provided in Table 5 and 6). In summary, it appears that, consistent with previous literature (Duncan, Brooks-Gunn, & Klebanov, 1994), several aspects of these early adolescents' family and community environments may relate to group differences in psychological outcomes between early adolescents from different schools in this region.

A second MANOVA included parent racial categorization, marital status, and estimated yearly income as independent variables and examined the same subset of dependent variables (i.e., self-esteem, social acceptance, global self-worth, self-concept, anxiety, depression, anger, and disruptive behavior). None of these parent variables demonstrated independent main effects (parent racial categorization, F(32, 551) = 1.45, p = .054; marital status, F(40, 652) = .87, p = .70; and estimated yearly income, F(56, 808) = .81, p = .84) or interactional effects upon the set of outcome variables for the entire sample.

Table 4. Means and Standard Deviations by School

	Schoo	ol #1	Schoo	ol #2	Scho	ol #3	Schoo	ol #4	Scho	ol #5
Variable	М	SD								
Social Acceptance	17.56	.69	19.26	.60	18.37	.86	17.87	1.13	17.87	.89
Global Self Worth	18.29	.71	19.82	.62	18.61	.88	17.99	1.16	18.62	.91
Self-Concept	40.08	1.63	43.97	1.43	39.92	2.03	31.81	2.67	39.43	2.10
Anxiety	15.22	1.62	11.57	1.42	13.27	2.02	21.72	2.65	18.23	2.09
Depression	10.43	1.59	8.06	1.40	10.26	1.99	15.89	2.61	13.37	2.05
Anger	14.67	1.61	11.66	1.41	13.24	9.28	19.90	2.63	16.17	2.07
Disruptive Behavior	7.00	1.00	6.24	.87	6.16	1.24	9.53	1.63	8.45	1.28

Table 5. Means and Standard Deviations by Early Adolescent Racial Categorization

	Wh (Hisp		Wh (NonHi		Bla (Hisp		Bla (NonHi		Oth	ner
Variable	М	SD	М	SD	М	SD	М	SD	М	SD
Ethnic Identity	36.69	.91	32.20	1.07	37.15	1.41	37.47	1.13	39.19	1.62
Self-esteem	20.31	.90	23.80	1.05	22.04	1.39	22.13	1.11	21.89	1.59
Social	18.30	.76	18.31	.89	20.23	1.18	18.10	.94	18.61	1.35
Acceptance Global Self Worth	17.69	.77	19.12	.90	19.86	1.19	19.30	.96	19.38	1.37
Self-Concept	39.92	1.73	43.91	2.03	39.52	2.69	42.28	2.16	43.53	3.09
Anxiety	15.08	1.74	10.73	2.03	18.77	2.70	15.91	2.16	12.90	3.10
Depression	10.74	1.80	6.56	2.10	14.89	2.79	10.60	2.23	8.01	3.20
Anger	14.96	1.83	11.93	2.14	17.26	2.84	17.05	2.28	10.55	3.26
Disruptive Behavior	6.98	1.07	6.26	1.26	7.06	1.67	7.57	1.34	7.11	1.91

*Note*: No significant between-group differences were found for all outcome variables.

Table 6. Means and Standard Deviations by Early Adolescent Generation Status

	1 <sup>st</sup> Gen	eration	2 <sup>nd</sup> Gen	eration	3 <sup>rd</sup> Gen	eration	4 <sup>th</sup> Gen	eration	5 <sup>th</sup> + Ge	neration
<u>Variable</u>	M	SD	М	SD	M	SD	M	SD	M	SD
Ethnic Identity	34.39	1.12	36.81	.71	36.77	1.75	37.83	1.37	34.74	1.34
Self-esteem	19.68	1.10	22.15	.70	23.21	1.72	23.86	1.35	21.54	1.32
Social	17.01	.93	18.99	.59	19.63	1.46	19.24	1.14	17.72	1.12
Acceptance Global Self	17.64	.94	19.45	.60	17.14	1.48	21.43	1.15	17.62	1.13
Worth Self-Concept	37.63	2.13	40.43	1.35	43.75	3.34	48.38	2.61	41.07	2.55
Anxiety	16.32	2.13	14.90	1.36	8.57	3.35	11.95	2.61	16.33	2.56
Depression	12.06	2.20	10.10	1.40	6.66	3.45	7.83	2.70	9.87	2.64
Anger	15.38	2.25	13.85	1.43	10.54	3.52	12.71	2.75	17.22	2.70
Disruptive Behavior	8.06	1.32	7.44	.84	5.84	2.07	5.00	1.61	7.74	1.58

*Note*: No significant between-group differences were found for all outcome variables.

## Regression Analyses

According to the proposed models, ethnic identity was hypothesized to correlate significantly with various emotional and behavioral outcomes; however, this study did not demonstrate such findings. In contrast, another factor, socioeconomic status, was found to relate significantly to several outcome variables (i.e., positively with self-esteem, global self-worth, self-concept, and scholastic competence, and negatively with anxiety, depression, and disruptive behavior). Given these relationships, SES was selected to replace ethnic identity within the proposed moderational models, and subsequent statistical analyses examined SES as a predictive factor in various outcomes.

Hierarchical multiple regression analyses were used to examine the predictive value of socioeconomic status alone and in combination with other variables in early adolescents' ratings of their current functioning in terms of depression, anxiety, anger, disruptive behavior, and self-concept. These analyses also were conducted to assess the moderating effects of social acceptance upon the relationship between socioeconomic status and early adolescent adjustment. According to the models proposed in Figures 1 and 2 (i.e., assuming the same structure with SES replacing ethnic identity), a significant interaction term between SES and Social Acceptance with regard to each measure of early adolescent psychological adjustment was expected (e.g., Baron & Kenny, 1986), that is after variance is accounted for by SES and Social Acceptance independently.

Results revealed from MANOVA statistics indicated a main effect of the interaction between sex and school on the set of dependent variables; therefore to exclude variance accounted for by this interaction, it was entered as Step 1 of all regression analyses. The interaction between sex and school was created by simple multiplication of the two independent

factors, yielding a sex X school interaction term. Socioeconomic status scores were entered independently in Step 2 in the regression equation, followed by Social Acceptance independently in Step 3. An SES X Social Acceptance interaction term (also created by simple multiplication of the two independent factors) was entered last in Step 4. Regression analyses were conducted separately with regard to each dependent variable.

# Depression

The regression analysis examining early adolescents' ratings of their depressive symptomatology (see Table 7) demonstrated that, in Step 1, the interaction between sex and school did not predict significantly early adolescents' current depression, F(1, 217) = .55, p = .46. Step 2 was nonsignificant overall, F(2, 216) = 2.39, p = .09. Step 3 was significant, F(3, 215) = 6.46, p < .001. In this step, the sex X school interaction term was not a significant predictor, but SES approached significance (p < .06). Early adolescents' ratings of their Social Acceptance served as a significant predictor (p < .001) of depression in Step 3. That is, early adolescents' ratings of their Social Acceptance were related negatively, p = -.26, p < .001, to their current level of depression. Finally, Step 4 was significant, p = -.26, p < .001. In Step 4, the sex p = -.26 school interaction term and Social Acceptance did not serve as significant predictors of depression. Both SES and the SES p = -.26 school interaction term served as significant predictors (p < .05 and p < .05, respectively).

To investigate further the significant interaction between Socioeconomic Status and Social Acceptance in predicting outcomes, both variables were examined categorically by conducting a median split for each group. Once divided dichotomously, the two variables were combined to identify four groupings: 1) low SES and low Social Acceptance (i.e., low SES/low SA); 2) low SES and high Social Acceptance (i.e., low SES/high SA); 3) high SES and low

Social Acceptance (high SES/low SA); and 4) high SES and high Social Acceptance (high SES/high SA). A One-Way Analysis of Variance (ANOVA) was conducted subsequently utilizing the SES-Social Acceptance groups as the independent variable to identify potential between-group differences in reported levels of depression. Results indicated a main effect of SES/SA grouping upon depression that approached statistical significance, F(3, 200) = 2.50, p < .06. Scheffe's post-hoc analyses indicated that the difference in reported depression between the low SES/low SA group (M = 12.66, SD = 9.42) and the high SES/high SA (M = 8.06, SD = 7.44) group also approached statistical significance (p < .08).

Table 7. Regression Analyses for Predictor Variables and Depression

Predictor Variables	ß	t
Block 1 ( $r^2 = .003$ )		
Sex X School	.05	.74
Block 2 ( $r^2 = .022$ )	.00	., .
Sex X School	00	03
SES	15	-2.06*
Block 3 $(r^2 = .083)***$		
Sex X School	03	45
SES	13	-1.90
Social Acceptance	25	-3.78***
Block 4 $(r^2 = .108)***$		
Sex X School	02	24
SES	.62	1.98*
Social Acceptance	.32	1.33
SES X Social Acceptance	-1.00	-2.46*

*Note:* \* p < .05, \*\* p < .01, \*\*\* p < .001

**Anxiety** 

The regression analysis examining early adolescents' ratings of their anxious symptomatology (see Table 8) demonstrated that, in Step 1, the interaction between sex and school predicted significantly early adolescents' current anxiety, F(1, 217) = 6.50, p < 05. Step 2 also was significant, F(2, 216) = 4.66, p < 05; however, the sex X school interaction term no longer served as a significant predictor, and SES did not become a significant predictor. Step 3 was significant, F(3, 215) = 7.13, p < .001, but neither the sex X school interaction term nor SES served as significant predictors of anxiety. Early adolescents' ratings of their Social Acceptance served as a significant predictor (p < .01) of anxiety in Step 3. That is, early adolescents' ratings of their Social Acceptance were related negatively, r = -.25, p < .001, to their current level of anxiety. Finally, Step 4 was significant, F(4, 214) = 9.08, p < .001, and SES, Social Acceptance, and the SES X Social Acceptance interaction term each served as significant predictors (p < .01, p < .05, and p < .001, respectively). In Step 4, the sex X school interaction term did not serve as a significant predictor of anxiety.

Utilizing the four SES/SA groupings as the independent variable, a One-Way Analysis of Variance (ANOVA) was conducted to identify between-group differences in reported levels of anxiety. Results indicated a significant main effect of SES/SA grouping upon anxiety, F(3, 201) = 3.82, p < .05. Scheffe's post-hoc analyses revealed that the low SES/low SA group (M = 17.00, SD = 9.35) reported significantly higher levels of anxiety (p < .05) than the high SES/high SA group (M = 11.50, SD = 6.64).

Table 8. Regression Analyses for Predictor Variables and Anxiety

Predictor Variables	ß	t
Block 1 $(r^2 = .029)^*$		
Sex X School	.17	2.55*
Block 2 $(r^2 = .041)^*$		
Sex X School	.13	1.81
SES	12	-1.66
Block 3 $(r^2 = .090)***$		
Sex X School	.10	1.47
SES	10	-1.50
Social Acceptance	22	-3.41**
Block 4 $(r^2 = .145)***$		
Sex X School	.12	1.82
SES	1.00	3.27**
Social Acceptance	.61	2.61*
SES X Social Acceptance	-1.46	-3.70***

*Note:* \* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

Anger

The regression analysis examining early adolescents' ratings of their feelings and expressions of anger (see Table 9) demonstrated that, in Step 1, the interaction between sex and school did not predict significantly their current anger, F(1, 217) = .07, p < .79. Both Step 2 and Step 3 also were not significant, F(2, 216) = 1.45, p < .24 and F(3, 215) = 2.18, p < .09, respectively. Finally, Step 4 was significant, F(4, 214) = 3.05, p < .05. In this step, the sex by school interaction term did not serve as a significant predictor, SES approached significance (p < .06) as a predictor, and Social Acceptance did not serve as a significant predictor of anger. In Step 4, only the interaction term between SES and Social Acceptance served as a significant predictor (p < .05) of anger.

A One-Way Analysis of Variance (ANOVA) examining the impact of the four SES/SA groupings upon reported levels of anger revealed no significant main effect of grouping upon anger, F(3,199) = .54, p < .65.

Table 9. Regression Analyses for Predictor Variables and Anger

Predictor Variables	ſS	t
Block 1 ( $r^2 = .000$ )		
Sex X School	.02	.27
Block 2 $(r^2 = .013)$		
Sex X School	03	34
SES	12	-1.68
Block 3 $(r^2 = .029)$		
Sex X School	04	55
SES	11	-1.58
Social Acceptance	13	-1.90
Block 4 $(r^2 = .054)$ *		
Sex X School	03	36
SES	.62	1.94
Social Acceptance	.43	1.74
SES X Social Acceptance	98	-2.35*

*Note:* \* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

# Disruptive Behavior

The regression analysis examining early adolescents' ratings of their own disruptive behavior (see Table 10) demonstrated that, in Step 1, the interaction between sex and school did not predict significantly early adolescents' current externalizing behavior, F(1, 217) = .36, p < .55. Step 2 was significant, F(2, 216) = 4.93, p < 01. Whereas the sex X school interaction term was not significant in this step, SES served as a significant predictor (p < .01) of disruptive behavior. Step 3 also was significant, F(3, 215) = 3.29, p < .05, but the sex X school interaction term did not serve as a significant predictor of disruptive behavior. SES, however, remained a significant predictor (p < .01) in Step 3 and was related significantly and negatively, r = -.18, p < .01, to early adolescents' current reports of disruptive behavior. Social Acceptance did not serve as a significant predictor of disruptive behavior in Step 3. Finally, Step 4 was significant, F(4, 214) = 2.82, p < .05; however, no individual factor served as a predictor of disruptive behavior in this step.

Additionally, a One-Way Analysis of Variance (ANOVA) was conducted to identify differences in reported symptoms of disruptive behavior between groupings of the interaction between SES and Social Acceptance. Results revealed a significant main effect of SES/SA grouping upon disruptive behavior, F(3, 199) = 3.86, p < .05. Scheffe's post-hoc analyses revealed that the low SES/high SA group (M = 9.58, SD = 7.16) reported significantly more (p < .05) disruptive behavior than the high SES/high SA group (M = 5.47, SD = 3.89).

Table 10. Regression Analyses for Predictor Variables and Disruptive Behavior

Predictor Variables	ß	t
Block 1 ( $r^2 = .002$ )		
Sex X School	04	60
Block 2 $(r^2 = .044)**$		
Sex X School	12	-1.65
SES	22	-3.08**
Block 3 $(r^2 = .044)^*$		
Sex X School	12	-1.66
SES	22	-3.06**
Social Acceptance	01	20
Block 4 $(r^2 = .050)$ *		
Sex X School	11	-1.56
SES	.16	.48
Social Acceptance	.27	1.09
SES X Social Acceptance	50	-1.19

*Note:* \* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

# Self-Concept.

The regression analysis examining early adolescents' ratings of their self-concept (see Table 11) demonstrated that, in Step 1, the interaction between sex and school did not predict significantly early adolescents' current self-concept, F(1, 217) = .23, p < .64. Step 2 was significant, F(2, 216) = 6.55, p < 01. Whereas the sex X school interaction term was not significant in this step, SES served as a significant predictor (p < .001) of self-concept. Step 3 also was significant, F(3, 215) = 13.17, p < .001, but the sex X school interaction term again did not serve as a significant predictor of self-concept. SES remained a significant predictor (p < .01) of self-concept in this step, and Social Acceptance also served as a significant predictor (p < .001). SES was related significantly and positively with current ratings of self-concept, p = .23, p < .01, and Social Acceptance demonstrated a similar correlation, p = .33, p < .001, with self-concept. Finally, Step 4 was significant, p = .001, p < .001. The sex X school interaction term and Social Acceptance did not serve as significant predictors, but SES approached significance (p < .06) as a predictor of self-concept. Only the SES X Social Acceptance interaction term served as a significant predictor (p < .01) of self-concept in Step 4.

A One-Way Analysis of Variance (ANOVA) also was conducted to identify differences in reported self-concept between SES/SA groupings. Results indicated a significant main effect of SES/SA grouping upon self-concept, F(3, 201) = 7.44, p < .001. Scheffe's post-hoc analyses revealed that the low SES/low SA group (M = 36.23, SD = 10.06) reported significantly lower (p < .001) self-concept than the high SES/high SA group (M = 43.75, SD = 7.15). The low SES/low SA group also reported significantly lower (p < .05) self-concept than the low SES/high SA group (M = 41.63, SD = 8.48).

 ${\it Table~11.} \ {\it Regression~Analyses~for~Predictor~Variables~and~Self-Concept}$ 

Predictor Variables	ß	t
Block 1 $(r^2 = .001)$		
Sex X School	03	47
Block 2 $(r^2 = .057)**$		
Sex X School	.06	.81
SES	.25	3.59***
Block 3 $(r^2 = .155)***$		
Sex X School	.09	1.40
SES	.23	3.48**
Social Acceptance	.32	4.99***
Block 4 $(r^2 = .184)***$		
Sex X School	.08	1.18
SES	57	-1.91
Social Acceptance	29	-1.28
SES X Social Acceptance	1.07	2.76**

*Note:* \* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

## **DISCUSSION**

The purpose of this study was to examine the relationships among ethnic identity, socioeconomic status, competencies, and emotional and behavioral outcomes in a sample of culturally diverse early adolescents. Information was obtained from self-reports of the early adolescents in this sample, and the results supported partially the proposed hypotheses.

It was anticipated that early adolescents of Hispanic background would report higher levels of anxiety and depression than Caucasian early adolescents due to acculturative stress (Sam & Berry, 1995) and that African American early adolescents would report higher levels of ethnic identity than Caucasian and Hispanic early adolescents (Phinney, 1994). Contrary to expectations, mean comparisons using MANOVA statistics did not reveal significant differences between racial/ethnic groups on depression, anxiety, anger, disruptive behavior, or self-concept. Given that outcomes did not differ significantly according to race/ethnicity and that SES was linked significantly with many outcomes, it appears that SES proved to be a better predictor than race or ethnicity of the emotional and behavioral functioning of the early adolescents in this sample (Duncan, Brooks-Gunn, & Klebanov, 1994; Luthar & Latendresse, 2005; Silverman and Ginsburg, 1995; Szapocznik, Scopetta, Kurtines, & Aranalde, 1978).

Also, no sex differences were found in the early adolescents' reports of anger, disruptive behavior, self-concept, or SES; however, *t*-test analyses found that girls reported significantly higher levels of ethnic identity, depression, and anxiety than boys. These findings regarding sex differences are consistent with previous literature describing the developmental patterns of

psychopathology. Research has indicated that before the onset of puberty, the rates of depression for girls and boys are equal; however, after the onset of puberty, rates of depression in girls become significantly higher than that of boys (Phares, 2003). Given that this sample incorporated early adolescents between the ages of 10- to 14-years (i.e., generally at or just after the onset of puberty), higher reports of depression in girls were expected and observed. With regard to anxiety, higher rates in females than males have been observed during adolescence and into adulthood (Silverman & Ginsburg, 1995). These findings were supported in this study within a somewhat younger population (i.e., early adolescents). In addition, adolescent and adult females are reported to be two times more likely than males to develop clinical depression (i.e., Major Depressive Disorder), and female adults also appear to be more likely to experience clinical manifestations of anxiety (e.g., Panic Disorder and Generalized Anxiety Disorder) as compared to males (American Psychiatric Association, 2000).

In accordance with previous findings regarding sex differences, an interactional effect between sex and school was identified as a confounding factor according to MANOVAs (i.e., a significant sex by school interaction effect was found with regard to depression, anxiety, anger, disruptive behavior, and self-concept). In particular, this finding was driven primarily by reports of significantly less depression and anxiety and higher self-concept of one group of boys at a specific school (i.e., an educationally "A-rated" school with higher reported SES-related characteristics, such as achieved parental education and occupation, and higher within-family and overall school income levels) as compared to a particular group of girls at a school rated lower on these characteristics. Characteristics of these two particular schools were compared, and, given that significant differences in SES emerged between these schools, it appeared that several other variables related to SES (e.g., family income, achievement scores, community

characteristics) also may have explained partially these results. Overall, this interaction effect was consistent with previous literature regarding sex differences in depression and anxiety (e.g., American Psychiatric Association, 2000; Silverman & Ginsburg, 1995; Phares, 2003) and other research illustrating the environmental influences (e.g., SES) upon psychological outcomes that supersede the impact of racial categorization or generation status alone (neither of which demonstrated main effects upon the outcomes in this study; Duncan, Brooks-Gunn, & Klebanov, 1994).

Correlational relationships were expected between several independent variables (i.e., ethnic identity, SES, social acceptance) and each dependent variable (i.e., depression, anxiety, anger, disruptive behavior, and self-concept). As expected, increased reports of early adolescents' ethnic identity were related to increased reports of parents' ethnic identity and ratings of self evaluations (e.g., self-esteem and self-concept) and social acceptance. Contrary to the hypotheses, early adolescents' reports of ethnic identity were not related to self-reported psychological symptoms (e.g., depression, anxiety, anger, and disruptive behavior), which may have occurred as a result of various factors. The relationships between these variables demonstrated in previous literature (e.g., Martinez & Dukes, 1997; Phinney, DuPont, Espinosa, Revill, & Sanders, 1994; Yasui, Dorham, & Dishion, 2004) may have occurred as a result of the minority status of those groups sampled. That is, individuals who belong to diverse ethnic groups that are considered a minority group in the surrounding area may report higher levels of ethnic identity as a result of the minority status (Phinney, 1992).

In this study, the immediate population from which the sample was obtained was predominantly Hispanic, as were the majority of early adolescent participants. Their reports of ethnic identity, therefore, may not have shown significant relationships with their emotional and

behavioral functioning due to the fact that they did not belong to a minority group in this region. Additionally, it may be that a restricted range of the early adolescents' responses in the current sample promoted a lack of relationships amongst these variables in this study. It may have been the case that the early adolescents in this sample are living in a social microcosm, thus reporting similar ratings of ethnic identity due to the inherent cultural diversity in their home, school, and social environments. In other words, these early adolescents are exposed consistently to the customs and traditions of multiple cultures, particularly Hispanic culture; therefore, a majority of early adolescents may relate well with other early adolescents of dissimilar backgrounds while identifying well with their own culture. That is, there may exist high within sample homogeneity, despite subgroups belonging to dissimilar ethnic backgrounds.

Another possible reason for a nonsignificant correlation between ratings of ethnic identity and psychological outcomes may have resulted from the lack of developmental readiness of the early adolescents sampled (e.g., Phinney, 1992). It may be that this age group has not yet achieved the developmental stage in which they are able to conceptualize themselves as meaningfully belonging to multiple groups. Thus, they may not have differentiated themselves yet from dissimilar cultural and/or ethnic backgrounds. This explanation is consistent with the notion that development of ethnic identity is concurrent with the development ego identity postulated by Ericksen (1968), both of which are thought to occur primarily during the period of mid- to late-adolescence (Phinney, 1992).

Although ethnic identity did not demonstrate the predicted relationships, socioeconomic status emerged as an important factor in the relationships among the variables examined in this study, which is consistent with previous findings (e.g., Duncan, Brooks-Gunn, & Klebanov, 1994; Luthar & Latendresse, 2005). Given that SES demonstrated a significant relationship with

many outcome variables (e.g., positive correlations with self-esteem, global self-worth, self-concept, and scholastic competence, and negative correlations with anxiety, depression, and disruptive behavior), it replaced ethnic identity in the predictive analyses. Further, results indicated a reasonable fit within the proposed model for several outcomes. Since SES, a rather static factor in these early adolescents' lives, can be viewed as a meaningful predictor of several outcomes, SES was substituted for ethnic identity in the planned analyses performed in this study. Whereas it likely might be difficult to improve an individual's economic resources or social position, interventions may focus on intervening variables that have the potential to be modified and/or enhanced. Thus, identifying variables that moderate the relationship between SES and early adolescents' outcomes is essential in determining ways to offset the potentially negative impact of socioeconomic adversity.

# Depression

With regard to early adolescents' ratings of their own depressive symptomatology in this study, both SES and the interaction between SES and Social Acceptance served as significant predictors. This finding suggested that Social Acceptance moderated the relationship between SES and depression. Additionally, subsequent analyses revealed that the group that reported both low SES and low Social Acceptance endorsed significantly higher levels of depression as compared with the group that endorsed high SES and high Social Acceptance. Thus, it appeared that it was the extreme differences in both factors that may be related most closely to reports of depression. This study examined the "peer status" approach to social acceptance (Rose-Krasnor, 1997) which identified how well this group of early adolescents perceived themselves to be accepted by their peer group. According to these results, the level of peer acceptance may have impacted the influence that SES had upon reports of depressive symptoms.

It is likely that actual social skills may relate to this self-perception of acceptance, but only moderate correlations between these constructs have been found in previous research (e.g., Rose-Krasnor; 1997). If some overlap does exist, however, it may prove beneficial to intervene to improve social skills, particularly since other research has demonstrated that deficits in social skills relate significantly to the development and maintenance of depressive symptoms (Segrin, 2000). Segrin (2000) discussed that the nature of this relationship is unclear (i.e., poor social skills may be a causal factor of depression, depression may cause poor social skills, or social skills deficits may act as a risk factor or point of vulnerability for the development of depression). Given these findings, improving early adolescents' self perceived peer acceptance in combination with enhancement of social skills may provide the best method of intervention for economically disadvantaged early adolescents who experience depression.

Anxiety

With regard to early adolescents' ratings of their own anxious symptomatology in this study, Social Acceptance, SES, and the interaction between SES and Social Acceptance all served as significant predictors in various steps of the regression. This finding suggested that, similar to findings regarding depression, Social Acceptance moderated the relationship between SES and anxiety. Subsequent analyses revealed that, consistent with findings for depression, the group that reported both low SES and low Social Acceptance endorsed significantly higher levels of anxiety as compared with the group that endorsed high SES and high Social Acceptance. In fact, it appeared that the proposed moderational model fit best with regard to anxiety in that all steps of the regression analysis were significant. These findings suggested that, similar to depression, the extent to which early adolescents feel accepted by their peers affects the potentially negative influence of SES upon anxiety. For example, social acceptance

may serve as a buffer against the development of anxious symptomatology or it may allow early adolescents to manage symptoms of anxiety that may exist in relation to social disadvantage or family stressors (e.g., Duncan, Brooks-Gunn, & Klebanov, 1994).

Anger

With regard to early adolescents' ratings of their own feelings and expressions of anger, the interaction between SES and Social Acceptance served as a significant predictor, but subsequent analyses indicated no significant differences between SES/SA groups with regard to reports of anger. These findings suggested that the proposed moderational model fit for this outcome. As with other findings, Social Acceptance likely moderated the relationship between SES and reports of anger. These findings were expected given that in early adolescents, anger and irritability are often observed as manifestations of depression (American Psychiatric Association, 2000), and these results are consistent with those related to depression. In contrast, these results suggested that SES was not independently related to anger, indicating that extreme social disadvantage is not a strong independent factor in this behavioral characteristic, as may have been expected previously (e.g., Duncan, Brooks-Gunn, & Klebanov, 1994).

## Disruptive Behavior

With regard to early adolescents' reports of their disruptive behavior, SES was correlated negatively with and served as a significant predictor of disruptive behavior. The interaction between SES and Social Acceptance, however, did not emerge as a significant predictor in these analyses, suggesting that the proposed model does not fit for disruptive behavior when examining this sample. The negative influence that SES has upon the development of disruptive behavior, therefore, was not moderated by social acceptance, which was expected given that social acceptance was not correlated significantly with disruptive behavior. Essentially, SES was

such a strong predictor of disruptive behavior that early adolescents' perceptions of their social acceptance did not help to predict their experience of externalizing behavior, a finding that is consistent with previous literature describing the strong impact of family adversity on externalizing behavior (e.g., Counts, Nigg, Stawicki, Rappley, & von Eye, 2005).

A factor that additionally may explain these findings was that the ratings of disruptive behavior may have been somewhat skewed (i.e., reported as less than the actual frequency and severity) due to the data collection method (i.e., early adolescent self-report). Research has suggested that the validity and usefulness of particular informants' reports may vary depending upon the nature of the behaviors observed (e.g., internalizing as compared to externalizing behavior; Achenbach, McConaughy, & Howell, 1987). In particular, some findings have illustrated differences between parent, teacher, and early adolescent ratings have suggested that children and adolescents may not be the most accurate reporters of their own externalizing behavior (Hart, Lahey, Loeber, & Hanson, 1994). Therefore, to ascertain a comprehensive and valid evaluation of child or adolescent behavior, particularly with regard to externalizing behavior, the use of multiple informants is essential (e.g., Achenbach et al., 1987). In contrast, if these findings are viewed as accurate representations of early adolescent disruptive behavior, the results of this study suggested that it may not prove effective to utilize interventions focused on social acceptance enhancement to prevent or treat symptoms of disruptive behavior.

## Self-Concept

With regard to early adolescents' reports of their self-concept, the findings supported the moderational impact of Social Acceptance upon the relationship between SES and self-concept. Subsequent analyses revealed that, consistent with findings for depression and anxiety, the group that reported both low SES and low Social Acceptance endorsed significantly lower levels of

self-concept as compared to the group that endorsed high SES and high Social Acceptance. Additionally, the group that reported both low SES and low Social Acceptance also reported significantly lower self-concept than the group that reported low SES and high Social Acceptance. These findings suggested that early adolescents who experience significant socioeconomic disadvantage and perceive themselves as having high Social Acceptance may develop a healthier self-concept. Thus, for early adolescents who perceive themselves as generally accepted by their peers, this fact may provide a buffering effect against the negative effects of low SES upon self-concept.

## *Implications*

Considering the findings of this study, it appears that the degree of culturally diverse early adolescents' social acceptance may be an important factor in predicting the development of internalizing and externalizing behavior problems (e.g., depression, anxiety, and self-concept; Segrin, 2000) in this age group. Therefore, rather than directly focusing intervention efforts upon psychological symptomatology, treatments should be developed that enhance early adolescents' abilities to assess realistically their peer acceptance and develop appropriate social skills for use within different social spheres. Increased self-appraisals of acceptance within social situations may modify negative effects (e.g., higher reports of anxiety and depression) of extreme socioeconomic circumstances, particularly for early adolescents experiencing low-income or poverty conditions within their family and/or their community.

#### Limitations

Various methodological limitations of this study also must be considered when evaluating the results. The sample included a majority of early adolescents of Hispanic background (62.2%), which is consistent with the demographic composition of the region in

which they live. This fact may have affected the results given that this group is not considered a minority in this area and may not experience similar levels of acculturative stress as their minority counterparts in other areas of the country. Previous research examining groups of various ethnic backgrounds have often confounded ethnicity with minority or recent generation status; therefore, including an ethnically diverse sample not considered a minority in their area may have resulted in differing outcomes (e.g., Phinney, 1992). Additionally, this sample of early adolescents reported Nonclinical ranges of emotional and behavioral problems; therefore, the relationships between predictor and outcome variables may differ significantly from those observed within a clinical (or clinic-referred) sample of early adolescents.

Also, all early adolescents with Hispanic backgrounds were not grouped together given that previous research has shown varied ratings of ethnic identity between groups of adolescents from various Hispanic backgrounds (e.g., Mexican, Colombian, Guatemalan, Honduran, Nicaraguan, Puerto Rican, and Salvadoran; Umaña-Taylor & Fine, 2001). Instead, race and ethnicity data were combined to produce five categories (i.e., White (Hispanic), White (NonHispanic), Black (Hispanic), Black (NonHispanic), and Other) in an attempt to emphasize and evaluate group differences based upon phenotypic differences (i.e., physical characteristics such as skin color) with ethnic background being considered concurrently (i.e., Hispanic versus NonHispanic). This method may not have captured potential between-group differences that may have existed if all early adolescents of Hispanic background had been grouped together in one category (e.g., White, Black, Hispanic, and Other).

Another limitation of this study is that the sample was restricted to sixth grade students between the ages of 10- and 14-years in an attempt to identify whether this age group of early adolescents demonstrated the hypothesized early development of ethnic identity. Though a

significant development of ethnic identity did not appear to begin at this young age within this sample, perhaps a trend might have been observed if increasing age groups were examined. It may have proven more informative to have included a cross-sectional sample of varying age groups or a longitudinal design to investigate the developmental nature of ethnic identity formation. The non-random selection of schools from which early adolescents were sampled is another limitation of this investigation. It appears that, whereas certain selected schools were located in highly affluent areas, other schools were located in areas where the surrounding population experienced extreme poverty and social disadvantage. Furthermore, the regions where lower SES was observed in the population also incorporated a higher percentage of African American students who were not of Hispanic ethnicity. The findings regarding early adolescents pertaining to lower SES may have, in turn, incorporated an overrepresentation of this racial/ethnic group.

It also is likely that this age group of early adolescents may have varied significantly in their reading and comprehension abilities. Since the measures utilized were self-report, their responses may have been affected by these factors. Future studies may choose to incorporate observational data obtained by parents, teachers, and early adolescents to investigate inter-rater reliability of reports and to provide more validity of reports of competencies (e.g., social acceptance; Renk & Phares, 2003) emotional and behavioral problems in ethnically diverse populations. These findings support previous literature asserting the utility of interventions to increase social acceptance at the skills level as a method of prevention of the development of psychopathology (Ebata, 1986; Rose-Krasnor, 1997) or as part of a multimethod treatment for childhood emotional and behavioral disorders (Spence, 2003).

## Conclusion

Overall, the findings of this study suggested that culturally diverse early adolescents' perceptions of their own peer acceptance is an important factor in determining the extent of the effects that their socioeconomic circumstances may have upon the development of emotional and behavioral problems, particularly with regard to internalizing behavior problems. Given these findings, cognitively-based interventions used to improve early adolescents' self perceived peer acceptance in combination with social skills training may together provide the most beneficial multimodal treatment for poor reports of social acceptance. According to this model, if these interventions prove effective, the detrimental effects of economic disadvantage may be lessened, thus decreasing the likelihood that culturally diverse early adolescents will develop, maintain, and/or exacerbate symptoms of depression, anxiety, and anger. Furthermore, increased social acceptance likely will improve early adolescents' self-concept as well

# **APPENDIX**



# Office of Research and Commercialization

February23, 2005

Jenny Klein Department of Psychology University of Central Florida 4000 Central Florida Blvd. Orlando, FL 32816-1390

Dear Ms. Klein:

With reference to your protocol entitled, "Acculturation, Social Competence, and Adjustment of Ethnically Diverse Middle School Children". I am enclosing for your records the approved, full board approved document of the UCFIRB Form you had submitted to our office.

Please be advised that this approval is given for one year. Should there be any addendums or administrative changes to the already approved protocol, they must also be submitted to the Board. Changes should not be initiated until written IRB approval is received. Adverse events should be reported to the IRB as they occur. Further, should there be a need to extend this protocol, a renewal form must be submitted for approval at least one month prior to the anniversary date of the most recent approval and is the responsibility of the investigator (UCF).

Should you have any questions, please do not hesitate to call me at 407-823-2901.

Please accept our best wishes for the success of your endeavors.

Cordially,

Barbara Ward, CIM

Carbara ward

IRB Coordinator

Copies: IRB File

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