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THE ECOLOGY OF HISPANIC ETHNIC IDENTITY

By

Deborah Lisa Abber

A DISSERTATION

Submitted to
Michigan State University
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DOCTOR OF PHILOSOPHY

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ABSTRACT

THE ECOLOGY OF HISPANIC ETHNIC IDENTITY

By

Deborah Lisa Abber

This research proposed and examined an ecological model of Hispanic ethnic identity. Individual (i.e., level of acculturation), family (i.e., family ethnic socialization), and social context (i.e., minority status stress) factors were hypothesized to predict ethnic identity. In turn, ethnic identity was hypothesized to influence self-esteem, and self-esteem was hypothesized to influence depression. In addition, several relationships among the individual, family, and social context factors were hypothesized.

Participants were 159 Hispanic college students at a large midwestern university. Participants completed self-report measures on level of acculturation, family ethnic socialization, minority status stress, ethnic identity, self-esteem, and depression. Structural equation modeling (SEM) was conducted using LISREL to test the hypothesized relationships in the ethnic identity model. *Post hoc* analyses were conducted to improve the overall fit of the ethnic identity model.

The overall fit of the respecified ethnic identity model was excellent ($\chi^2 = 63.66$, df = 54, $p = 0.17$; GFI = 0.94, NFI = 0.93, RMSEA = 0.034). Direct significant, positive relationships were demonstrated from biculturalism to ethnic identity ($\beta = 0.43$); family ethnic socialization to ethnic identity ($\beta = 0.45$); ethnic identity to self-esteem ($\beta = 0.32$); biculturalism to minority status stress ($\beta = 0.21$); minority status stress to family ethnic socialization ($\beta = 0.48$); family ethnic socialization to biculturalism ($\beta = 0.39$); and

minority status stress to depression ($\beta = 0.23$). Direct significant negative relationships were demonstrated from self-esteem to depression ($\beta = -0.63$) and minority status stress to self-esteem ($\beta = -0.36$). Significant indirect relationships from the individual, family, and social context factors to ethnic identity, self-esteem, and depression were also found.

Results of this research support an ecological conceptualization of Hispanic ethnic identity and demonstrate the mediating role of ethnic identity in the relationships between the three ecological levels and mental health. Findings challenge cognitive developmental models of ethnic identity development, which conceptualize ethnic identity formation as an internal process of self-exploration. Study limitations are addressed and suggestions for future research are given.

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In loving memory of my grandmother

BEATRICE ABBER

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INTRODUCTION

Ethnic identity is one aspect of personal identity that is highly salient to members of diverse ethnic groups (Aries & Moorehead, 1989; Baldwin, 1979; Bernal, Knight, Garza, Ocampo, & Cota, 1990; Phinney, 1989, 1996; Phinney & Alipuria, 1990; Phinney, Cantu, & Kurtz, 1997; Zinn, 1980), and it has been consistently associated with psychological adjustment (e.g., Bautista de Domanico, Crawford, & De Wolfe, 1994; Chavira & Phinney, 1991; Munford, 1994; Parham & Helms, 1985; Phinney, Chavira, & Tate, 1993). As the proportion of minority group members in the United States continues to increase, it has become a research area of growing interest (Bautista de Domanico et al., 1994; Kerwin, Ponterotto, Jackson, & Harris, 1993; Phinney, 1989; Phinney et al., 1993).

However, the majority of work in this area has focused on African Americans (Kerwin, et al., 1993; Phinney, 1990; Smith, 1991). Fewer studies have involved Hispanic individuals (Bautista de Domanico et al., 1994; Phinney, 1990; Phinney et al., 1997; Ruiz, 1990) despite the fact that Hispanic Americans constitute the fastest-growing ethnic group in the United States (U.S. Bureau of the Census, 1995). Furthermore, researchers have stressed the dearth of information on ethnic identity development, with theoretical writing far outweighing empirical research (Kerwin et al., 1993; Phinney, 1990; Phinney & Chavira, 1995; Stevenson, 1994). Most of the empirical research in this area has focused on determining the psychosocial variables associated with ethnic identity (e.g., Brook, Whiteman, Balka, Win, & Gursen, 1998; Carter, 1991; Munford, 1994; Parham & Helms, 1985; Perron, Vondracek, & Skorikov, 1998); empirical research aimed at determining the factors that influence the development of positive ethnic identity is limited (Bernal, et al., 1990; Marshall, 1995; Stevenson, 1995).

A number of similar conceptual models of ethnic identity formation have been developed for various ethnic groups, including African Americans (Cross, 1978), Asian Americans (Kim, 1981), Mexican Americans (Arce, 1981), biracial individuals (Poston, 1990), and minority individuals in general (Ford, 1987). These models have been derived mainly from Erikson's (1968) theory of ego identity formation and Marcia's (1966) empirical work on the stages of ego identity development (Phinney, 1991). In general, ethnic identity formation is conceptualized as a series of stages an individual passes through over time, from a low or diffuse ethnic identity to a high or achieved one, as one's attitudes toward one's ethnic group and the dominant group develop and ethnic issues are resolved (Phinney, 1991; Rowe, Bennett, & Atkinson, 1994). Current conceptual models of ethnic identity formation have not been empirically validated; however, previous research examining ethnic identity, using both cross sectional and longitudinal designs, supports a developmental process of ethnic identity formation (Phinney, 1989; 1992; Phinney & Chavira, 1992; Phinney & Tarver, 1988).

Current models of ethnic identity development have two important limitations. First, although individuals may engage in a process of self-exploration of ethnic issues, these models oversimplify ethnic identity development by emphasizing intrapsychic factors and failing to consider the influence of external factors. Moreover, Hispanic individuals', as well as other minority individuals' sense of self and self-esteem, have been found to be highly influenced by interpersonal relationships and other external factors, such as the family, extended family, and the community, rather than by internal factors (Marín & Marín, 1991; Zayas & Solari, 1994). Hispanic ethnic identity may also be highly influenced by external factors. Second, models of ethnic identity were adapted from ego identity theory. Most of the knowledge base on child development has

generally come from studies of middle-class White families and has been based on Euro-American values and standards of behavior (Zayas, 1994; Zayas & Solari, 1994). Although theories have been adapted for ethnic minority groups, the underlying ideas may not reflect the values, attitudes, behaviors, culture, and psychological functioning of ethnic minority individuals.

In order to better understand Hispanic ethnic identity formation, contextual factors salient to Hispanic individuals, in addition to internal factors, need to be examined. This paper proposes that ecological theory is a useful framework for the study of ethnic identity because ecological frameworks provide a more comprehensive view of psychological phenomena and human functioning by considering the effects of both individual and contextual factors, and the relationships between them.

In this study, the influence of three ecological levels were examined (see Figure 1) -- the individual level (i.e., level of acculturation), the family level (i.e., family ethnic socialization), and the social context level (i.e., minority status stress). Level of acculturation, family ethnic socialization, and minority status stress were hypothesized to influence ethnic identity among Hispanic college students. In turn, ethnic identity was hypothesized to influence self-esteem. Thus, ethnic identity was hypothesized to be a mediating variable between the individual, family, and social context factors, and self-esteem. Self-esteem was hypothesized to influence depression and to mediate the relationship between ethnic identity and depression. In addition, relationships among the individual, family, and social context levels were hypothesized. Level of acculturation was hypothesized to influence the experience of minority status stress; the experience of minority status stress was hypothesized to influence family ethnic socialization; and family ethnic socialization was hypothesized to influence level of acculturation.

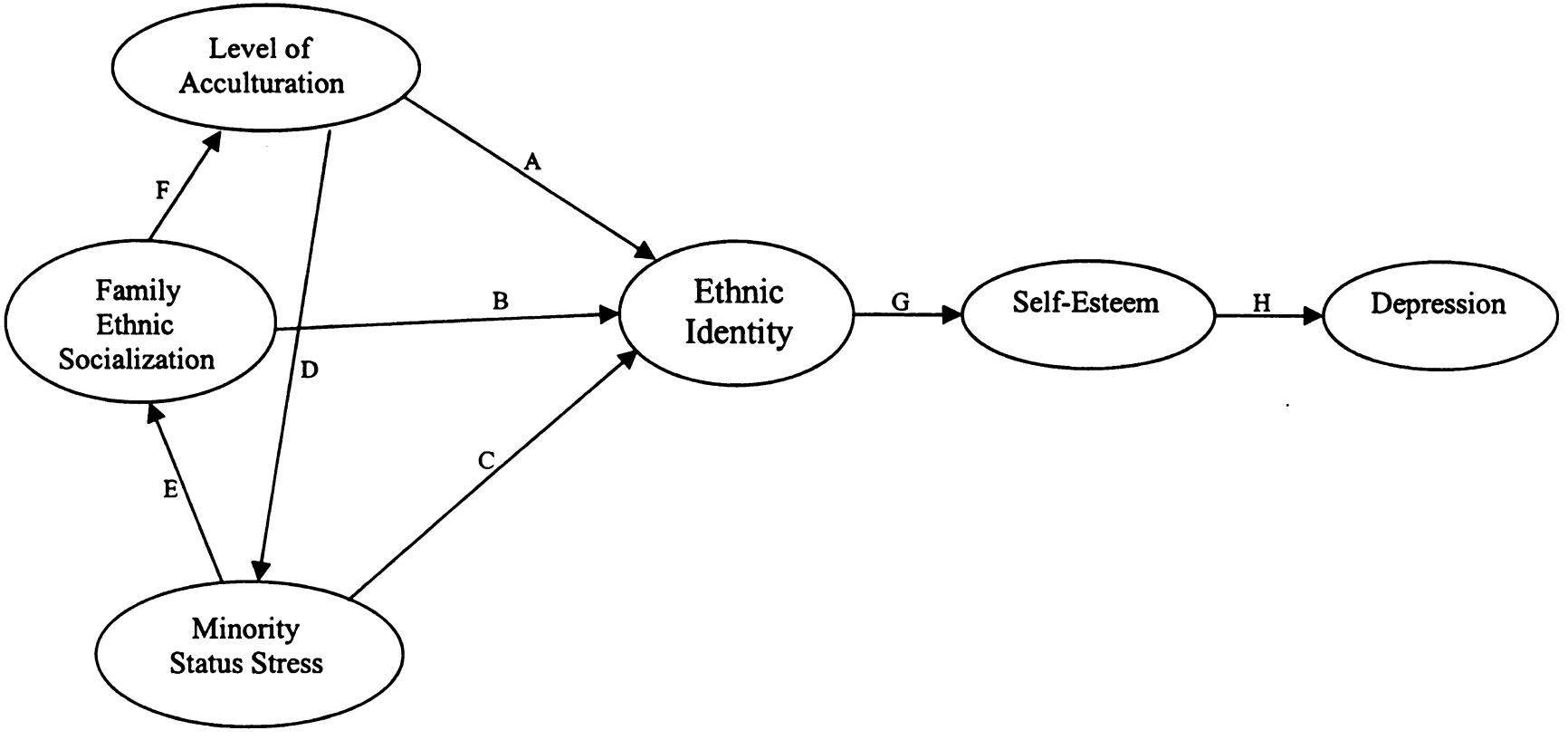

Figure 1. Ethnic Identity Structural Model

Chapter 1

LITERATURE REVIEW

Ethnic Identity

One's ethnicity is a fixed categorical variable that refers to ethnic group membership defined by country of origin; in contrast, ethnic identity is a psychological construct that varies among members of the same ethnic group and across different contexts and settings (Phinney, 1996). Based on an extensive literature review, Phinney (1990) stated that most writers define ethnic identity as the psychological relationship of ethnic group members with their own group, including self-identification as a member of one's ethnic group, a subjective sense of belonging, and positive attitudes and feelings toward one's ethnic group.

Ethnic identity is believed to be an important aspect of personal identity among ethnic group members (e.g., Aries & Moorehead, 1989; Baldwin, 1979; Bernal, et al., 1990; Phinney, 1989, 1996; Zinn, 1980) and previous studies have found that it is a highly salient component of personal identity for members of ethnic groups in which racial characteristics are apparent, including African Americans, Asian Americans, Hispanic Americans, and Native Americans (Aries & Moorehead, 1989; Phinney, 1996; Phinney & Alipuria, 1990). Ethnic identity may become particularly salient to ethnic group members during adolescence and early adulthood, when individuals face the larger developmental issue of identity formation (Erikson, 1968). Although children tend to acquire knowledge of their ethnic label and their ethnic group at an early age (Aboud, 1987), during adolescence, individuals are better able to examine the meaning of their ethnicity because of their advanced cognitive abilities (Rice, 1996). Also, during

adolescence and early adulthood, ethnic issues may become more salient as individuals become exposed to prejudice and discrimination through jobs, sports, and other activities (Phinney & Chavira, 1995).

As stated above, stage theories of ethnic identity formation postulate that minority group members engage in a process of ethnic identity development that takes place over time, as individuals explore and resolve ethnic issues, leading to an achieved ethnic identity (Phinney, 1991; Rowe et al., 1994). Previous research provides evidence of this developmental process (Phinney, 1989; 1992; Phinney & Chavira, 1992; Phinney & Tarver, 1988). In their longitudinal study of ethnic identity and self-esteem, Phinney and Chavira (1992) demonstrated progress toward ethnic identity achievement between the ages of 16 and 19 years among ethnically diverse high school students. In addition, Phinney and Tarver (1988) found that approximately one-third of Black and White 8th graders, in comparison to one-half of Asian, Hispanic, and African American 10th graders (Phinney, 1989) showed evidence of ethnic identity search. Furthermore, ethnic identity was higher among minority college students than among minority high school students, which also suggests a developmental trend (Phinney, 1992). These data do not provide information about factors involved in the developmental process and progression to higher stages; however, they do suggest that while ethnic identity is important to minority individuals during adolescence, it is more likely to be achieved by early adulthood (college age years). The present study focused on this population and thus, participants were Hispanic undergraduate students.

As stated in the introduction, an ecological framework was used in this study to examine ethnic identity. In the next two sections, an overview of ecological theory is given and the ecology of Hispanic ethnic identity is proposed. These sections are

followed by a discussion of each of the paths in the ethnic identity model presented in Figure 1.

Ecological Theory

Ecological psychology takes a broad comprehensive approach to the study of individual behavior and functioning (Swartz & Martin, 1997). Conceptualization goes beyond the internal intrapsychic forces impinging on the growing individual and includes the influence of many environmental factors on human development. The ecological perspective of human development recognizes that the growing individual exists within many different systems and is influenced by many external social forces, such as family, peers, extended family members, schools, media, neighbors, and the laws of the society (Rice, 1996). It also recognizes the role of many interactions between various settings and social contexts as well as the ever changing nature of the environments in which the growing individual lives (Rice, 1966).

According to the ecological perspective, behavioral maladjustment and psychological distress results from a "lack of fit" or mismatch between the person and environment (Hendrickson, Gable, & Shores, 1987). The various systems in which an individual is embedded may hold different or conflicting values, attitudes, and expectations, or the individual's characteristics, such as his/her abilities or perceptions, may differ from those of the environment, which may cause psychological distress (Swartz & Martin, 1997). In addition, when individuals transition from one setting to another, they attempt to adapt and adjust to the new situation in order to maintain homeostasis within their environment; however, when individuals experience difficulties adjusting and adapting to the new environment, maladaptive behaviors may result (Swartz & Martin, 1997).

The idea that developmental processes and psychological functioning are influenced by many complex internal processes and environmental influences has long been discussed within the psychological literature (Swartz & Martin, 1997). For example, in 1909, Parsons stated that consideration of both the environment and the person, not one or the other, is necessary in order to understand human functioning; and in 1924, Kantor proposed that behavior is a function of the interaction between the person and environment (Swartz & Martin, 1997). As the field of ecological psychology began to emerge as a separate domain, a number of theories were created to describe the person and the multiple and multifaceted environments in which the person functions (e.g., the family, school, and larger community; Swartz & Martin, 1997). In general, ecological theories explain how the many ever-changing internal and environmental factors as well as the transactions between these factors determine behavior and psychological functioning. However, theories within this perspective differ with respect to their focus on either the psychological (perceived) features or objective (actual) features of the environments and whether the unit of study should focus on the individual or the group (Swartz & Martin, 1997).

Lewin (1951) emphasized the role of the individuals' phenomenological experience of themselves, the whole environment, and the subjective experience of the interaction between the person and environment in human functioning. Others theorists emphasized the role of the objective characteristics of the environment and believed the unit of analysis should be the actual setting including the physical attributes (e.g., size and appearance) and social characteristics (e.g., the rules and norms) of the setting (e.g., Barker, 1968). Moos (1976) focused on the physical and social characteristics of settings in understanding behavior as well; however, similar to Lewin, the subjective

perception of the setting was emphasized. Moos also proposed that group perceptions of the setting, rather than individual perceptions, should be the unit of study. Bronfenbrenner's (1979) ecological model of human development describes the growing individual in relation to the changing environments in which he/she lives, including the immediate settings and the larger social contexts. Bronfenbrenner emphasized the impact of individual and environmental factors on behavior, as well as the many reciprocal relationships between individuals, the various systems in which they are embedded, and the larger social context within which the individual lives. The unit of analysis would, therefore, include an examination of the perceived and actual external factors that impact the individual, and an examination of the perceived and actual interaction between the different levels of the ecology. Similarly, Sameroff and Chandler (1975) proposed a transactional model of child development in which the person and environment are interdependent and continually interact to create, modify, and transform individual behavior and development.

Although there are a number of theories within the ecological model, the common themes across theories are that "organisms do not act or exist in isolation but are embedded within a complex network of interrelated systems; all organisms are affected by internal and external drives; and individuals adapt in that they actively shape and are shaped by their environment in an attempt to attain and maintain homeostasis" (Swartz & Martin, 1997, p.15). Toro, Trickett, Wall, and Salem (1991) stated that the ecological perspective is defined by:

> a focus on describing the context in which people are embedded and in which behavior occurs; conceptualization of the ecological environments through multiple levels of analysis; recognition that there can be vast differences between

seemingly similar types of environments; acceptance that individual behavior is transactional, and cannot be understood separate from the context in which it occurs; and the belief that interventions must be tailored to the specific ecologies in which they are implemented (p.1209, as cited by Swartz & Martin, 1997, p.15).

Ecological frameworks have gained increased attention in recent years in the conceptualization and research of various psychosocial concerns (e.g., Hobfoll, 1998; Kazak, 1989). However, the predominant trend for theoretical writing and empirical research in psychology has been to emphasize the properties of the person and neglect an examination of the environment (Swartz & Martin, 1997). However, because there are many influences on human behavior, multiple factors should be considered in research studies.

The Ecology of Hispanic Ethnic Identity

Ethnic identity may, in part, result from an internal exploration of ethnic issues as one's attitudes toward one's ethnic group and the dominant group develop, as conceptualized in the developmental frameworks of ethnic identity, discussed above. However, because individuals do not develop in isolation from their families, peers, schools, communities, and many other social contexts, they are continually influenced by external forces. Thus, identity in general, and ethnic identity, in particular, are also likely to be influenced by many external contextual forces. Therefore, an ecological model, which takes into account multiple forces on development, may be a more appropriate model for the study of ethnic identity.

Furthermore, as stated above, Hispanic individuals' sense of self has been found to be highly influenced by interpersonal relationships and other external factors, such as the family, extended family, and the community, rather than by internal factors (Marín &

Marín, 1991; Zayas & Solari, 1994). Hispanic individuals, as well as other ethnic minority individuals, tend to emphasize family interdependence, family unity, and the centrality of the family to their lives more than do Anglo Americans (Zayas, 1994; Zayas & Palleja, 1988; Zayas & Solari, 1994). Hispanic American parents tend to emphasize to their children parental authority, conforming, and interpersonal relatedness; whereas Anglo American parents tend to emphasize self-reliance and independence (Escovar & Lazarus, 1982; Gonzalez-Ramos, Zayas, & Cohen, 1993; as cited in Zayas & Solari, 1994). Also, Hispanic American adolescents' source of pride tends to come more from their family, than from individual factors, in comparison to Anglo American adolescents (Zayas, 1994). *Familismo* (familism) is a term used to describe feelings of loyalty, reciprocity, and closeness shared among Hispanic individuals and their family (Sabogal, Marín, Otero-Sabogal, Marín, & Pérez-Stable, 1987; Zayas & Palleja, 1988). It highlights the feelings of interdependence among members of Hispanic families. Because Hispanic individuals may place more emphasis on family, relationships, and other contextual factors, rather than internal factors, in their sense of self and self-esteem, Hispanic ethnic identity may also be influenced by external factors as well. Thus, the current models of ethnic identity fail to provide an adequate explanation of ethnic identity for this population. To better understand the development of ethnic identity among Hispanic individuals, other factors, in addition to internal individual factors need to be examined and incorporated into a model of ethnic identity.

Within an ecological perspective, ethnic identity would develop as a result of many interactions between the individual, various immediate settings, the larger social context, and the dominant culture's values and attitudes. Ethnic identity may result from direct influences from the ecological levels (see paths A, B, and C in Figure 1); however,

it could also result from interactions between the ecological levels (see paths D, E, and F in Figure 1). Few studies have examined the influence of external factors in ethnic identity development (Phinney, 1990; Yeh & Huang, 1996). Thus, there is little research available to suggest which levels may have the greatest impact on ethnic identity and which variables within the levels may be most relevant to Hispanic ethnic identity. In this study, three ecological levels were investigated including the individual level, family level, and social context level. These levels were chosen because they are believed to have the greatest influence on human development because of their immediate contact with the individual (Bronfenbrenner, 1979).

As stated above, this study proposed the following pathways to explain the development of ethnic identity among Hispanic college students and its impact on mental health. Each factor within the individual, family, and social context levels (i.e., level of acculturation, family ethnic socialization, and minority status stress) directly influences the development of ethnic identity. Ethnic identity, in turn, impacts self-esteem, and self-esteem mediates the relationship between ethnic identity and depression. In addition, factors within the three levels interact with one another, which impacts ethnic identity. This model may be a more accurate explanation of the development of ethnic identity. The first step in conducting an empirical validation of this model is the delineation of the pathways, presented in the following sections. Please refer to Figure 1 for an overview of the constructs and the pathways for the ethnic identity model.

Individual Level -- Level of Acculturation

At the individual level, the influence of acculturation on ethnic identity was examined. The acculturation process is central to the Hispanic American experience (Gomez & Fassinger, 1994) and investigators stress the importance of measuring level of

acculturation in research with Hispanic individuals (Negy & Woods, 1992a). Previous research suggests that level of acculturation directly influences mental health. However, in this study, level of acculturation was hypothesized to influence mental health because of its effects on ethnic identity. In this section, the concept of acculturation will first be described. This subsection will be followed by a discussion of pathway A, the mediating effects of ethnic identity on the relationship between acculturation and mental health, and the influence of socioeconomic status on acculturation.

Acculturation. Acculturation refers to the transfer of culture from one group of people to another that occurs as a result of continuous contact between two distinct cultures (Barona & Miller, 1994, Negy, 1993; Negy & Woods, 1992a; Phinney, Chavira, & Williamson, 1992; Sodowsky, Lai, & Plake, 1991). However, acculturation is more often described as the behavioral changes in culture that minority group members experience as they adapt to the majority group's culture and the extent to which individuals have maintained their culture of origin (Berry, 1980; Mena, Padilla, & Maldonado, 1987).

Acculturation is a multidimensional construct defined by the acquisition and proficiency in the host society's language, and adaptation to the host society's values, cultural traditions, food preferences, use of media, child-rearing practices, interpersonal relations, expected behavioral amenities, and other elements of a culture (Barona & Miller, 1994; Betancourt & López, 1993; Cortés, Rogler, & Malgady, 1994; Cuéllar, Arnold, & Maldonado, 1995; Feliz-Ortiz, Newcomb, & Myers, 1994). In contrast, ethnic identity refers to a psychological construct defined by how ethnic group members feel about their ethnic group membership in relation to the dominant ethnic group (Phinney, 1990). Although these two concepts have been used almost interchangeable, level of

acculturation and ethnic identity are separate but related processes (Cuéllar, Nyberg, & Maldonado, 1997).

Many researchers have conceptualized the acculturation process as unidimensional, that is, adopting host-culture behavior and values requires simultaneously discarding behaviors and values from the culture of origin (Barona & Miller, 1994; Cortés et al., 1994; Cuéllar, Harris, & Jasso, 1980; Marín, Sabogal, Marín, Otero-Sabogal, & Pérez-Stable, 1987; Olmedo & Padilla, 1978). And, most measures of acculturation are unidimensional in nature (Barona & Miller, 1994; Cuéllar, et al., 1980; Deyo, Diehl, Hazuda, & Stern, 1985; Garcia & Lega, 1979; Marín et al., 1987; Olmedo, Martínez, & Martínez, 1978; Padilla, 1980). However, successful adaptation to the dominant culture does not necessarily require rejecting skills needed to interact with the traditional culture, such as language skills, and studies have found high rates of psychological distress among immigrants experiencing pressures to acculturate unidimensionally (Szapocznik, Kurtines, & Fernandez, 1980).

A growing number of researchers conceptualize acculturation as a bidirectional process (Berry, 1980; Levine & Padilla, 1980; Mendoza & Martínez, 1981; Snachez & Atkinson, 1983; as cited in Sodowsky et al., 1991). Berry, Kim, Minde, and Mok (1987) outlined a two-dimensional model that considers how much an individual has adapted to the host-culture and maintained his/her culture of origin. Within this model, there are four ways in which ethnic group members can participate in a culturally diverse society: *Biculturalism*, also referred to as *Integration*, includes individuals who maintain their culture's traditions while adapting to the dominant culture; *Assimilation* is defined by exclusive involvement with the dominant culture and lack of involvement in the traditional culture; *Separation* involves exclusive involvement in the traditional culture

and lack of involvement with the dominant culture; and *Marginality* involves the loss of one's culture and lack of involvement with dominant culture.

Path A: The influence of level of acculturation on ethnic identity. Of the four acculturation options presented above, bicultural individuals who have preserved some aspects of their culture, especially language skills, are better able to participate in two cultural contexts (Szapocznik et al., 1980). Consequently, bicultural individuals may feel a greater sense of connection and belonging to their ethnic group and have a clearer sense of their ethnicity (high ethnic identity). Research suggests that assimilated individuals who are over-acculturated because they rejected their Hispanic roots or lacked exposure to their Hispanic roots have intrapersonal identity conflicts (Szapocznik, Scopetta, Kurtines, & Aranalde, 1978). Assimilated individuals have lost their culture and cultural ties, and as a result, these individuals may feel a lack of connection and belonging to their ethnic group and have a poor sense of their ethnicity (low ethnic identity). Fewer Hispanic individuals are separated (i.e., retain their Hispanic culture and fail to learn adaptive Americanized behaviors) and almost no Hispanic individuals are marginal (Szapocznik et al., 1980). However, separated individuals would be expected to have high ethnic identity because of their immersion in the Hispanic culture and marginal individuals would be expected to have low ethnic and American identities because of their detachment from both cultures.

In this study, endorsement of a separated or marginal acculturation status was not expected because of the low base rate of these two options at the college level (Gomez & Fassinger, 1994). For example, among 252 female Hispanic undergraduates at a large, predominantly White, eastern state university, no students represented a marginal or separated status; students were either assimilated or bicultural (Gomez & Fassinger,

1994). Thus, in the present study, only two of the four acculturative options, biculturalism and assimilation were examined, and it was hypothesized that bicultural individuals would have higher ethnic identity than assimilated individuals.

There is some support for this hypothesis in the literature. Cuéllar et al. (1997) examined the relationship between ethnic identity, measured by the Multigroup Ethnic Identity Measure (Phinney, 1992), and level of acculturation, measured by the Acculturation Rating Scale-II (Cuéllar et al., 1995) among Mexican American college students. Results indicated that bicultural individuals obtained higher ethnic identity scores and that ethnic identity diminished with increased acculturation into the mainstream culture. In another study, Phinney et al. (1992) examined the relationship between acculturation attitudes, ethnic identity, and self-esteem among 417 ethnically diverse high school students in a California inner city. Results demonstrated that individuals who endorsed assimilation were more likely to have low ethnic identity and individuals who endorsed integration were more likely to have high ethnic identity. These findings did not differ by gender, place of birth, ethnic group, or socioeconomic status. In addition, endorsement of assimilation was negatively correlated with self-esteem and endorsement of integration was positively correlated with self-esteem. Separation attitudes were related to having high ethnic identity; however, this acculturation option was given little support and was unrelated to self-esteem. Marginality attitudes were not included in the study because of their low base rate.

Ethnic identity as a mediator between acculturation and mental health. Previous studies have demonstrated relationships between acculturation and mental health problems such as depression, self-esteem, anxiety, alcohol abuse, psychosomatic symptomotology, delinquent behavior, and suicidal ideation (Buriel, Calzada, &

Vazquez, 1982; Burnam, Hough, Karno, Escobar, & Telles, 1987; Escobar, Randolph, & Hill, 1986; Salgado de Snyder, 1987; Sorenson & Golding, 1988; Warheit, Vega, Auth, & Meinhardt, 1985; as cited in Cortés et al., 1994). A review of the research on acculturation and mental health problems among Hispanics showed that most studies demonstrate a link between acculturation and mental health (Rogler, Cortés, & Malgady, 1991); however, the direction of this relationship is unclear; some studies have reported an inverse relationship between acculturation and mental health, whereas others have reported a positive relationship (Cortés et al., 1994; Cuéllar & Roberts, 1997).

Problems with the measurement of acculturation may partly account for the inconsistencies in the literature, as previous research mainly has measured acculturation unidimensionally (Cortés et al., 1994). High scores on a unidimensional measurement of acculturation indicate assimilation (i.e., detachment from Hispanic culture and immersion in American culture), and low scores on acculturation reflect separation (i.e., immersion in Hispanic culture to the exclusion of American culture). However, both of these acculturation options are likely to lead to poor mental health. Separation has been shown to impact mental health because of the many acculturative barriers that separated individuals inevitably confront as they adapt and adjust to American culture (e.g., Gil, Vega, & Dimas, 1994; Hovey & King, 1996; Vega, Khoury, Zimmerman, & Gil, 1995). However, assimilation has also been shown to impact mental health because assimilated individuals have given up their culture and have lost their cultural ties, which provide a sense of historical continuity and a sense of belonging (e.g., Kaplan & Marks, 1990; Phinney et al., 1992; Smith, 1991; Sommers, Fagan, & Baskin, 1993).

Previous studies that have examined acculturation bidimensionally have demonstrated that separation and assimilation are both associated with poor mental

health, and that biculturalism is the most adaptive acculturation option; marginality is the least satisfactory alternative and it is typically not considered an option among minority group members (e.g., Bautista de Domanico et al., 1994; Gomez & Fassinger, 1994; Lang, Munoz, Bernal, Sorenson, 1982; Phinney et al., 1992; Sodowsky et al., 1991; Szapocznik et al., 1980).

While the literature suggests there is a direct link between level of acculturation and mental health, ethnic identity may mediate this relationship for assimilated and bicultural individuals. The mediating effect of ethnic identity may occur because giving up one's culture or losing one's cultural ties may decrease one's psychological relationship with one's ethnic group (i.e., low ethnic identity) as discussed above, and low ethnic identity may impact mental health (discussed in a later section). However, previous studies have ignored the effects of ethnic identity when examining the relationship between acculturation and mental health.

Ethnic identity would not be expected to mediate the relationship between acculturation and mental health for separated individuals. Separated individuals may have poor psychological adjustment because of the acculturative barriers and stress that they may encounter, as stated above. Marginal individuals may have poor psychological adjustment because of the effects on both ethnic and American identity (Phinney et al., 1992). However, as stated above, these two acculturation options were not examined in this study.

In summary, if the environment is Anglo American and the traditional culture is excluded, then individuals will most likely assimilate to the dominant culture to adapt (Gomez & Fassinger, 1994). And, with increased education, Hispanic individuals are likely to become more Americanized and give up their cultural ties (Gomez & Fassinger,

1994). However, individuals who lose their cultural ties (i.e., assimilated individuals) may have psychological distress because of the effects on ethnic identity.

The influence of socioeconomic status (SES) on acculturation. Research shows that acculturation level is influenced by numerous sociocultural and demographic variables such as generational status, education, occupation, income, age, years of residence in the U.S., and ethnic density of the neighborhood (Sodowsky et al., 1991). Gender differences in acculturation level have not been found (e.g., Garcia & Lega, 1979; Marín et al., 1987; Padilla, 1980; as cited in Sodowsky et al., 1991). Negy and Wood (1992b) demonstrated a strong positive correlation between acculturation and SES that did not vary significantly when SES was inferred from the parent with the highest SES, father SES, or mother SES. Furthermore, there were no differences in the strength of this relationship for male and female participants. SES may be strongly associated with acculturation level because higher levels of education and income facilitate integration into the mainstream society (Negy & Woods, 1992a). Negy and Wood (1992a) stated that because SES is an important correlate of acculturation, it should be accounted for in studies on acculturation. Thus, in this study, differences in level of acculturation related to SES were assessed prior to the examination of the ethnic identity model. It was expected that assimilated individuals would have higher SES than bicultural individuals.

Family Level -- Family Ethnic Socialization

At the family level, there are many variables that are likely to influence ethnic identity. Few studies have examined the influence of family factors on ethnic identity; however, preliminary evidence suggests that family ethnic socialization may be important to its development (Demo & Hughes, 1990; Knight, Bernal, Garza, Cota, & Ocampo,

1993; Knight, Cota, & Bernal, 1993; Marshall, 1995; Phinney & Chavira, 1995; Stevenson, 1995).

Ethnic socialization. Socialization has been defined as "the preparation of newcomers for life in their social, economic, physical, cultural, and extraphysical surroundings" (Marshall, 1995, p. 379). It refers to the process of change that occurs due to learning of social roles and engaging in social interaction, either by direct instruction or observation, and the family is considered the primary socializing agent that has the most influence on children's personal identity, competencies, and future functioning (Marshall, 1995).

One aspect of socialization, ethnic socialization, involves teaching children about their culture and cultural heritage. Ethnic socialization among ethnic minority families also entails preparing children to understand and deal with issues related to their ethnicity that they may face, in order to buffer the negative impact of the child's minority status (Phinney & Chavira, 1995). Thus, ethnic socialization among ethnic minority families "entails the intergenerational transmission of certain messages and patterns that relate to personal and group identity, relationships between and within ethnic groups, and the ethnic group's position in society" (Marshall, 1995, p.383). Therefore, in addition to preparing their children for adulthood, ethnic minority families need to also prepare children to deal with being an ethnic minority member in a race-conscious society (Zayas, 1994). Ethnic socialization may involve both parents and extended family members. Hispanic families, in particular, often rely on both the immediate family and the extended family to convey their beliefs about what it means to be part of their ethnic group and to teach their cultural patterns and behaviors to their children (Zayas, 1994).

On the basis of research primarily with African American families, the literature suggests that three issues are generally emphasized in ethnic socialization practices: 1) teaching about one's culture (i.e., cultural practices and history), 2) teaching about racial pride, and 3) teaching about how to get along in the mainstream culture by preparing children for experiences of racism, prejudice, and discrimination (Bowman & Howard, 1985; Boykin & Toms, 1985; Marshall, 1995; Phinney & Chavira, 1995; Thornton, Chatters, Taylor, & Allen, 1990; Zayas & Solari, 1994). Previous studies have demonstrated that approximately 55% of parents engage in ethnic socialization practices (Spencer, 1983; Thornton et al., 1990) and approximately 50% of adolescents report receiving ethnic socialization messages (Stevenson, Reed, & Bodison, 1996). Although most of the research on ethnic socialization has involved African American families, preliminary evidence suggests that Mexican American families also engage in ethnic socialization practices (Knight, Bernal, et al., 1993; Knight, Cota, et al., 1993; Phinney & Chavira, 1995).

Path B: The influence of family ethnic socialization on ethnic identity. Family socialization practices are an important element in children's formation of a sense of self and personal identity (Marshall, 1995). Similarly, ethnic socialization practices may impact children's sense of ethnic identity. There has been little research that has examined the relationship between ethnic socialization and ethnic identity; however, preliminary evidence supports this hypothesis.

Phinney and Chavira (1995) examined the relationship between parental ethnic socialization and ethnic identity among African American, Japanese American, and Mexican American adolescents between the ages of 16 and 18. Results indicated that parents who reported using ethnic socialization practices during an open-ended ethnic

socialization interview tended to have adolescents with higher ethnic identity. African American and Mexican American parents were more likely to use ethnic socialization practices than Japanese American parents. In this study, the three ethnic groups differed in socioeconomic status; however, it was unrelated to parental socialization when ethnicity was controlled. Also, there were no statistically significant differences in terms of gender of adolescent, gender of parent, marital status of parents, or parents' birthplace (i.e., U.S. or foreign country).

Several studies investigated the relationship between ethnic socialization and ethnic identity among young children. Two studies of Mexican American children between the ages of 6 and 12 and their mothers demonstrated that mothers who taught their children about Mexican culture, ethnic pride, and discrimination, and who had Mexican objects in the home were more likely to have children with high ethnic identity, than children whose mothers who did not engage in ethnic socialization practices (Knight, Bernal, et al., 1993; Knight, Cota, et al., 1993). Similarly, in a study of 9-10-year-old African American children and their mothers, mothers who engaged in more ethnic socialization practices, including ethnic pride, racial equality, discrimination, and self-development were more likely to have children with higher ethnic identity (Marshall, 1995).

One study examined the relationship between perceived socialization messages and ethnic identity (Stevenson, 1995). In this study, African American adolescents who supported the importance of communicating ethnic socialization messages were more likely to have high ethnic identity. The underlying assumption of this study was that adolescents who have received ethnic socialization messages would be more likely to believe strongly in the importance of family ethnic socialization.

In summary, there is limited research in this area; however, preliminary data suggest that individuals who receive ethnic socialization messages have higher ethnic identity. Although families may engage in ethnic socialization practices to prevent the experience of psychological distress as a result of their children's minority status, family ethnic socialization may not directly impact mental health. The degree to which ethnic socialization is able to predict mental health among Hispanic individuals may vary as a function of their ethnic identity.

Social Context Level -- Experience of Minority Status Stress

In spite of the increase in multicultural awareness among members of the U.S. in the past decade (Phinney, 1996), racism continues to be a barrier for Hispanic and other ethnic minority individuals (Utsey, 1998). These individuals commonly experience negative events related to their minority status including discrimination, direct or indirect experiences of prejudice and negative stereotyping, and lack of multicultural sensitivity. For example, in a study by Chavira and Phinney (1991), the large majority of Hispanic adolescents reported that they had personally experienced discrimination (77%) and that they believed society has negative stereotypes of Hispanics (88%). The Latino National Political Survey (de la Garza, DeSipio, Garcia, Garcia, & Falcon, 1992), which investigated the political attitudes and behaviors of Mexicans, Puerto Ricans, and Cubans from 40 areas in the U.S., found that 74% of Hispanic individuals reported experiencing "some" to "a lot" of discrimination because of their ethnicity. Furthermore, studies have also demonstrated that Hispanic individuals feel discriminated against in a variety of arenas; for example, in comparison to Anglo Americans, Hispanic Americans tend to feel discriminated against interpersonally, in public places, such as work, stores, and school, and through the media (Korzenny & Schiff, 1987).

Previous conceptual writing on this topic has emphasized that being a minority exacts a heavy psychological, emotional, and somatic toll because racism is embedded in the social, cultural, and institutional structure of American society, making it a common experience almost impossible to escape (Utsey, 1998). The experience of racism may influence psychological adjustment because "racist events are inherently demeaning, degrading, and highly personal; they are attacks upon and negative responses to something essential about the self that cannot be changed" (Landrine & Klonoff, 1996, p.147). The experience of racism has been implicated in the development of high blood pressure, stroke, cardiovascular disease (Kriegar & Signey, 1996), substance abuse and depression (Burke, 1984; Pillay, 1984), low self-esteem (Simpson & Yinger, 1985; Smith, 1985), and low levels of life satisfaction (Broman, 1997, as cited in Utsey, 1998). However, the consequences of the experience of racism have rarely been addressed empirically (Landrine & Klonoff, 1996). Historically, researchers have mainly examined the negative effects of African American experience of racism by focusing on anecdotal accounts of personal experiences with racial discrimination (Utsey, 1998).

The theoretical basis for the relationship between experience of racism and poor mental health derives mainly from social identity theory (Tajfel & Turner, 1979). According to social identity theory, group membership provides individuals with a sense of belonging and a positive group identity, which contributes to a sense of well-being (Tajfel & Turner, 1979). However, if a minority group is negatively evaluated by society and subjected to discrimination, members of the minority group may also hold a negative view of their group and themselves; this may result in low self-esteem and psychological distress (Tajfel, 1978). Similarly, Erikson (1968) stated that ethnic minority group members may internalize the negative views about their ethnic groups that are held by the

dominant society, which may lead to negative self-evaluation, self-hatred, and psychological distress. Early studies that demonstrated preferences for Caucasian dolls by African American children were interpreted as evidence for the self-hate and low self-esteem that results from membership in a stigmatized group (Phinney et al., 1997).

Many researchers have argued that social identity theory is incorrect because there is substantial evidence that minority groups that are negatively evaluated by society and subjected to discrimination do not have lower levels of mental health when compared to Whites after controlling for SES (e.g., Crocker & Major, 1989; Gordon, 1988; Rosenberg & Simmons, 1972; as cited in Phinney, 1991). For example, African American and Hispanic American adolescents often score higher or do not differ from Caucasian adolescents on measures of self-esteem (e.g., Bowler, Rauch, & Schwarzer, 1986; Crocker & Major, 1989; Hughs & Demo, 1989; Martínez & Dukes, 1991, as cited in Phinney et al., 1997). Studies examining depression among Hispanic adolescents and adults have found mixed results. Most studies report a higher number of depressive symptoms among Hispanic individuals when compared to their same age Caucasian peers (e.g., Golding & Burnam, 1990; Roberts & Chen, 1995; Roberts & Sobhan, 1992; Vernon & Roberts, 1982, as cited in Cuéllar & Roberts, 1997); however, others report little or no differences (e.g., Anthony & Petronis, 1991; Weissman, Bruce, Leaf, Florio, & Holzer, 1991, as cited in Cuéllar & Roberts, 1997).

However, it also important for researchers to examine within group differences in the experience of racism that may contribute to mental health. Preliminary evidence suggests that, within groups, greater perceptions of racism may lead to psychological distress. For example, among 881 U.S. born Hispanic adolescents, perceived discrimination and perception of a closed society were associated with behavior problems

reported by teachers (Vega et al., 1995). Landrine and Klonoff (1996) developed the Schedule of Racist Events to assess the frequency of experience of racist events (i.e., being called racist names, being discriminated against, and being accused or suspected of doing something wrong). Findings demonstrated that higher experiences of racist events rated as stressful predicted higher levels of somatic symptoms, feelings of inadequacy, and low self-esteem. These results were independent of gender and socioeconomic status. Results also demonstrated that 17.6% of the variance in somatic symptoms and 15.2% of the variance in feelings of inadequacy and self-esteem were accounted for by experience with racism, which suggests that other factors contribute to mental health.

Other research suggests that the variety of common negative experiences associated with being a member of a minority ethnic group do not appear to be directly related to mental health. For example, in the Chavira and Phinney (1991) study, they reported that experiences of discrimination and prejudice and awareness of stereotypes against Hispanics were unrelated to self-esteem. Other studies have demonstrated similar results for various ethnic minority groups (e.g., Asamen & Berry, 1987; Dion, Earn, & Yee, 1978).

Experiences of racism and discrimination may impact psychological functioning depending upon an individual's appraisal of the event and the degree of stressfulness of the event. Early "life events" research attempted to demonstrate a link between experience of life events that required adaptive responses and poor psychological adjustment by asking people to check off the events that happened to them during the past year from a list of events that require life adjustment (Holmes & Rahe, 1967). The effects of these events were assumed to be additive and most investigators working in this field modeled their research after the Holmes and Rahe approach (Friedman & DiMatteo,

1989). The life change approach assumed that every life change, whether it is positive or negative, increases the likelihood that problems will develop and failed to examine the mediating effects of stress (Friedman & DiMatteo, 1989). However, later research examining the effects of life events on mental and physical health demonstrated that undesirable negative events appraised as stressful were more strongly correlated with self-reports of mental and physical health problems than the mere experience of negative events (Sarason & Sarason, 1984).

Similarly, although racism and discrimination are negative experiences that most Hispanic individuals are likely to encounter, past research suggests that the relationship between experience of racism and discrimination, and poor psychological adjustment is not simple, direct, or absolute (e.g., Chavira & Phinney, 1991). How a person perceives and appraises the events appears to be more important to mental health (Landrine & Klonoff, 1996). Thus, scales used in this study measured negative life events related to one's minority status by asking individuals to rate the degree of stressfulness of the negative events they have experienced in order to assess the impact that the experiences have on individual functioning (Landrine & Klonoff, 1996; Saldaña, 1994).

Path C: The influence of minority status stress on ethnic identity. Few studies have examined the role of social context factors on ethnic identity development (Phinney, 1990); however, there is some empirical evidence to suggest that ethnic identity does vary depending upon the characteristics of the social context (Andujo, 1988; Garcia & Lega, 1979; Rosenthal & Hrynevich, 1985; Yeh & Huang, 1996). For example, ethnic identity is positively related to the ethnic density of the neighborhood (Garcia & Lega, 1979). In addition, Rosenthal and Hrynevich (1985) found that adolescents of Greek, Italian, and Anglo Australian descent reported that their feelings about their ethnicity

varied according to whether they socialized with individuals of the same ethnicity or were in settings in which their ethnicity was respected. Yeh and Huang (1996) examined factors associated with ethnic identity development among Asian Americans using a projective drawing technique. In their study, approximately half of the respondents indicated that the presence or absence of other Asians in their geographic area, negative U.S. stereotypes of Asians, negative self-comparisons with White standards, and feelings of alienation from U.S. society contributed to their present ethnic identity.

Within the social context level, research suggests that one variable that may be highly salient to the maintenance of Hispanic college students' ethnic identity in a predominantly White environment is the experience of minority status stress in the university environment. Hispanic individuals represent a small proportion of the total number of students enrolled in post secondary education in the United States and are not present in numbers proportional to their share of the total population (Quintana, Vogel, & Ybarra, 1991). Because the university environment is typically a White dominated environment, Hispanic college students are likely to experience some minority status stress there, and it was hypothesized that perception of minority status stress would be inversely related to ethnic identity.

In addition, while the literature suggests a relationship between experience of racism and mental health, discussed above, ethnic identity may mediate this relationship. Individual differences may shape the extent to which the experience of minority status stress contribute to mental health (Utsey, 1998). Two people may experience the same negative racist event, yet only one may appraise the event as stressful, internalize the negative messages, and feel negatively toward their ethnicity. "Voluminous writing, especially biographical work by minority writers, has documented negative feelings

about their group that were acquired from pervasive negative images in society" (Phinney, 1991, p. 196), which suggest that some individuals internalize society's negative messages about their ethnic group. Consistent with social identity theory (Tajfel & Turner, 1979), experiencing negative stressful events related to one's minority status throughout one's life may influence how one feels about one's ethnicity and attitudes toward members of one's ethnic group (i.e., ethnic identity). Low ethnic identity in turn, may impact mental health (discussed later). Thus, although most Hispanic individuals experience racism to some degree, mental health may not be affected if those experiences are not perceived as stressful and do not influence ethnic identity. There have been no studies to date that have examined ethnic identity as a mediator between racism and mental health. However, considering the fact that many researchers have discussed the negative psychological consequences with which racism has been linked, it is imperative to determine mediators of this relationship that may serve to attenuate the negative effects.

Relationships Among the Individual, Family, and Social Context Levels

The ecological model of ethnic identity emphasizes that there are relationships between the ecological levels in the ethnic identity model (see Figure 1). In this study, several relationships between the individual, family, and social context factors (i.e., level of acculturation, family ethnic socialization, and minority status stress) were hypothesized, in addition to their direct influences on ethnic identity. Each of these relationships is discussed below.

Path D: The influence of level of acculturation on the experience of minority status stress. An individual's level of acculturation may influence the experience of minority status stress. As discussed in a previous section, low acculturation is indicative

of a traditional cultural orientation in which the traditional language, foods, music, beliefs, values, customs etc. are maintained; and high acculturation reflects detachment from the traditional culture and immersion in the dominant culture. Hispanic individuals who are immersed in Hispanic culture (i.e., more traditional) may experience more minority status stress than acculturated Hispanic individuals (i.e., more similar culturally to Whites) because the former may seem "more Hispanic" and the latter "more White" (culturally) to individuals who are racist or lack multicultural sensitivity.

There is some evidence in the literature in support of this hypothesis. Among 282 Hispanic and Asian American college students, respondents who had low levels of acculturation (i.e., first generation immigrants) perceived more prejudice in their environments than those who had high levels of acculturation (i.e., second, third, and forth generation; Sodowsky et al., 1991). In a study of 209 Indian rural and urban migrants and 64 White nonmigrants in Peru, highly acculturated participants, measured by generation status, language use, and customs, perceived less ethnic discrimination than participants with low levels of acculturation (Richman, Garviria, Flaherty, & Birz, 1987). Furthermore, in their validation study of the Schedule of Racist Events (SRE), Landrine and Klonoff (1996) examined the relationship between experience of racial discrimination using the SRE, and level of acculturation using the African American Acculturation scale (Landrine & Klonoff, 1994). Results demonstrated that traditional African Americans reported more recent and lifetime racist events than did their more acculturated counterparts.

Thus, level of acculturation appears to influence the extent to which Hispanic individuals experience racism and discrimination. In this study, a bidimensional approach to the measurement of acculturation was used, unlike the studies described

above. However, based on the results of these studies, assimilated individuals who lack involvement in Hispanic culture should be less likely to experience racism and discrimination and report high levels of minority status stress than bicultural individuals who are immersed in the Hispanic culture. Therefore, bicultural individuals were expected to report higher levels of minority status stress.

Path E: The influence of minority status stress on family ethnic socialization. The social context appears to influence ethnic socialization practices. For example, among 157 African American parents, perception of racism in their immediate environment was positively associated with parental racial socialization (Hughes & Chen, 1997). Also, in another study involving African American mothers, Stevenson and Abdul-Kabir (1996) found that mothers were less concerned about racism when they had limited or no exposure to work contexts in which employees and employers were predominantly White (as cited in Stevenson, Reed, et al., 1996). Research on the effects of the social context on parental ethnic socialization suggests that parental experience of racism and discrimination makes this type of parenting practice more salient (Stevenson, Reed, et al., 1996).

However, the social context of ethnic minority children may also influence whether or not parents engage in ethnic socialization. The experience of minority status stress may increase ethnic socialization practices by parents in an effort to help their children maintain their ethnic identity and prevent the experience of psychological distress. No studies to date have examined this hypothesis. However, Thornton et al. (1990) found that parents who lived in neighborhoods that were predominantly Black were less likely to ethnically socialize their children than those who lived in neighborhoods where half of the residents were White. The results of this study suggest

that parents increase ethnic socialization practices when their children are in social contexts in which racism is likely to be experienced.

As discussed in a previous section, the literature suggests a link between perception of racism and mental health (e.g., Landrine & Klonoff, 1996; Utsey, 1998), and this link was hypothesized to be mediated by ethnic identity. That is, individuals who experience minority status stress may have poorer mental health depending upon their ethnic identity. Ethnic socialization may also be a mediator (see Figure 1, paths E, B and G). Experience of minority status stress may influence ethnic socialization, as stated above. High ethnic socialization is hypothesized to increase ethnic identity (discussed in a previous section). High ethnic identity may influence psychological adjustment (discussed in a later section). Thus, the experience of minority status stress may be attenuated by ethnic socialization practices, which then may serve to increase ethnic identity and mental health; or the experience of minority status stress may lower ethnic identity directly. In turn, lower ethnic identity may lower mental health (discussed later). There is preliminary support for the mediating role of ethnic socialization. In a study of 119 African American young adults, results revealed that racial socialization messages attenuated the link between reports of racist events and poor mental health. Neither racial socialization beliefs nor the social network of participants moderated the relationship (Fisher & Shaw, 1999).

In addition, the effects of ethnic socialization may be due to the internalization of early family ethnic socialization messages (i.e., messages communicated prior to the experience of minority status stressors), or the experience of minority status stressors may increase ethnic socialization practices by parents. Only a longitudinal study would

be able to determine the role of ethnic socialization; however, in this study, experience of minority status stress was expected to predict ethnic socialization practices.

Path F: The influence of family ethnic socialization on level of acculturation. Family socialization is not only important to the development of children's self worth, self-concept, personal identity, and ethnic identity (Demo & Hughes, 1990); it also prepares children to accept adult roles and responsibilities, teaches competencies needed for adequate functioning within society, and serves to transmit values, beliefs, and ideas around lifestyles and patterns of behaviors (Boykin & Toms, 1985; Marshall, 1995; Thomas & Speight, 1999).

A number of studies have demonstrated that family socialization practices contribute to children's personal frame of reference for behaviors such as alcohol use (Jackson, Henriksen, & Dickinson, 1999), smoking (Chassin, Presson, Rose, & Sherman, 1998), prosocial behavior (Roberts, 1999), social and peer competence (Pettit, Brown, Mize, & Lindsey, 1998), healthy and safe behaviors (Lees & Tinsley, 1998), exercise (DiLorenzo, Stucky-Ropp, Vander-Wal, & Gotham, 1998), HIV risk education (Parsons, Butler, Kocik, Norman, & Nuss, 1998), drug use and delinquency (Brook, Whiteman, Balka, & Cohen, 1997), and antisocial behavior (O'Connor, Deater-Deckard, Fulker, Rutter, & Plomin, 1998). For example, in a study examining the effects of alcohol-specific socialization on alcohol use by children, 488 fifth grade children's self report of their perceptions of alcohol-specific socialization practices by their parents (i.e., monitoring of alcohol use by children, allowing alcohol use by children in the home, communications against alcohol use, and setting rules against alcohol use) predicted alcohol use when children were in seventh grade (Jackson et al., 1999).

Similarly, children's perceptions of family ethnic socialization practices should predict children's maintenance of culturally specific behaviors such as language usage, use of media, involvement in customs, culturally specific values, etc. That is, ethnic socialization should be a predictor of level of acculturation. Thus, using a bidimensional approach to the measurement of acculturation, ethnic socialization should be a predictor of biculturalism rather than assimilation. However no studies have examined this relationship. Considering the fact that biculturalism appears to be related to better mental health (Berry et al., 1987; Gomez & Fassinger, 1994; Lang et al.,1982; Phinney et al., 1992; Sodowsky et al., 1991; Szapocznik et al., 1980), determining some of the factors that may influence the development of biculturalism is needed.

In summary, socialization practices appear to enhance children's personal identity and behavior. Ethnic socialization practices may also influence ethnic identity, as well as the maintenance of culturally specific behaviors, customs, language, etc. Thus, in this study, it was hypothesized that family ethnic socialization is positively related to biculturalism.

Ethnic Identity and Mental Health

The ethnic identity model proposed in this study also incorporates the effects that ethnic identity has on self-esteem and on the experience of depressive symptomology (see Figure 1). Each of these relationships is discussed below, as well as the influence of gender on mental health.

Path G: The influence of ethnic identity on self-esteem. Ethnic identity is part of one's personal identity and sense of "wholeness" with regard to who one is (Cuéllar et al., 1997) and is a key component of ethnic minority group members' global self-concept (Phinney, 1990; Phinney & Chavira, 1995; Phinney et al., 1997). "Self-concept may be

defined as conscious, cognitive perception and evaluation by individuals of themselves; it is their thoughts and opinions about themselves" (Rice, 1996, p. 182). Thus, ethnic identity can be described as individuals' thoughts and opinions about their "ethnic self," one aspect of the total self. Other aspects of the self include, physical, sexual, social, vocational, academic, and other "selves" depending upon the various life roles each individual has (Rice, 1996). If one accepts, approves, and places a high value on the selves they perceive, they are said to have "self-esteem" and feelings of self-worth, and to be at "harmony" (Rice, 1996, p. 199). Thus, positive regard for one's ethnic self (i.e., high ethnic identity) would be likely to contribute to feelings of self-esteem, whereas negative attitudes or evaluations about one's ethnicity or ethnic group (i.e., low ethnic identity) would be likely to lower self-esteem.

Considerable attention has been given to examining the relationship between ethnic identity and self-esteem (Phinney, 1990). A positive relationship between ethnic identity and self-esteem is supported by a number of studies (e.g., Bautista de Domanico et al., 1994; Chavira & Phinney, 1991; Phinney et al., 1993; Phinney & Chavira, 1995), and this relationship has been consistently demonstrated for members of various ethnic groups, such as African Americans (e.g., Parham & Helms, 1985), Hispanic Americans (e.g., Grossman, Wirt, & Davids, 1985), and Asian Americans (e.g., Phinney & Alipuria, 1990).

For example, Phinney et al. (1997) examined ethnic identity and self-esteem among 669 American-born African American, Hispanic American, and Anglo American high school students using the Multigroup Ethnic Identity Measure (Phinney, 1992) and the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965). Using a regression analysis, results showed that ethnic identity was a significant predictor of self-esteem

across the three groups. In a different study, one's assessment of how others evaluate one's group (collective self-esteem) had no relationship to personal self-esteem or to other measures of psychological adjustment among African Americans (Crocker, Luhtanen, Blaine, & Broadnax, 1994, as cited in Phinney et al., 1997). These results suggest that minority group members' own attitudes and feelings about their group (i.e., their ethnic identity), rather than negative evaluations by others, influence self-esteem (Phinney et al., 1997). Negative evaluations about one's ethnic group by others may lead to low self-esteem because ethnic identity is lowered in response to negative evaluations.

This study proposed that ethnic identity is the critical factor in the development of low self-esteem in response to the experience of racism, acculturation, and lack of family ethnic socialization. The literature has not examined or discussed the mediating role of ethnic identity. In the present study, the relationship between ethnic identity and self-esteem was examined to provide further evidence for this relationship among Hispanic college students. Self-esteem was also examined in this study to demonstrate the mediating role of ethnic identity in the relationships between experience of racism, acculturation, and family ethnic socialization, and self-esteem. In addition, self-esteem was examined to demonstrate the important role that self-esteem plays in mediating the relationship between ethnic identity and depression, discussed below.

Path H: The influence of self-esteem on depression. Numerous studies in the literature provide evidence that low self-esteem is an important contributor of depression (e.g., Brown, Andrews, Bifulco, & Veiel, 1990; Brown, Bifulco, & Andrews, 1990; Roberts & Monroe, 1992; Robertson & Simons, 1989). Previous studies have also demonstrated that individuals with low self-esteem manifest a number of other mental health problems such as poor self-image (Koenig, 1988), anxiety (Greenberg, 1992), drug

abuse (Reardon & Griffing, 1983), and eating disorders (Button, 1990, as cited in Rice, 1996).

Because ethnic identity is believed to be a meaningful psychological construct that has salience and centrality for ethnic group members, researchers have argued that it may impact the psychological adjustment of minority group members (Phinney, 1990; 1991; 1996; Phinney et al., 1997). Several studies support this hypothesis (Brook et al., 1998; Carter, 1991; Marshall, 1995; Munford, 1994; Parham & Helms, 1985; Perron, et al., 1998; Plant & Yanico, 1991). Although few studies have examined the relationship between ethnic identity and mental health, evidence suggests that low ethnic identity may lead to depression (Munford, 1994; Plant & Yanico, 1991).

Munford (1994) examined the relationship between racial identity, depression, and self-esteem among 146 African American college students. Racial identity was assessed by the Racial Identity Attitude Scale (Paham & Helms, 1981). This scale measures attitudes associated with the four stages of Black identity development as described by Cross (1971). This cognitive developmental model hypothesizes that individuals progress through a sequence of stages, from primarily pro-White and anti-Black attitudes (pre-encounter attitudes) to an achieved pride and security in one's race (internalization attitudes). Results demonstrated that pre-encounter attitudes were significantly positively correlated with depression ($r = 0.33$), as measured by the Beck Depression Inventory, and significantly negatively correlated with self-esteem ($r = -0.29$), as measured by Rosenberg's Self-Esteem Scale. Internalization attitudes were significantly negatively correlated with depression ($r = -0.23$) and significantly positively correlated with self-esteem ($r = 0.28$). These findings are consistent with an earlier study by Plant and Yanico (1991) which also found racial identity to be negatively associated

with depression among African Americans. In both studies, regression analyses demonstrated that racial identity attitudes were significant predictors of depression; however, only a small proportion of the variance in depression scores was accounted for by racial identity attitudes, suggesting other factors may play a larger role in the development of depression.

Munford (1994) offered several possible explanations for the relationship between ethnic identity and depression. According to Munford, individuals with low racial identity may focus on the negative aspects of being African American, such as being devalued and discriminated against, and may feel that the African American experience is negative, which may lead to a depressive mind-set. These individuals may also view themselves negatively because they are African American. They may feel that they do not possess good qualities and that they have little to contribute to society (Munford, 1994). Thus, individuals who feel insecure with their racial identity, may not feel good about themselves in general (Munford, 1994). In contrast, individuals with high racial identity feel secure with their identity and their heritage. They may feel that they have many good qualities because of being African American and may feel that they have much to offer society because they are African American. As a result, individuals with high racial identity may feel better about themselves in general and thus, they may be less likely to feel depressed or experience psychological difficulties (Munford, 1994). Thus, Munford's explanation for the relationship between ethnic identity and depression implies that individuals with low ethnic identity are likely to have low self-esteem, which may lead to depression, and individuals with high ethnic identity are likely to have high self-esteem, which would decrease the likelihood of developing depression.

Because ethnic identity may be an important source of self-esteem for minority group members, as discussed above, low ethnic identity may lead to the development of mental health problems because of its effects on self-esteem. Thus, in this study, it was hypothesized that low ethnic identity would lead to low self-esteem, and low self-esteem would predict depression. In addition, as discussed in previous sections, the literature suggests links between acculturation and mental health problems and between experience of racism and mental health problems; however, this study proposed that these relationships are not direct. Acculturation and experience of racism, as well as ethnic socialization, may only be related to self-esteem because of their effects on ethnic identity and may only be related to depression because of their effects on ethnic identity and the effects of ethnic identity on self-esteem.

The influence of gender on self-esteem and depression. Research has generally found that females score lower on measures of self-esteem than males (e.g., Harter, 1993, as cited in Phinney et al., 1997). In addition, research has found that male Hispanic Americans, African Americans, Native Americans, Asian Americans, and White Americans score higher than their female counterparts (e.g., Dukes & Martínez, 1994; Phinney et al., 1997). Similarly, scores on measures of depression are also influenced by gender, as females tend to score higher than males across ethnic groups (e.g., Chino & Funabiki, 1984; O'Neil, Lancee, & Freeman, 1985). Because self-esteem and depression scores tend to vary according to gender, the differences in self-esteem and depression scores related to gender were assessed prior to the examination of the ethnic identity model. It was expected that women would score lower on measures of self-esteem and higher on measures of depression.

Chapter 2

RATIONALE

Although there has been a limited amount of research in this area, ethnic identity appears to be important to minority group member's global self-esteem (e.g., Bautista de Domanico et al., 1994; Chavira & Phinney, 1991; Phinney et al., 1993; Phinney & Chavira, 1995) and may serve as a protective factor against a variety of psychosocial concerns (Brook et al., 1998; Carter, 1991; Marshall, 1995; Munford, 1994; Parham & Helms, 1985; Perron et al., 1998). Very little data exist as to the factors that influence ethnic identity. A number of conceptual models of ethnic identity formation have been developed for various ethnic groups using a cognitive developmental framework (Arce, 1981; Cross, 1978; Ford, 1987; Kim, 1981; Poston, 1990). These models conceptualize ethnic identity to be highly influenced by internal processes, such as self-exploration and resolution of ethnic issues. However, researchers in this area have not conducted empirical studies to provide evidence in support of this conceptualization.

Individuals do not develop in isolation from their families, peers, schools, communities, and many other social contexts -- they are continually influenced by external forces. Numerous internal and external factors, as well as the many interactions between them, may contribute to ethnic identity. According to Sameroff's (1980) transactional model, development is a dynamic process that results from the continual interplay between an individual, his/her environment, and his/her experiences, all of which change over time. Both the individual and the individual's social surroundings are constantly affected by their experiences with each other. Thus, examining a developmental process by isolating either individual characteristics or the environment provides little value; researchers need to examine psychological processes and

development using more complex models that emphasize the analysis of multiple levels (Sameroff, 1980).

Ecological theory and the transactional model provide a more complete conceptualization of ethnic identity. An ecological-transactional approach is unique in that it is a comprehensive approach, encompassing multiple levels of analysis in the study of ethnic identity, and emphasizes the dynamic quality of ethnic identity. The ecological-transactional model of ethnic identity depicted in Figure 1 illustrates that ethnic identity may result from the direct effects of the three ecological levels, and from several interactions between factors within the three ecological levels, and that ethnic identity influences mental health. Thus, according to an ecological-transactional model, ethnic identity development is conceptualized as a complex process resulting from internal and external factors, and the relationships between them. The model also demonstrates the importance of ethnic identity in mediating the relationships between acculturation, family ethnic socialization, and experience of racism, and mental health. Although the literature suggest links between the ecological factors and mental health, the mediating role of ethnic identity has been ignored in both empirical research and theoretical writing. Most of the studies on ethnic identity have explored the psychosocial correlates of ethnic identity (Bautista de Domanico et al., 1994; Chavira & Phinney, 1991; Phinney et al., 1993; Phinney & Chavira, 1995. However, ethnic identity may be a key factor in the development of mental health problems in response to acculturation, lack of family ethnic socialization, and experience of racism. Considering the impact that ethnic identity has on psychological adjustment, determining the factors that enhance or lower ethnic identity is important.

The available data, presented above, suggest the following pathways in the ethnic identity model. First, within the individual level, bicultural individuals who maintain aspects of their traditional culture while adapting to mainstream culture are better able to participate in two cultures (Berry et al., 1987). Consequently, they may feel a greater sense of connection and belonging to their ethnic group, have positive feelings about their ethnicity, and have a clearer sense of their ethnicity (high ethnic identity) than assimilated individuals who have lost their cultural ties. Although the literature suggests that acculturation is directly related to mental health (e.g., Rogler et al., 1991), ethnic identity may mediate this relationship for assimilated and bicultural individuals. The mediating effect of ethnic identity may occur because giving up one's culture or losing one's cultural ties (assimilation) may decrease one's psychological relationship with one's ethnic group (i.e., low ethnic identity), and low ethnic identity may negatively impact mental health.

Second, within the family level, socialization practices are important in the development of children's personal identity and self-worth (Marshall, 1995). Similarly, individuals who have received ethnic socialization messages from their families, may have more positive feelings about their ethnicity and a better understanding of the meaning of their membership in their ethnic group than individuals who have not received ethnic socialization messages (Knight, Bernal et al., 1993; Knight, Cota et al., 1993; Phinney & Chavira, 1995). Ethnic socialization practices may enhance self-esteem and mental health because of its impact on ethnic identity.

Finally, within the social context level, individuals who experience a greater number of minority status stressors may internalize negative views held by society, which may lower ethnic identity (Tajfel, 1978). The literature suggests a direct relationship

between experience of racism and poor mental health (Landrine & Klonoff, 1996); however, the experience of poor mental health in response to the experiences of minority status stressors may occur only if ethnic identity is lowered as a result of these experiences. The mediating role of ethnic identity in these relationships has been ignored by researchers; however, ethnic identity is important to examine as it may attenuate the effects of racism on mental health.

The available data also suggest several relationships among the individual, family, and social context factors. First, level of acculturation may influence the experience of minority status stress. Hispanic individuals who are more immersed in the Hispanic culture may appear to be "more Hispanic" whereas Hispanic individuals who are detached from the Hispanic culture and are more culturally similar to Whites may appear "more White" (e.g., Sodowsky et al., 1991). Consequently, assimilated individuals may be less likely to experience racism than bicultural individuals. Second, the experience of minority status stress may influence family ethnic socialization. Individuals who experience higher levels of minority status stress may elicit ethnic socialization messages from their parents in an effort to maintain ethnic identity (Thornton et al., 1990). Ethnic socialization practices and ethnic identity may also attenuate the relationship between experience of racism and poorer mental health. Finally, family ethnic socialization practices may influence children's level of acculturation. Family socialization practices are important in the development of children's behaviors (Boykin & Toms, 1985; Thomas & Speight, 1999). Similarly, individuals who have received ethnic socialization messages from their families, may be more likely to have maintained the behaviors, language, customs, values, etc. of Hispanic culture than individuals who have not received ethnic socialization messages.

In addition, ethnic identity is an important aspect of the "self" (Aries & Moorehead, 1989; Baldwin, 1979; Phinney, 1989; Phinney & Alipuria, 1990; Zinn, 1980) and low ethnic identity appears to lead to lower levels of self-esteem (e.g., Phinney et al., 1997). Although the literature suggests that ethnic identity has a direct impact on depression (Munford, 1994), this relationship may be mediated by self-esteem. Self-esteem has been implicated in the development of a number of mental health problems (e.g., Robertson & Simons, 1989). Because ethnic identity may impact self-esteem, the effects of self-esteem may cause a relationship between ethnic identity and depression. Finally, gender differences in the ethnic identity model were not expected, with the exception of the influence of gender on self-esteem and depression, and SES was only expected to affect acculturation.

To empirically test this ecological-transactional model of ethnic identity, a longitudinal design is necessary in order to demonstrate the continuous interplay between the three levels and the dynamic nature of ethnic identity. However, because this model had been developed based on preliminary research in the field, investment in a longitudinal design was not justified. Thus, the proposed model was examined at one point in time in order to provide initial support for an ecological model of ethnic identity. The ethnic identity model was tested using college students because ethnic identity is believed to be achieved by the college age years (Phinney, 1992).

In addition, two measures of each construct in the ethnic identity model were used for several reasons. First, multiple indicators were used in this study to provide stronger support for the relationships in the ethnic identity model. Second, multiple measures are recommended when using structural equation modeling. Third, several of the measures in this study have not been previously used with Hispanic individuals or have not been

empirically validated. By including two measures for each construct in this study, convergent validity could be demonstrated. Fourth, there has been disagreement in the acculturation literature as to the best way to assess this construct (e.g., Cortés et al., 1994). Thus, two bidimensional measures were included in order to capture the different components of acculturation. Fifth, including multiple acculturation and ethnic identity measures would allow discriminant validity to be demonstrated, which would provide additional support that acculturation and ethnic identity are separate processes.

Hypotheses

Based on the presented literature review and the pathways of the ethnic identity model, the following hypotheses were predicted (see Figure 2):

Hypothesis 1: A direct, significant positive relationship between biculturalism and ethnic identity (Path A).

Hypothesis 2: A direct, significant positive relationship between family ethnic socialization and ethnic identity (Path B).

Hypothesis 3: A direct, significant negative relationship between minority status stress and ethnic identity (Path C).

Hypothesis 4: A direct, significant positive relationship between biculturalism and experience of minority status stress (Path D).

Hypothesis 5: A direct, significant positive relationship between experience of minority status stress and family ethnic socialization (Path E)

Hypothesis 6: A direct, significant positive relationship between family ethnic socialization and biculturalism (Path F).

Hypothesis 7: A direct, significant positive relationship between ethnic identity and self-esteem (Path G).

Hypothesis 8: A direct, significant negative relationship between self-esteem and depressive symptoms (Path H).

Hypothesis 9: A significant negative relationship between biculturalism and SES.

Hypothesis 10: A significant negative relationship between female gender and self-esteem.

Hypothesis 11: A significant positive relationship between female gender and depression.

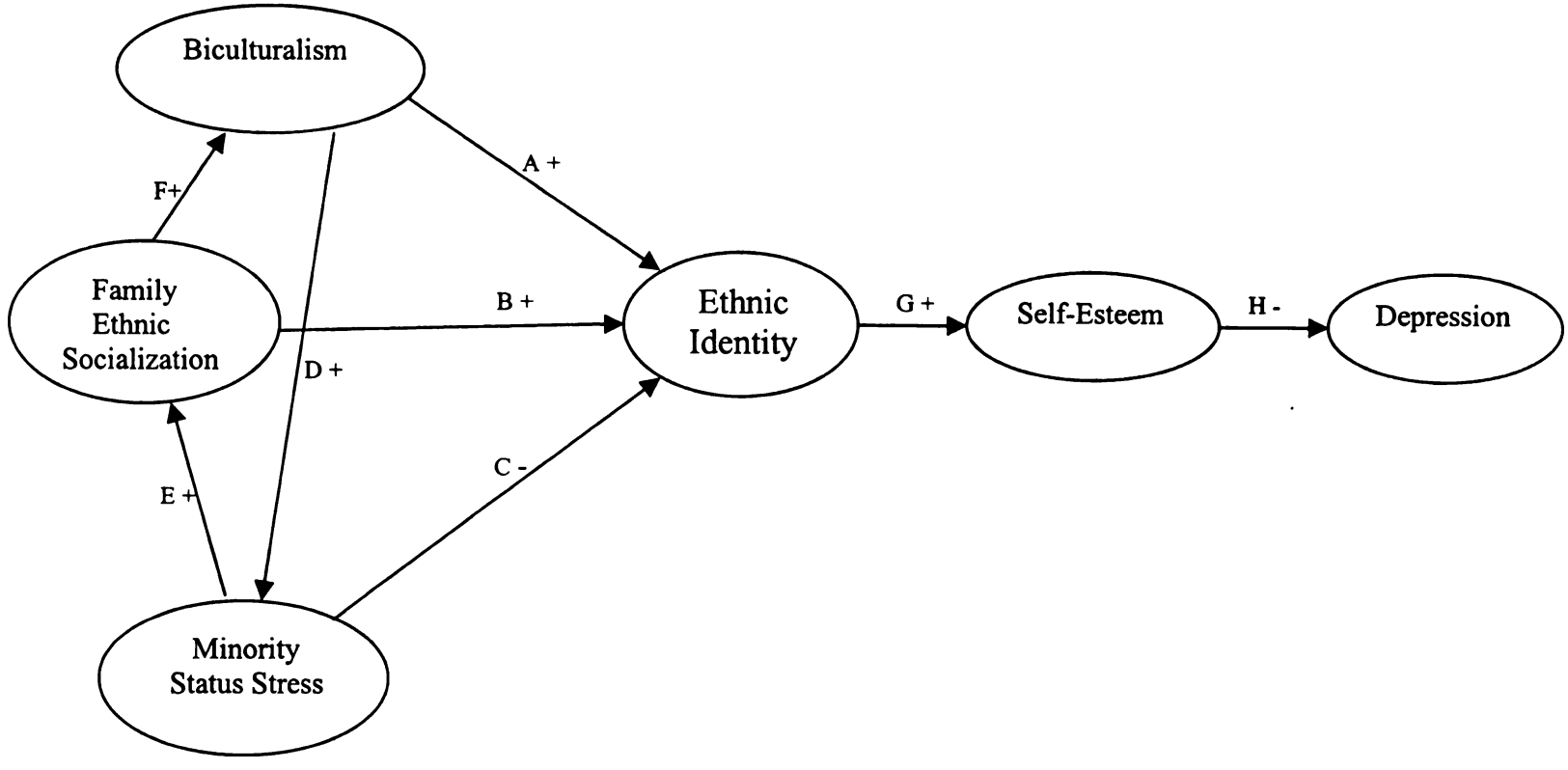

Figure 2. Ethnic Identity Structural Model and Hypotheses

Chapter 3

METHOD

Participants

Participants were 159 Hispanic undergraduate students at Michigan State University, 61 men (38.4%) and 98 women (61.6%). A total of 52 participants were recruited during Fall 1999 and Spring 2000 from the Human Subjects Pool of the Department of Psychology and received extra class credit for their participation. An additional 107 participants were recruited by mail (29% response rate) during Spring 2000 and received $10.00 for their participation.

The mean age of participants was 20.61 years (SD = 3.27) and the average GPA was 2.95 (SD = 0.52). Approximately 34% were Freshmen, 18% were Sophomores, 25% were Juniors, 18% were Seniors, and 5% were in their 5^{th} or 6^{th} year of college. See Table 1. Most of the participants reported that their cultural heritage was from Mexico (43 %), Spain (20%), or Puerto Rico (13%), and approximately 15% of participants indicated that they belonged to two Hispanic subgroups. See Table 2 for a complete description of this sample's cultural heritage.

Approximately 85% of participants were born in the United States (51% in Michigan) and 96% of participants were U.S. citizens (Table 3). The majority of participants reported that their religion was Christianity (80%) and that their race was Caucasian/Hispanic (82%). See Table 4 for a complete description.

Demographic information concerning the parents of the participants was also obtained. Approximately 67% of mothers and 60% of fathers were born in the U.S. and

Table 1. Demographic Information: Age, Year in College, and GPA of Participants

	Mean	Standard Deviation	Minimum	Maximum
Age:	20.61	3.27	18	40
Year in college:	2.44	1.29	1	6
GPA:	2.95	0.52	1.50	4.00

Table 2. Demographic Information: Cultural Heritage of Participants

Argentina	3.8%	Bolivia	1.3%
Brazil	3.2%	Chile	1.9%
Colombia	5.1%	Costa Rica	1.3%
Cuba	6.3%	Dominican Republic	1.9%
Ecuador	2.5%	El Salvador	0.6%
Guatemala	2.5%	Honduras	1.3%
Mexico	43.3%	Nicaragua	0.6%
Panama	1.3%	Paraguay	0.6%
Peru	1.9%	Puerto Rico	13.4%
Spain	19.7%	Uruguay	0.6%
Venezuela	1.3%	Two Hispanic subgroups	14.5%

Table 3. Demographic Information: Place of Birth and Citizenship of Participants

Place of Birth		*Citizenship*	
USA	84.5%	USA citizen	96.2%
Spanish speaking country	12.6%		
Other	2.9%		

Table 4. Demographic Information: Religion and Race of Participants

Religion		*Race*	
Christian	79.9%	Caucasian/Hispanic	82.4%
Muslim	1.3%	Biracial	8.1%
Jewish	0.6%	Missing	9.4%
Other	2.5%		
Atheist	8.2%		
Missing	7.5%		

Table 5. Demographic Information: Place of Birth of Mothers and Fathers

	Mothers	Fathers
USA	67.2%	59.6%
Spanish speaking country	28.9%	34.6%
Other	3.9%	5.8%

Table 6. Demographic Information: Level of Education of Mothers and Fathers

	Mothers	Fathers
Grades 1-6	2.5%	2.5%
Grades 7-12	20.8%	25.2%
Other post high school training	6.9%	2.5%
Some college	22.6%	15.7%
Associates degree	9.4%	7.5%
College degree	18.2%	12.6%
Some graduate level training	5.0%	2.5%
Graduate degree	14.5%	30.2%
Missing	0%	1.3%

Table 7. Demographic Information: Occupation of Mothers and Fathers

	Mothers	Fathers
Homemaker	12.6%	0%
Unskilled labor	13.2%	13.2%
Skilled labor	38.4%	32.7%
Professional	27.7%	37.1%
Does not work	1.3%	1.9%
Retired	2.5%	4.4%
Disabled	0%	1.3%
Deceased	1.9%	3.8%
Missing	2.5%	5.7%

29% of mothers and 35% of fathers were born in a Spanish speaking country (Table 5). The majority of mothers (77%) and fathers (71%) received some post high school education. In addition, most of the mothers were skilled laborers (38%) or professionals (28%) and most of the fathers were skilled laborers (33%) or professionals (37%). See Tables 6 and 7 for complete descriptions of parent level of education and occupation.

Procedure

Participants recruited through the Human Subjects Pool of the Department of Psychology at Michigan State University (MSU) were invited to attend a single group administration session to complete the instruments in this study. At the beginning of each administration session, participants read and signed a consent form. The principle investigator then administered the packet of self-report measures and a short demographic questionnaire. The participants spent approximately 45 minutes completing all instruments in this study. After finishing the measures, participants were debriefed to the purpose and nature of this study.

Hispanic MSU undergraduate students who had not participated in this study for course credit were invited by mail to participate in this study. The MSU Registrars Office mailed packets containing all measures, a return envelope, a small blank envelope, a cover letter inviting Hispanic students to participate in this study, and instructions for participation to approximately 400 MSU undergraduate students (half male and half female) identified in their database as Hispanic. Individuals who had participated previously or were signed up to participate through the Psychology subject pool were not mailed a packet. The cover letter included information regarding consent to participate and participants were told that returning the questionnaire packet indicated their consent to participate in this study. These participants were given $10.00 for their participation.

Participants were invited to return the completed questionnaire packet to the investigator by mail along with the enclosed small envelope addressed to them. Upon receipt of the questionnaire packet and self-addressed envelope, a check for $10.00 was mailed. Participants were also given the opportunity to return the questionnaire packet in person and receive $10.00 in cash during specified times.

Instruments

In this section, the psychometric properties of measures are described. Please refer to the Results section for the psychometric properties of the measures for this sample. Participants completed all of the following measures and were told beforehand that several questions referred to Hispanic individuals and that the word "Hispanic" referred to all individuals from a Latin American or Spanish speaking country (e.g., countries within Central and South America, Puerto Rico, Cuba, Dominican Republic, and Spain).

Demographic Information

A demographic questionnaire was administered consisting of questions concerning participants' age, gender, level of education, current GPA, ethnicity, race, place of birth, citizenship, religion, and parents' ethnicity, place of birth, level of education, and occupation. Participants were also asked to indicate the number of MSU organizations related to their ethnic group that they are involved in, and how physically similar they perceive themselves to be to members of their ethnic group (Appendix A).

Individual Level -- Level of Acculturation

The Bidimensional Acculturation Scale for Hispanics (BAS). The BAS (Marín & Gamba, 1996) was developed to assess level of acculturation among Hispanic individuals

using two major cultural dimensions (Hispanic and non-Hispanic). The BAS is a 24-item scale consisting of 12 items for each cultural domain. The scale contains 3 language-related subscales, Language Use, Linguistic Proficiency, and Electronic Media and internal consistency scores for the overall Hispanic domain (0.90) and overall non-Hispanic domain (0.96) were high. Validity indices were comparable or higher than those found for other acculturation scales using the usual indicators for estimating criterion validity of acculturation scales (i.e., generation status, age at arrival in the U.S., number of years in the U.S., amount of formal education, proportion of respondent's life lived in the U.S., and correlation with the acculturation score obtained through the Short Acculturation Scale for Hispanics (Marín et al., 1987).

Items were rated on a 4-point scale from 1 (almost never or very poorly) to 4 (almost always or very well). Examples of items include, "How often do you speak Spanish?" "How well do you read Spanish?" and "How often do you watch television programs in Spanish?" See Appendix B. Scores can range from 12 to 48 on each cultural domain. To assign acculturation categories, a score of 30 was used as a cutoff to indicate a high or low level of adherence to each cultural domain. Subjects who endorsed items indicative of a separated or marginal status were not included in the analyses. Thus, only the Hispanic domain was examined in the ethnic identity model, since individuals who endorsed items indicative of biculturalism or assimilation would not differ on the non Hispanic domain.

Researchers have argued that there is a lack of satisfactory measures of acculturation (Negy & Woods, 1992a; Keffe, 1980). The BAS emphasizes language use and mastery in the assessment of level of acculturation to the exclusion of other dimensions of acculturation. Most acculturation measures also tend to focus exclusively

on language or have at least half of the scale items referring to language (e.g., Barona & Miller, 1994; Cuéllar et al., 1980; Marín et al., 1987; Neff, Hoppe, & Perea, 1987; Olmedo & Padilla, 1978; Padilla, 1980). Factor analytic studies of acculturation scales have found language preference to be a reliable indicator of acculturation level that accounts for large amounts of variance in comparison to other indicators of acculturation (Barona & Miller, 1994; Cuéllar et al., 1980; Feliz-Ortiz et al., 1994; Marín et al., 1987; Olmedo & Padilla, 1978). However, researchers in this area have argued that relying on language use yields high levels of internal consistency or reliability at the expense of content validity. As stated above, acculturation is a multidimensional construct encompassing acquisition and proficiency in the host society's language, as well as adaptation to the host society's values, cultural traditions, food preferences, use of media, child-rearing practices, interpersonal relations, expected behavioral amenities, and other elements of a culture (Barona & Miller, 1994; Betancourt & López, 1993; Cortés et al., 1994; Cuéllar et al., 1995; Feliz-Ortiz et al., 1994). Because of this limitation with the BAS, another bidimensional acculturation measure, discussed below, was included in this study that takes a more comprehensive assessment of acculturation.

Bicultural Involvement Scale (BIS). The BIS was created to assess, separately, involvement in American culture and involvement in Puerto Rican culture (Cortés et al., 1994). Each subscale contains 9 items that focus on language preferences and usage, values, ethnic pride, food preferences, child-rearing practices, and interpersonal relations. The 9 items in each subscale are equivalent, differing from each other only with respect to the culture to which they refer. Internal consistency reliability of the two subscales measuring involvement in American and Puerto Rican cultures were 0.78 and 0.73, respectively. Criterion validity was estimated using generation status, age at arrival in

the U.S., and number of years in the U.S. Both scales were moderately related to the three criteria in the expected direction (Cortés et al., 1994).

One limitation of this scale is that it was developed specifically for use with Puerto Rican individuals. In this study, the Puerto Rican domain was adapted for use by Hispanics in general. Examples of items on the adapted Hispanic domain include, "How much are Hispanic values a part of your life?" " How important is it to you to celebrate holidays in the Hispanic way?" and " How important is it to you to raise your children with Hispanic values?" See Appendix C. A second limitation of this scale for this study is that two of the items on this scale assess ethnic pride, which is believed to be part of ethnic identity, as opposed to acculturation (Cuéllar et al., 1997). The psychological concept, ethnic pride, is captured in the measures of ethnic identity stated above, and thus, it was unlikely that these items would load on acculturation scores.

Items were rated using a 4-point Likert scale ranging from 1 (not at all) to 4 (very much), with higher scores within each subscale indicating greater involvement in the cultural domain. Scores can range from 9 to 36 on each cultural domain. To assign acculturation categories, a score of 23 was used as a cutoff to indicate high or low level of adherence to each cultural domain. Because subjects who endorsed items indicative of a separated or marginal status were not included in the analyses, only the Hispanic domain was examined in the analysis of the ethnic identity model.

Family Level -- Family Ethnic Socialization

Family Ethnic Socialization Scale (FESS). One reason that there has been little research in the area of ethnic socialization is the lack of psychometrically sound measures of ethnic socialization processes (Stevenson, 1994). Previous ethnic socialization research mainly used descriptive or survey interviews to assess ethnic socialization

practices or scales specifically created for their study and population. However, studies generally assessed the three main ethnic socialization issues, discussed above, including teaching about culture and racial pride, and preparing children for experiences of racism, prejudice, and discrimination (Boykin & Toms, 1985; Marshall, 1995; Thornton et al., 1990; Zayas & Solari, 1994). In this study, an ethnic socialization scale was created to measure general ethnic socialization practices that would be applicable to various ethnic groups. Items were based on questions used by Phinney and Chavira (1995), Knight, Bernal, et al. (1993) and Knight, Cota, et al. (1993), as well as several items used by Stevenson (1994).

The FESS, developed for this study, consists of 11 items regarding family teaching of cultural practices, dealing with racism, and ethnic pride. Examples are, "My family tried to teach me about the cultural practices of my ethnic group (e.g., special customs, traditions, food, music)," "My family talked to me about how to deal with experiences like name calling, negative stereotyping, and prejudice," and "My family told me to be proud of my ethnicity." Items were rated on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree). An individual's family ethnic socialization score was derived by reversing negatively worded items and summing across items. Scores can range from 11 to 77 with higher scores indicating higher experience of family ethnic socialization. In addition, subjects were asked to answer three open ended questions adapted from the open ended questions used by Marshall (1995) and Phinney and Chavira (1995) in their parent ethnic socialization interview (see Appendix D).

Teenager Experience of Racial Socialization Scale (TERS). The TERS (Stevenson, Cameron, & Herrero-Taylor, 1996) was also used to measure family ethnic socialization. The TERS is a modified version of the Scale of Racial Socialization for

Adolescents (SORS-A; Stevenson,1994). The SORS-A was developed for African American adolescents based on the culture, values, attitudes, behaviors, and experiences of this ethnic group. The SORS-A assesses adolescents' personal opinions about the appropriateness of socialization activities with children in African American families in order to vicariously assess one's experience of racial socialization (Stevenson, 1994). In contrast, the TERS intends to measure the frequency with which respondents received race-related messages from their family throughout their childhood. Both scales are worded similarly and include items about racism struggles, teaching about culture, pride development, and spiritual coping.

Factor analysis of the TERS revealed four factors: Racism Struggles, Cultural Survival, Pride Development, and Spiritual Coping, and Cronbach's alpha for these four subscales were .74, .73, .76, and .76, respectively (Stevenson, Cameron, et al., 1996). Preliminary support for the construct validity of the SORS-A has been given (Stevenson,1994) and evidence of criterion validity has been demonstrated by comparing the SORS-A to the African Self-Conscious Scale (Baldwin & Bell, 1985). Mother's and father's educational level, family size, and adolescent gender were not significantly related to the SORS-A (Stevenson, 1994).

Three of the four subscales of the TERS were used in this study (Racism Struggles, Cultural Survival, and Pride Development). The three subscales used in this study contained a total of 22 items that were adapted for Hispanic college students. Respondents were asked whether their parents or caregivers communicated the socialization messages to them now or when they were younger. Items were rated on a 5-point scale from, 1 (Never) to 5 (Most of the Times). Examples of items are, "Knowing your heritage is important for your survival (for your life)," and "Be proud of who you

are." Subscale scores were determined by reverse scoring negative items and then adding items within each of the three domains, with higher scores indicating higher transmission of racial socialization messages. See Appendix E.

Social Context Level -- Experience of Minority Status Stress

Minority Student Stress Scale (MSSS). The MSSS (Saldaña, 1994) was created to measure stressful experiences and perceptions of the university relevant to ethnic minority status among Hispanic college students at a predominantly White university. This scale was based on issues identified in a previous college student stress scale for African Americans (Edmunds (1984) and the College Adjustment Rating Scale (Zitzow, 1984), as cited in Saldaña (1994). Twenty-five items were rated on a 6-point scale ranging from 5 (extremely stressful) to 1 (not at all stressful). Respondents also had the option of choosing the response "not applicable," which is given a score of 0. Three domains make up the MSSS and each domain has adequate reported reliabilities as follows: Academic concerns (alpha = 0.93), Ethnic-nonethnic group concerns (alpha = 0.84), and Discrimination concerns (alpha = .86). Examples of items include, "Members of my ethnic group doing low-status jobs and Anglos in high-status jobs," "Always having to be aware of what Anglo people might do," and "Others lacking respect for people of my ethnic group." Subscale scores were obtained by summing responses within each factor, with higher scores indicative of more experiences of minority status stress. (Appendix F).

The Schedule of Racist Events (SRE). The SRE (Landrine & Klonoff, 1996) was developed to assess the frequency with which African Americans have experienced specific racist events in the past year and over their entire lifetimes. The SRE was theoretically conceptualized according to the life events (Dohrenwend, Krasnoff,

Askenasy, & Dohrenwend, 1978) and daily hassles (Kanner, Coyne, Schaefer, & Lazarus, 1981) framework, as cited in Landrine and Klonoff (1996). Racist events are viewed as culturally specific negative events (stressors) that happen to African Americans, because they are African American, as opposed to life events or hassles than can happen to anyone (e.g., losing your car keys). Like generic negative events, racist events can be conceptualized as occurring frequently or infrequently, and as acute (recent) and chronic (lifetime). In this study, the SRE was adapted for use with Hispanic individuals.

Respondents completed each of the 18 items three times on a 6-point Likert-type scale: once for the frequency of the racist event in the past year, once for the frequency of the racist event during one's entire life, and once for the appraisal of stressfulness of the racist events (only 17 items are completed for appraisal). The three ratings represent three different subscales and reported internal consistency reliability coefficients were 0.95 for Recent Racist Events, 0.95 for Lifetime Racist Events, and 0.94 for Appraised Racist Events (Landrine & Klonoff, 1996). Split-half reliability coefficients for the three subscales were 0.93, 0.91, and 0.92 respectively. Some evidence for the validity of the SRE was demonstrated by correlating its subscales with measures of physical and mental health (e.g., the Hopkins Symptom Checklist; Landrine & Klonoff, 1996).

Examples of adapted items are, "How many times have you been treated rudely or unfairly by teachers and professors because you are Hispanic" and "How many times have you or someone you know been called a racist name?" (Appendix G). Total scores for the Appraised Racist Events domain were examined in the ethnic identity model to assess the effects of minority status stress on ethnic identity. Scores for this subscale were obtained by summing the participants' ratings of all items. Scores on the Appraised

Racist Events subscale can range from 17-102, with higher scores indicating greater experience of stress in response to the events. In addition, participants were asked at the end of this questionnaire to describe the most stressful experience they have had (if any) regarding discrimination, prejudice, or negative stereotyping/name calling.

Ethnic Identity

Multigroup Ethnic Identity Measure (MEIM). The MEIM was created to assess ethnic identity among members of diverse ethnic groups and subgroups (Phinney, 1992). Ethnic identity is defined by evidence of exploration of one's ethnicity, accompanied by a clear, secure understanding and self-acceptance of one's own ethnicity; a subjective sense of belonging to one's ethnic group; positive attitudes and feelings toward one's ethnic group; and interest in ethnic involvement (Phinney, 1992). Because this study does not focus on one particular subgroup of Hispanic individuals, the MEIM was chosen for this study so that items would be relevant to all Hispanic individuals, regardless of which Hispanic subgroup participants belonged.

The MEIM consists of 14 items that assess three aspects of ethnic identity: positive attitudes toward one's group and a sense of belonging (5 items); ethnic identity achievement, including exploration and resolution of identity development issues (7 items); and ethnic involvement (2 items). Results from a factor analysis of the MEIM conducted by Phinney (1992) using ethnically diverse high school and college samples showed that the items representing the three aspects of ethnic identity loaded on a single (Ethnic Identity) factor. Notably, the two ethnic involvement items on this scale assess involvement in cultural activities, which is believed to be part of acculturation, as opposed to ethnic identity. Involvement in Hispanic culture is captured in the measures

of acculturation presented above, and thus, it was unlikely that these items would load on ethnic identity scores.

Alpha reliability coefficients for the high school and college samples were 0.81 and 0.90, respectively. Examples of items on the MEIM are, "I feel good about my cultural or ethnic background," and "I have a clear sense of my ethnic background and what it means for me." Respondents rated items on a 4-point scale from 4 (strongly agree) to 1 (strongly disagree). After reverse scoring all negative items, all items were summed, with high scores indicative of high ethnic identity. (Appendix H).

The MEIM has been used in a number of studies to compare diverse ethnic groups (e.g., Perron et al., 1998; Phinney & Chavira, 1995; Phinney et al., 1997) and to examine Hispanic ethnic identity (e.g., Cuéllar et al.,1997; Phinney et al., 1993). Research has supported the internal consistency and factor structure of this measure (Phinney, 1992; Cuéllar et al., 1997; Phinney et al., 1997). Because past research has consistently found a relationship between ethnic identity and self-esteem, studies demonstrating that the MEIM is related to self-esteem (Phinney et al., 1993; Phinney et al., 1997; Phinney & Chavira, 1995), provide some support for its validity. Additional support for its validity can be gleaned from looking at its relationship to ethnic self-esteem (Phinney et al., 1993). In a study examining the effect of ethnic threat on Hispanic adolescent's ethnic self-concept, Phinney et al. (1993) found that ethnic identity measured by the MEIM was significantly related to ethnic self-concept, measured by an adapted form of the Private Collective Self-Esteem Scale (Luthanen & Crocker, 1990, as cited in Phinney et al., 1993). Other similar measures of ethnic identity for specific groups exist; however, no studies have compared the MEIM to other ethnic identity measures.

Jewish-American Identity Scale (JAIS). An adapted form of the Jewish-American Identity Scale (Zak, 1973) was also included in this study to assess ethnic identity. This short measure was created to assess the ethnic identity of Jewish-Americans, defined as a sense of belonging to one's group, the feeling of interdependence with members of one's group in the world, and the degree of importance of being a member of one's group to the individual (Zak, 1973). Factor analysis revealed two distinct factors representing Jewish identity and American identity, and the reliabilities of the two subscales were 0.88 and 0.89, respectively (Zak, 1973). Each subscale consists of 8 items that are worded similarly with appropriate identity words. Items were rated on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Scores on each subscale range from 8 to 48, with higher scores representing higher levels of ethnic identity. In this study, one subscale was adapted to be applicable to any ethnic group in the U.S. American identity was not assessed. The JAIS has been adapted previously for other ethnic groups. For example Der-Karabetian (1980) adapted this scale for Armenians in the U.S. and reported reliabilities of 0.72 and 0.79 for the Armenian and American subscales, respectively. However, this scale has not been adapted for Hispanic individuals previously. Examples of adapted items include, "Being a member of my ethnic group plays an important part in my life," "When an important newspaper insults people of my ethnic group, I feel that it is insulting me," and "If I were to be born all over again, I would wish to be born a member of my ethnic group" (Appendix I).

Self-Esteem

Rosenberg Self-Esteem Scale (RSES). The 10-item Rosenberg (1965) self-esteem scale is a widely used instrument designed to measure global feelings of self-worth or self-acceptance. Respondents rated 10 items on a 4-point response format

ranging from 1 (strongly agree) to 4 (strongly disagree). Items are worded both positively and negatively and examples of items are "I feel that I have a number of good qualities," and I feel that I do not have much to be proud of" (Appendix J). Scores were obtained by reverse scoring negatively worded items and summing the responses of each item. Total scores can range from 10-40, with higher scores representing higher self-esteem. The internal consistency coefficient alphas for the RSES range from 0.77 to 0.88. The RSES has a test-retest reliability of .85 (Silber & Tippet, 1965) and it has been found to correlate (r = .60) well with the Coopersmith Self-Esteem Inventory (Crandall, 1973). In addition, the RSES has been used with Hispanic populations (e.g., Dukes & Martínez, 1994).

The Self-Rating Scale (SRS). The SRS (Fleming & Courtney, 1984) has undergone several revisions. It was an outgrowth of Janis and Field's (1959) Feelings of Inadequacy Scale, which was originally developed to measure self-concept as part of a larger scale devised to assess individual differences in persuasibility and contained 23 items. In its latest revision (Fleming & Courtney, 1984), the SRS has 36 items representing five subscales, which purport to make up the general construct of self-concept (Self-Regard, Social Confidence, School Abilities, Physical Appearance, and Physical Abilities). Fleming and Courtney (1984) reported that their Self-Regard subscale most closely matches the idea of self-esteem. Therefore, in the present study, the Self-Regard subscale was used as an additional measure of self-esteem.

The Self-Regard subscale consists of 7 items and respondents rated items using a 7-point Likert format from 0 (Never) to 6 (Always). Items are worded both positively and negatively and examples of items are, "Do you ever think that you are a worthless individual?" and "In general, how confident do you feel about your abilities?" See

Appendix K. Scores were obtained by reverse scoring negatively worded items and summing the responses of each item. Total scores can range from 0-49, with higher scores indicating higher levels of self-esteem. Cronbach alpha for the Self-Regard subscale was 0.82 using a college student sample (Fleming & Courtney, 1984). The Self-Regard subscale is correlated with the Rosenberg Self-Esteem Scale (0.78), supporting the contention that both are measures of the same construct (Fleming & Courtney, 1984). In addition, this measure has been used with Hispanic populations (e.g., de Mendonca, 1989).

Depression

Beck Depression Inventory (BDI). The BDI (Beck, 1978) is a 21-item self-report questionnaire designed to assess symptoms or attitudes characteristic of depression. Each of the 21 items has four alternatives ranging from 0 (low depression) to 3 (maximum depression) and total scores can range from 0 to 63. Some examples of items include, "I don't sleep as well as I used to," and "I have lost most of my interest in other people." The BDI is a commonly used scale for measuring level of depression for a wide range of populations including Hispanic individuals and college students and it has been shown to have good reliability and validity (see Beck, Steer, & Garbin, 1988 for a review). See Appendix L.

Center for Epidemiologic Studies Depression Scale (CESDS) The CESDS (Radloff, 1977) was also included in this study to assess depression. The CESDS was developed to measure current level of depressive symptomology for both normal and clinical populations. Respondents rated 20 items using a 4-point Likert-type scale from 1 (rarely or none of the time) to 4 (most or all of the time). Examples include, "I felt lonely," "I talked less than usual," and "I felt that everything I did was an effort"

(Appendix M). Scores were obtained by reverse scoring appropriate items and adding all of the items together, with higher scores reflecting higher levels of depressive symptoms during the past week (Radloff, 1977). For the general population and patient sample, Cronbach alphas were 0.85 and 0.90, respectively, and the eight week test-retest reliability was 0.59 (Radloff, 1977). The CESDS has been used with Hispanic populations (e.g., Golding & Aneshensel, 1989) and has demonstrated adequate validity as evidenced by this measure's ability to discriminate between general population and psychiatric inpatient samples, as well as levels of severity among patient groups (Radloff, 1977). In addition, the CESDS has been found to correlate well with other self-report measures of depression (Radloff, 1977), indicating that the CESDS is an adequate measure of depression.

Chapter 4

RESULTS

Structural equation modeling (SEM) was used to test the hypothesized relationships in the ethnic identity structural model presented earlier (Figure 2). Prior to the analyses of the hypotheses, decisions regarding missing data, nonnormality of observed variables, and the measurement properties of the scales for this sample were made.

The amount of missing data for the ethnic identity model was minimal. Less than 1% of the data was missing for the entire model (0.26%). Mean substitution was used to replace missing data values. Detecting outliers was accomplished by visual examination of the plots of each measured variable, identifying cases more than three standard deviations from the mean or not close to other observations. A total of 9 participants exhibited extreme values and were excluded from the analyses [1], as outliers can dramatically affect the results of structural equation modeling (West, Finch, & Curran, 1995). The final sample size for analyses was 159. The data was then examined to determine if excessive kurtosis and skewness were present, as these characteristics can also affect the results (West et al., 1995). Kurtosis and skewness values for the entire model ranged from –0.98 to +1.12, indicating that excessive kurtosis and skewness were

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[1] Extremely high scores were exhibited on the Schedule of Racist Events (1 participant), the Minority Status Stress Scale (2 participants), the Rosenberg Self-Esteem Scale (1 participant), the Self-Rating Scale (2 participants), the Beck Depression Inventory (3 participants), and the Center for Epidemiologic Studies Depression Scale (1 participant), and extremely low scores were exhibited on the Rosenberg Self-Esteem Scale (2 participants). Three participants exhibited extreme scores on two measures.

not present in the current data set. The data reflected a relatively normal distribution and were appropriate for the analyses.

An examination of the measurement properties of the scales used to assess the latent variables in the ethnic identity model was necessary to determine if the collected data fit the hypothesized factor structure reported in the literature. Confirmatory factor analyses were conducted using LISREL to determine if there was an acceptable degree of fit between the collected data and the reported factor structure for each questionnaire. To determine the degree of fit, the Goodness of Fit Index (GFI), the Normed Fit Index (NFI), and the Root Mean Square Error of Approximation (RMSEA) were examined. Guidelines for interpreting the GFI and NFI were: 1.00 = ideal fit; 0.90-0.99 = excellent fit; 0.85-0.89 = average fit; < 0.85 = poor fit; and guidelines for interpreting RMSEA were: 0.00-0.05 = excellent fit; 0.05-0.08 = moderate fit; 0.08-0.10 = acceptable fit; > 0.10 = poor fit (Bollen, 1989).

For measures that did not have an acceptable degree of fit, exploratory factor analyses were conducted in SPSS to improve the factor structure of the measures. All exploratory factor analyses were conducted using a principle components factor analysis with a promax rotation. After exploratory factor analyses, items were generally deleted if: (1) item factor loadings were below 0.40; (2) an item loaded on two factors and the discrepancy between the item factor loadings was less than 0.30; or (3) a factor had less than three items that met the above requirements. Several items were maintained that marginally met the above criteria if internal consistency was improved or if including the item could be justified on theoretical or empirical grounds.

These preliminary analyses led to the initial measurement model (see Figure 3). This model was then used to test the hypothesized relationships between the constructs in the ethnic identity structural model (Figure 2) and determine if the model was compatible with the collected data. The results of the preliminary analyses are presented below.

Review of the Measurement Model

Please refer to the measurement model (Figure 3) for the factor structures, measures, constructs, and pathways in the ethnic identity model and the Key for the Measurement Model for an outline of the measures, scales, and abbreviations used in the measurement model. The means, standard deviations, and range for each measure and subscale are listed in Table 8.

Individual Level -- Level of Acculturation

The Bidimensional Acculturation Scale for Hispanics (BAS; Marín & Gamba, 1996). This measure was used to assess level of acculturation. The literature reported three language-related subscales, Language Use (3 items), Linguistic Proficiency (6 items), and Electronic Media (3 items) for the Hispanic and American domains of this measure. As expected, no participants represented a Separated or Marginal acculturation status (Bicultural = 41%, Assimilated = 59%) indicating that all participants scored highly on the American domain. Therefore, only the Hispanic domain was used in the analyses. The confirmatory factor analysis (CFA) indicated a poor fit for the data [χ^2 (df 51, N = 159) = 306.20, $p<.001$, GFI = 0.76, NFI = 0.87, RMSEA = 0.18]. An exploratory factor analysis (EFA) yielded a one-factor solution; however, only items from the Linguistic Proficiency subscale were maintained (Table 9). Items from the Language Use and Electronic Media subscales loaded highly on two factors and the discrepancy between item factor loadings was approximately 0.10. The internal

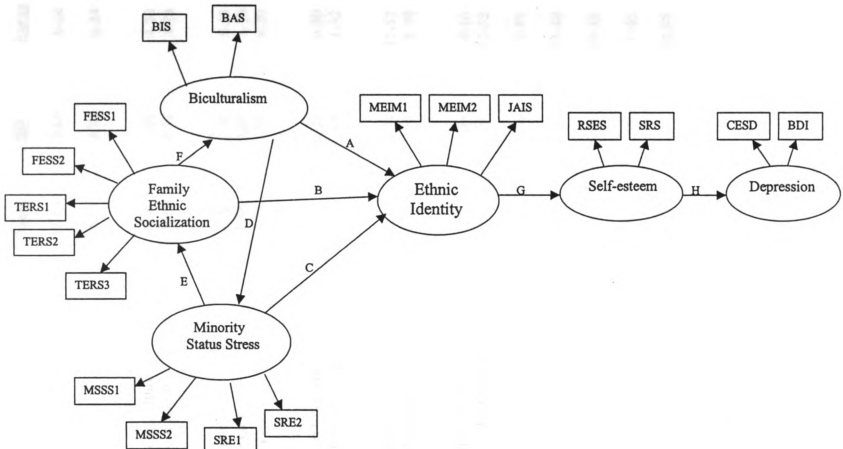

Figure 3. Ethnic Identity Structural and Measurement Model

Table 8. Psychometric Properties of Measures: Means, Standard Deviations, and Range

Measure		Mean	SD	Range
BAS		13.69	5.82	6-24
BIS		14.75	4.96	6-24
FESS				
	Teaching about Culture	18.91	6.89	4-28
	Teaching about Racism	19.12	5.74	4-28
TERS				
	Cultural Awareness	11.30	5.36	5-25
	Racism Struggles	7.84	4.20	4-20
	Pride Development	17.33	2.96	8-20
MSSS				
	Discrimination Concerns	17.25	12.09	0-50
	Ethnic-Non Ethnic Group Concerns	11.14	6.64	1-32
SRE				
	Rude Treatment	20.03	10.76	11-57
	Aggressive Behaviors	14.79	7.18	5-30
MEIM				
	Awareness of Ethnicity	10.82	3.26	4-16
	Clarity, Affirmation, and Belonging	24.74	5.26	11-32
JAIS		31.45	8.37	11-48
RSES		35.80	4.02	23-40
SRS		34.02	5.07	19-42
BDI		27.69	5.81	21-46
CESDS		31.40	8.90	20-59

reliability for this sample ($\alpha = 0.96$) was excellent and was similar to findings reported by Marín and Gamba (1996). Notably, Marín and Gamba reported that the Linguistic Proficiency subscale could be used by itself to measure level of acculturation because of reliability for this sample ($\alpha = 0.96$) was excellent and was similar to findings reported by Marín and Gamba (1996). Notably, Marín and Gamba reported that the Linguistic Proficiency subscale could be used by itself to measure level of acculturation because of its high reliability and validity. The revised scale is represented by BAS in Figure 3. High scores indicate Biculturalism and low scores indicate Assimilation.

Bicultural Involvement Scale (BIS; Cortés et al., 1994). This measure was also used to assess level of acculturation. The literature reported one composite scale for each of the two cultural domains of this measure (i.e., involvement in American culture and involvement in Hispanic culture). An examination of acculturation status using this measure also revealed that no participants represented a Separated or Marginal acculturation status (Bicultural = 54%, Assimilated = 46%), indicating that all participants scored high on the American domain. Therefore, only the Hispanic domain was used in the analyses. The initial CFA indicated an average fit for the data [χ^2 (df 27, N = 159) = 99.64, $p<.001$, GFI = 0.88, NFI = 0.86, RMSEA = 0.13]. An EFA supported a one-factor solution with three items deleted (Table 10). Notably, as expected, the two items hypothesized to assess ethnic identity (i.e., ethnic pride) did not meet the selection criteria. The internal reliability for this sample ($\alpha = 0.88$) was above average. The revised scale is represented by BIS in Figure 3, and high scores indicate Biculturalism.

Family Level -- Family Ethnic Socialization

Family Ethnic Socialization Scale (FESS). This measure was developed by the investigator for this study to assess family ethnic socialization. A factor structure for this

Table 9. The Bidimensional Acculturation Scale for Hispanics (BAS)

Items and factor loadings

Alpha = .96 (6 items)

20.	How well do you read Spanish	(.92)
21.	How well do you understand television programs in Spanish	(.92)
22.	How well do you understand radio programs in Spanish	(.92)
19.	How well do you speak Spanish	(.91)
23.	How well do you write in Spanish	(.90)
24.	How well do you understand music in Spanish	(.89)

Items deleted:

7.	How often do you speak Spanish	(.87)
9.	How often do you think in Spanish	(.79)
10.	How often do you watch television programs in Spanish	(.64)
12.	How often do you listen to music in Spanish	(.63)
8.	How often do you speak Spanish with your friends	(.62)
11.	How often do you listen to radio programs in Spanish	(.35)

Table 10. Bicultural Involvement Scale (BIS) -- Items and factor loadings

Alpha = .88 (6 items)

4.	How much are Hispanic values a part of your life	(.87)
6.	How important is it to you to raise your children with Hispanic values	(.83)
14.	How much do you enjoy Spanish TV programs	(.78)
2.	How important is it to you to celebrate holidays in the Hispanic way	(.77)
16.	How much do you enjoy speaking Spanish	(.76)
8.	How comfortable would you be in a group of Hispanics who don't speak	(.70)

Items deleted:

10.	How proud are you of being Hispanic	(.60)
18.	How many days a week would you like to eat Hispanic food	(.58)
12.	Do you think Hispanics are kind and generous	(.25)

measure was not hypothesized *a priori* and therefore, only an EFA was conducted. The EFA yielded a two-factor solution; one factor represents teaching about culture and the other factor represents teaching about racism (Table 11). For this sample, the Teaching about Culture factor demonstrated adequate reliability ($\alpha = 0.84$) and the Teaching about Racism factor demonstrated acceptable reliability ($\alpha = 0.73$). The two subscales arerepresented by FESS1 and FESS2, respectively, in the measurement model (Figure 3). High scores are indicative of greater ethnic socialization.

Teenager Experience of Racial Socialization Scale (TERS; Stevenson, Cameron, et al., 1996). This measure was also used to measure family ethnic socialization. The three subscales that were selected from this measure (Cultural Survival, Racism Struggles, and Pride Development) demonstrated a poor fit of the data to these hypothesized factors [χ^2 (df 206, N = 159) = 531.55, $p<.001$, GFI = 0.77, NFI = 0.68, RMSEA = 0.10]. An EFA supported a three factor solution with several items from each subscale deleted (Table 12). The three factors represented cultural awareness, racism struggles, and pride development. Alpha reliabilities for each of the subscales in this sample were acceptable (Cultural Awareness $\alpha = 0.85$; Racism Struggles $\alpha = 0.87$; and Pride Development $\alpha = 0.64$). High scores on the Cultural Awareness (TERS1), Racism Struggles (TERS2), and Pride Development (TERS3) subscales are indicative of more experience of family ethnic socialization practices (Figure 3).

Social Context Level -- Experience of Minority Status Stress

Minority Student Stress Scale (MSSS; Saldaña, 1994). This inventory assesses stressful experiences and perceptions of the university relevant to ethnic minority status among Hispanic college students at a predominantly White university. The initial CFA of three variables was poor [χ^2 (df 87, N = 159) = 267.12, $p<.001$, GFI = 0.82, NFI =

Table 11. Family Ethnic Socialization Scale (FESS) -- Items and factor loadings

* = Reverse scored items

Factor 1: Teaching about Culture

Alpha = .84 (4 items)

1.	My family tried to teach me about the cultural practices of my ethnic	(.90)
3.	My family talked to me about the roots and history of my ethnic group	(.85)
*2.	My family was not involved in the cultural practices of my ethnic group	(.76)
4.	My family taught me what it is to be a member of my ethnic group	(.73)

Items deleted:

5.	My family told me to be proud of my ethnicity	(.66)

Factor 2: Teaching about Racism

Alpha = .73 (4 items)

7.	My family talked to me about how to deal with experiences like name	(.78)
9.	My family talked to me about how to deal with discrimination or being	(.73)
11.	My family tried to prepare me for living in a culturally diverse society	(.73)
6.	My family tried to teach me how to get along in mainstream American	(.65)

Items deleted:

10.	My family believed that all races are equal	(.33)
*8.	My family taught me little about racism in America	(.13)

Table 12. Teenager Experience of Racial Socialization Scale (TERS)
Items and factor loadings

* = Reverse scored items

Factor 1: Cultural Awareness

Alpha = .85 (5 items)

22.	You should know about Latin American history so that you will be a	(.82)
19.	Teachers can help Hispanic children grow by showing signs of Hispanic	(.80)
16.	Schools should be required to teach all children about Latin American	(.77)
13.	Knowing your heritage is important for your survival (for your life)	(.71)
29.	Going to a mostly Hispanic school will help Hispanic children feel better	(.68)

Items deleted:

30.	You need to learn how to live in a White world and a Hispanic world	(.54)
8.	Having large families can help many Hispanic families survive life	(.49)
*12.	Hispanic children will learn more if they go to a mostly White school	(.35)
* 2.	Hispanic children will feel better about themselves if they go to school	(.21)

Factor 2: Racism Struggles

Alpha = .87 (4 items)

23.	You have to work twice hard as Whites in order to get ahead in this world	(.84)
26.	Whites make it hard for people to get ahead in this world	(.83)
32.	Whites have more opportunities than Hispanics	(.81)
35.	A Hispanic child or adult will be harassed just because s/he is Hispanic	(.76)

Items deleted:

7.	Racism and discrimination are the hardest things a Hispanic child has to	(.67)
14.	Racism is real, and you have to understand it or it will hurt you	(.54)
*15.	Too much talk about racism will keep you from reaching your goals in	(.25)
* 1.	American society is fair toward Hispanic people	(.21)

Factor 3: Pride Development

Alpha = .64 (4 items)

31.	Never be ashamed of your ethnicity	(.80)
28.	Be proud of who you are	(.66)
9.	All ethnic groups are equal	(.65)
6.	You should be proud to be Hispanic	(.60)

Items deleted:

21.	Getting a good education is still the best way for you to get ahead	(.15)

0.86, RMSEA = 0.11]. An EFA supported a two-factor solution: one containing items indicative of discrimination concerns and the other representing ethnic-nonethnic group concerns (Table 13). Alpha reliabilities for this sample were excellent (Discrimination Concern $\alpha = 0.94$ and Ethnic-Non Ethnic Group Concerns $\alpha = 0.91$). Discrimination Concerns is represented by MSSS1 and Ethnic-Non Ethnic Group Concerns is represented by MSSS2 in Figure 3. High scores on each of these factors are indicative of more experiences of minority status stress.

The Schedule of Racist Events (SRE; Landrine & Klonoff, 1996). In the SRE subscale of interest, respondents were asked to appraise the stressfulness of racist events they experienced. The initial CFA of this hypothesized one factor scale indicated a poor fit for the data [χ^2 (df 119, N = 159) = 616.06, $p<.001$, GFI = 0.69, NFI = 0.68, RMSEA = 0.16]. An EFA yielded a two-factor solution; one factor containing items indicative of racist events involving rude or unfair treatment and the other factor representing racist events involving aggressive behaviors (Table 14). The internal reliabilities for this sample were above average (Rude Treatment $\alpha = 0.90$ and Aggressive Behaviors $\alpha = 0.88$). The two factors, Rude Treatment (SRE1) and Aggressive Behaviors (SRE2) are found in Figure 3, and high scores indicate greater experience of minority status stress.

Ethnic Identity

Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). The MEIM was used to assess ethnic identity. The literature reported a one-factor structure for this measure. The initial CFA indicated a poor fit for the data [χ^2 (df 77, N = 159) = 262.50, $p<.001$, GFI = 0.81, NFI = 0.78, RMSEA = 0.12]. An EFA yielded a two-factor solution with two items removed; one factor containing items representing awareness and active learning about one's ethnicity and the other factor representing clarity, affirmation, and

Table 13. Minority Student Stress Scale (MSSS) -- Items and factor loadings

Factor 1: Discrimination Concerns

Alpha = .94 (11 items)

21.	Being treated rudely or unfairly because of my ethnicity	(.87)
22.	Being discriminated against	(.87)
7.	Attitudes/treatment of faculty toward students of my ethnic group	(.83)
23.	Anglo people expecting me to be a certain way because of my ethnicity	(.83)
24.	Others lacking respect for people of my ethnic group	(.79)
25.	Having to "prove" my abilities to others (e.g., work twice as hard)	(.79)
8.	Anglo students/faculty expecting poor academic performance from	(.77)
20.	This campus being an unfriendly place	(.75)
10.	Pressure that what "I" do is representative of my ethnic group's abilities,	(.75)
9.	Tense relationships between Anglos and minorities at this university	(.73)
3.	Racist policies and practices at this university	(.73)

Items deleted:

6.	Seeing members of my ethnic group doing low-status jobs and Anglos in	(.69)
16.	Having to always be aware of what Anglo people might do	(.65)

Factor 2: Ethnic-Nonethnic Group Concerns

Alpha = .91 (7 items)

2.	Few students of my ethnic group in my classes	(.85)
1.	Not enough professors of my ethnic group	(.80)
5.	Few courses involving issues relevant to my ethnic group	(.79)
4.	University lacking concern/support for the needs of students of my ethnic	(.77)
13.	Anglo-oriented campus culture	(.76)
14.	Lack of unity/supportiveness among members of my ethnic group at this	(.71)
15.	Having to live around mostly Anglo people	(.70)

Items deleted:

17.	Maintaining my ethnic identity while attending this university	(.61)
18.	Relationships between males and females of my ethnic group (available	(.55)
19.	Wealthy campus culture	(.54)
11.	Having Anglo friends	(.53)
12.	Relationships between different ethnic groups	(.39)

Table 14. The Schedule of Racist Events (SRE) -- Items and factor loadings

Factor 1: Rude Treatment

Alpha = .90 (11 items)

4.	How many times have you been treated rudely or unfairly by *people in*	(.80)
1.	How many times have you been treated rudely or unfairly by *teachers,*	(.80)
8.	How many times have you been treated rudely or unfairly by *institutions*	(.77)
3.	How many times have you been treated rudely or unfairly by your *fellow*	(.75)
5.	How many times have you been treated rudely or unfairly by *strangers*	(.71)
7.	How many times have you been treated rudely or unfairly by *people in*	(.70)
2.	How many times have you been treated rudely or unfairly by your	(.69)
11.	How many times have people *misunderstood your intentions and motives*	(.68)
10.	How many times have you been *accused or suspected of doing something*	(.62)
6.	How many times have you been treated rudely or unfairly by *neighbors*	(.61)
9.	How many times have you been treated rudely or unfairly by your *friends*	(.60)

Factor 2: Aggressive Behaviors

Alpha = .88 (5 items)

13.	How many times have you been *really angry about something racist that*	(.89)
16.	How many times have you *gotten into an argument or a fight about*	(.86)
15.	How many times have you or someone you know *been called a racist*	(.85)
12.	How many times did you *want to tell someone off for being racist but*	(.75)
17.	How many times have you or someone you know been *made fun of,*	(.70)

Items deleted:

14.	How many times were you *forced to take drastic steps* (e.g., filing a	(.48)

Table 15. Multigroup Ethnic Identity Measure (MEIM) -- Items and factor loadings

* = Reverse scored items

Factor 1: Awareness of Ethnicity

Alpha = .81 (4 items)

1.	I have spent time trying to find out more about my own ethnic group,	(.85)
*7.	I really have not spent much time trying to learn more about the culture	(.77)
10.	In order to learn more about my ethnic background, I have often talked	(.75)
4.	I think a lot about how my life will be affected by my ethnic group	(.71)

Factor 2: Clarity, Affirmation, and Belonging

Alpha = .88 (8 items)

8.	I have a strong sense of belonging to my own ethnic group	(.83)
13.	I feel a strong attachment towards my own ethnic group	(.80)
9.	I understand pretty well what my ethnic group membership means to me,	(.77)
14.	I feel good about my cultural or ethnic background	(.76)
11.	I have a lot of pride in my ethnic group and its accomplishments	(.74)
3.	I have a clear sense of my ethnic background and what it means for me	(.73)
*6.	I am not very clear about the role of my ethnicity in my life	(.72)
5.	I am happy that I am a member of the group I belong to	(.52)

Items deleted:

12.	I participate in cultural practices of my own group, such as special food,	(.65)
2.	I am active in organizations or social groups that include mostly members	(.39)

belonging (Table 15). Notably, as expected, the two items that assessed acculturation did not meet the item selection criteria. The internal reliabilities for this sample were adequate (Awareness of Ethnicity $\alpha = 0.81$ and Clarity, Affirmation, and Belonging $\alpha = 0.88$). The two factors, Awareness of Ethnicity (MEIM1) and Clarity, Affirmation, and Belonging (MEIM2) are found in Figure 3, and high scores indicate high ethnic identity.

Jewish-American Identity Scale (JAIS; Zak, 1973). The JAIS was also used to assess ethnic identity. The literature reported a one-factor solution for this measure. The initial CFA demonstrated an acceptable fit of this data to the hypothesized factor structure [χ^2 (df 20, N = 159) = 58.96, $p<.001$, GFI = 0.91, NFI = 0.89, RMSEA = 0.11]. Internal consistency for this sample ($\alpha = 0.86$) was similar to alpha reliabilities reported by Zak (1973). High scores on the JAIS indicate higher ethnic identity (Figure 3).

Self-Esteem

Rosenberg Self-Esteem Scale (RSES; Rosenberg (1965). This measure was used to assess self-esteem and contains one factor. The initial CFA [χ^2 (df 35, N = 159) = 129.70, $p<.001$, GFI = 0.86, NFI = 0.77, RMSEA = 0.13] demonstrated a reasonable fit for the data. This factor structure was accepted given the generous amount of prior research and validation of this measure. This scale demonstrated adequate internal consistency ($\alpha = 0.83$) in this study. All items of the RSES were reversed scored so that high scores indicate high self-esteem (Figure 3).

The Self-Rating Scale (SRS; Fleming & Courtney, 1984). This measure was also used to assess self-esteem. The initial CFA for the subscale selected from this measure, the Self-Regard subscale, was excellent [χ^2 (df 14, N = 159) = 38.20, $p<.001$, GFI = 0.94, NFI = 0.90, RMSEA = 0.10]. The internal reliability of the SRS for this sample ($\alpha = 0.81$) was adequate and similar to the internal reliability reported by Fleming and

Courtney (1984). All items were reversed scored so that high scores on the SRS indicated high self-esteem (Figure 3).

Depression

Beck Depression Inventory (BDI; Beck, 1978). The initial CFA for this one factor depression measure was poor [χ^2 (df 189, N = 159) = 435.80, p<.001, GFI = 0.79, NFI = 0.60, RMSEA = 0.09]. This factor structure was accepted given that the measurement properties of the BDI have been well established in the literature. For the current sample, the alpha reliability was adequate (α = 0.85) and similar previous samples (e.g., α = 0.86; Beck & Steer, 1984). Higher scores on the BDI are indicative of higher levels of depressive symptomology (Figure 3).

Center for Epidemiologic Studies Depression Scale (CESDS; Radloff, 1977). The initial CFA for this one factor depression measure was also poor [χ^2 (df 170, N = 159) = 455.36 p<.001, GFI = 0.78, NFI = 0.67, RMSEA = 0.10]. Likewise, although the measurement properties could be improved, this factor structure was accepted since the CESDS has been widely used in the literature. For the current sample, the alpha reliability was above average (α = 0.88) and within the range of internal consistency alpha coefficients found previously (0.84 to 0.90). Higher scores on the CESDS are indicative of higher levels of depressive symptomology. This measure is represented by CESDS in Figure 3.

Results of the Hypotheses

This section discusses the results of each hypothesis in the model as well as the hypotheses regarding demographic variables. For each hypothesis in the ethnic identity model Structural Equation Modeling (SEM) analyses were conducted using the scales discussed above and represented in Figure 3. SEM is a comprehensive statistical

approach that objectively evaluates the degree of fit between a theoretical model and collected data (Hoyle, 1995). A measurement model is specified, which outlines the relationships between the observed variables (measures) and latent variables (theoretical constructs), and a structural model is specified, which outlines the hypothesized relationships between the latent variables (Hoyle, 1995).

The advantages of using SEM over the standard approaches of data analysis such as correlation, multiple regression, and ANOVA are: 1) SEM has the capacity to estimate and test relations between latent variables, 2) SEM allows multiple indicators and latent variables to be examined together, 3) SEM allows for measurement error in all variables, and 4) SEM provides a means of testing more complex and specific hypotheses by allowing for the examination of direct and indirect effects, reciprocal relationships, and models with feedback loops (Hoyle, 1995).

Maximum likelihood (ML) estimation was employed to yield optimal parameter estimates. ML is the standard method of estimating parameters in structural equation models and research indicates that ML performs reasonably well under a variety of less than optimal conditions (e.g., small sample sizes; Hoyle & Panter, 1995; West, et al., 1995). The statistical software, LISREL (Jöreskog & Sörbom, 1992), was used to perform the SEM analyses. Analyses of differences in mean scores related to demographic variables (i.e., SES and gender) were conducted using ANOVA and *t* tests in SPSS. See Table 16 for the correlation matrix of the 18 indicators in the ethnic identity model.

Table 16. Correlation Matrix of Indicators in Ethnic Identity Model

	BAS	BIS	FESS1	FESS2	TERS1	TERS2	TERS3	MSSS1	MSSS2	SRE1	SRE2	MEIM1	MEIM2	JAIS	RSES	SRS	BDI	CESDS
BAS	1.00																	
BIS	.79**	1.00																
FESS1	.46**	.58**	1.00															
FESS2	.07	.20*	.33**	1.00														
TERS1	.27**	.43**	.47**	.32**	1.00													
TERS2	.07	.27**	.28**	.26**	.61**	1.00												
TERS3	.20*	.25**	.31**	.38**	.38**	.28**	1.00											
MSSS1	.18*	.30**	.26**	.13	.40**	.50**	.16*	1.00										
MSSS2	.23**	.37**	.31**	.10	.44**	.46**	.06	.75**	1.00									
SRE1	.11	.26**	.19*	.18*	.37**	.52**	.17	.65**	.63**	1.00								
SRE2	.04	.13	.18*	.12	.28**	.30**	.09	.44**	.42**	.63**	1.00							
MEIM1	.40**	.55**	.57**	.29**	.50**	.30**	.22**	.34**	.39**	.31**	.34**	1.00						
MEIM2	.44**	.54**	.68**	.23**	.39**	.31**	.26**	.13	.19*	.17*	.09	.60**	1.00					
JAIS	.38**	.55**	.55**	.27**	.50**	.46**	.25**	.44**	.52**	.41**	.34**	.60**	.62**	1.00				
RSES	.09	.02	.14	-.00	-.07	-.07	.09	-.19*	-.10	-.03	-.01	.11	.27**	-.03	1.00			
SRS	-.02	.01	.11	.05	-.06	-.09	.01	-.23**	-.13	-.05	-.01	.07	.27**	-.03	.73**	1.00		
BDI	.10	.14	-.01	.02	.13	.10	-.05	.31**	.23**	.26**	.18*	.13	-.05	.14	-.52**	-.52**	1.00	
CESDS	.13	.16*	.02	-.03	.15	.19*	-.01	.35**	.24**	.22**	.15	.15	-.09	.17*	-.57**	-.57**	.84**	1.00

** $p < .01$
* $p < .05$

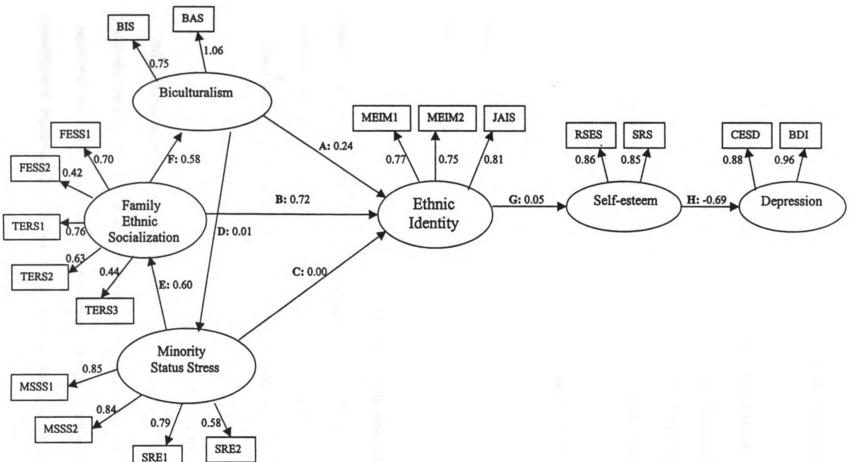

Figure 4. Hypothesized Ethnic Identity Model Results

Hypothesis 1

As predicted, a direct, positive relationship was found between the acculturation and ethnic identity latent variables (standardized $\beta = 0.24$, $z = 2.77$, $p < .01$, one-tailed test; Path A, Figure 4). These findings suggest that respondents who are more involved in Hispanic culture and who have maintained the language and cultural practices are more likely to have a strong sense of ethnic identity.

Hypothesis 2

As predicted, a direct, positive relationship was demonstrated between family ethnic socialization and ethnic identity (Path B, Figure 4). The standardized regression weight was 0.72 ($z = 3.98$, $p < .01$, one-tailed test). Respondents who experienced more family ethnic socialization were more likely to have higher ethnic identity.

Hypothesis 3

A direct, negative relationship between experience of minority status stress and ethnic identity was not supported (standardized $\beta = 0.00$, $z = 0.03$, one-tailed test; Path C, Figure 4). These results indicate that ethnic identity is not directly predicted by the experience of minority status stress.

Hypothesis 4

A direct, positive relationship was not demonstrated between biculturalism and experience of minority status stress (standardized $\beta = 0.01$, $z = 0.08$, one-tailed test; Path D, Figure 4). In other words, the results indicate that individuals with a bicultural acculturation status were not more likely to experience minority status stress.

Hypothesis 5

As predicted, a direct, positive relationship was found between experience of minority status stress and family ethnic socialization (standardized $\beta = 0.60$, $z = 3.97$, $p <$

.01, one-tailed test; Path E, Figure 4). These results suggest that respondents who experienced more minority status stress were more likely to experience family ethnic socialization practices.

Hypothesis 6

As predicted, a direct, positive relationship was found between family ethnic socialization and biculturalism (standardized $\beta = 0.58$, $z = 4.05$, $p < .01$, one-tailed test; Path F, Figure 4). That is, individuals who experienced family ethnic socialization practices were more likely to have maintained involvement in Hispanic culture.

Hypothesis 7

A direct, positive relationship between ethnic identity and self-esteem was not supported (standardized $\beta = 0.05$, $z = 0.54$, one-tailed test; Path G, Figure 4). These results indicate that individuals with high ethnic identity were not more likely to have high self-esteem.

Hypothesis 8

As predicted, a direct, negative relationship was found between self-esteem and depressive symptoms (standardized $\beta = -0.69$, $z = -8.44$, $p < .01$, one-tailed test; Path H, Figure 4). Individuals with higher self-esteem were less likely to experience depressive symptomology.

Hypothesis 9

A negative relationship between biculturalism and SES (i.e., parent education and occupation) was predicted. No statistically significant differences in level of acculturation were found for father's level of education using the BAS ($F [7, 149] = 0.88$, $p = .53$) or the BIS ($F [7, 149] = 0.56$, $p = .79$) and for father's occupation using the BAS ($F [6, 143] = 1.72$, $p = .12$) or the BIS ($F [6, 143] = 1.28$, $p = .27$). Similarly, no

differences in level of acculturation were found for mother's level of education using the BAS (F [7, 151] = 1.18, p= .32) or the BIS (F [7, 151] = 0.98, p = .45) and for mother's occupation using the BAS (F [6, 148] = 0.55, p = .77) or the BIS (F [6, 148] = 0.23, p = .97). Consequently, SES was not controlled for in the analysis of acculturation in the ethnic identity model.

Hypothesis 10

A negative relationship between female gender and self-esteem was predicted. No differences in self-esteem were found between men and women on the RSES (t = - 0.80, p = .47) or the SRS (t = 1.38, p = .17). Therefore, the influence of gender on self-esteem was not controlled for in the ethnic identity model.

Hypothesis 11

A positive relationship between female gender and depression was predicted. No differences in depression scores were found between men and women on the BDI (t = - 0.72, p = .47) or the CES-D (t = - 0.38, p = .71). The influence of gender on depressive symptomology was also not controlled for in the ethnic identity model.

Indirect Effects

Three statistically significant indirect relationships were demonstrated. An indirect relationship from minority status stress to biculturalism was found ($\eta = 0.35$, $p < .01$). Individuals who experienced minority status stress were more likely to report that their family engaged in ethnic socialization practices, and these individuals were more likely to be bicultural. An indirect relationship from ethnic socialization to ethnic identity was found ($\eta = 0.14$, $p < .05$). Individuals who experienced ethnic socialization were more likely to be bicultural, and bicultural individuals were more likely to have high ethnic identity. An indirect effect from minority status stress to ethnic identity was

also found ($\eta = 0.52$, $p < .01$). Individuals who experienced minority status stress were more likely to experience family ethnic socialization, and these individuals were more likely to have high ethnic identity. Also, these individuals were more likely to be bicultural and bicultural individuals were more likely to have high ethnic identity.

Results of the Overall Ethnic Identity Model

This section presents the results of the overall fit of the hypothesized ethnic identity model and the results of the *post hoc* analyses on the structural and measurement model that were conducted to improve the overall fit of the ethnic identity model. As stated above, these analyses were conducted using the statistical software, LISREL, and the chi-square statistic, degrees of freedom, level of probability, Goodness-of-Fit Index (GFI), Normed Fit Index (NFI), and Root Mean Square Error of Approximation (RMSEA) were examined to determine the degree of fit of the model.

Model 1-Hypothesized Model

The initial hypothesized ethnic identity model yielded a chi-square statistic of 336.01 ($df = 127$, $N = 159$, $p < .001$; Figure 4). The fit indexes suggested that the fit of the model (i.e., how well the data fit the hypothesized relationships between the latent constructs) was poor and could be improved (GFI = 0.81, NFI = 0.80, RMSEA = 0.102). All of the relationships outlined in the proposed model were in the predicted direction; however, several relationships did not reach statistical significance (i.e., biculturalism to minority status stress, minority status stress to ethnic identity, and ethnic identity to self-esteem). The factor loadings of each indicator to their respective latent variable in the ethnic identity model were all statistically significant ($p < .01$) and are also presented in Figure 4.

The output suggested several changes that could be made to the structural and measurement model (Figure 3) to improve model fit. Below are descriptions of the respecification steps that were taken to achieve a good fitting model (see Table 17). To assess whether each modification to the model produced a statistically significant improvement, the difference in χ^2 ($\Delta\chi^2$) between the nested models was examined. Only statistically significant respecified models were maintained, unless the modification yielded a more parsimonious model.

Model 2

Modifications to the structural model were first made. A review of the modification indices for beta (i.e., the relationships between the endogenous variables), revealed two parameters that could be estimated to improve model fit: a direct path from minority status stress to depression and a direct path from minority status stress to self-esteem. The hypothesized model was first respecified to include a direct path from minority status stress to depression (Path J, Figure 5) because this path had higher modification indices in the beta matrix and all residuals between the indicators of these two variables were high. A direct path from minority status stress to depression was also consistent with previous literature and theoretically sound. The inclusion of Path J in the model yielded a statistically significant improvement in model fit; however, the overall model fit was poor ($\chi^2 = 322.12$, df = 126, $p < .001$; GFI = 0.82, NFI = 0.81, RMSEA = 0.099).

Model 3

Model 2 was then respecified to include a direct path from minority status stress to self-esteem (Path I, Figure 5) because this path was the next highest modification index for beta and some of the residuals between the indicators of these two variables

Table 17. Summary of Respecification Steps in Post Hoc Model-Fitting Process

	Models	χ^2	df	$\Delta\chi^2$	Δdf	GFI	NFI	RMSEA
0	Null Model	1722.20	153	---	---	---	---	---
1	Hypothesized Model	336.01	127	---	---	0.81	0.80	0.102
2	Model 1 w/ path from stress to depression	322.12	126	13.89*	1	0.82	0.81	0.099
3	Model 2 w/ path from stress to self-esteem	299.48	125	22.64*	1	0.83	0.82	0.094
4	Model 3 w/ FESS1 removed	208.17	109	91.31*	16	0.87	0.85	0.076
5	Model 4 w/ JAIS removed	177.92	94	30.25*	15	0.88	0.86	0.075
6	Model 5 w/ TERS2 removed	140.87	80	37.05*	14	0.89	0.89	0.069
7	Model 6 w/ SRE1 removed	98.06	67	42.81*	13	0.92	0.91	0.054
8	Model 7 w/ SRE2 removed	83.62	55	14.44	12	0.92	0.92	0.057
9	Model 8 w/ covariance btw FESS2, TERS3	74.30	54	9.32*	1	0.93	0.93	0.049
10	Model 9 w/ covariance btw BAS and RSES	63.65	53	10.65*	1	0.94	0.93	0.036
11	Model 10 w/ Path C removed	63.66	54	- 0.01	1	0.94	0.93	0.034

Note: $\Delta\chi^2$ = difference in χ^2 values; Δdf = difference in degrees of freedom; GFI = Goodness of Fit Index; NFI = Normed Fit Index; RMSEA = Root Mean Square Error of Approximation; * $p < .05$

were high. This modification was also consistent with previous literature and theoretically sound. The inclusion of Path I produced a statistically significant improvement in model fit ($\chi^2 = 299.48$, df = 125, $p < .001$). The fit indices improved slightly (GFI = 0.83, NFI = 0.82, RMSEA = 0.094), indicating that the model fit remained poor.

Model 4

Several modifications to the measurement model were also made to improve model fit. One of the family ethnic socialization indicators, FESS1, was eliminated from Model 3. FESS1 had many bad residuals (i.e., measurement error), high modification indices for lambda-y (i.e., relationships between the latent constructs and the indicators), and high modification indices for theta-epsilon (i.e., the error covariance between indicators). The removal of FESS1 from the model yielded a statistically significant and substantial improvement in model fit ($\chi^2 = 208.17$, df = 109 df, $p < .001$) and the overall fit was average (GFI =0.87, NFI = 0.85, RMSEA = 0.076).

Models 5

The ethnic identity indicator, JAIS, presented several problems for the model including high residuals and high modification indices for lambda-y (i.e., model fit would improve if JAIS was allowed to load on other latent variables). It was not theoretically justifiable to allow JAIS to be an indicator of another construct. In addition, JAIS was not significantly correlated with the self-esteem indicators; the correlations between JAIS and the self-esteem indicators were near zero. Previous research has also demonstrated that JAIS is not related to self-esteem using the RSES (Zak, 1976). Since previous research has consistently found a relationship between ethnic identity and self-esteem using a variety of other identity measures including the MEIM (e.g., Phinney et al.,

1997), it also made theoretical sense to eliminate JAIS from the model. The removal of JAIS yielded a statistically significant and substantial improvement in model fit (χ^2 = 177.92, df = 94, $p < .001$). The fit indices indicated that the fit of this model was average (GFI = 0.88, NFI = 0.86, RMSEA 0.075).

Model 6

A second indicator of family ethnic socialization, TERS2, was eliminated from the model. TERS2 had several bad residuals, high modification indices for lambda-y, and high modification indices in the theta-epsilon matrix. The removal of TERS2 from Model 5 yielded a statistically significant and substantial improvement in model fit (χ^2 = 140.87, df = 80, $p < .001$). The fit indices indicated that the fit of the model was average (GFI = 0.89, NFI = 0.89, RMSEA = 0.069). Although two ethnic socialization indicators were removed from the measurement model, the three remaining indicators represented the three main types of ethnic socialization practices (i.e., teaching about culture, teaching about racism, and pride development).

Models 7 and 8

The minority status stress indicators, SRE1 and SRE2, were also eliminated from the model. These indicators had several bad residuals and high modification indices for lambda-y, and many high modification indices in the theta-epsilon matrix. In addition, unlike the other minority status stress indicators, these indicators were not significantly correlated with the acculturation indicators, several of the family ethnic socialization indicators, the self-esteem indicators, and one of the depression indicators. The removal of SRE1 from Model 6 yielded a statistically significant and substantial improvement in model fit (χ^2 = 98.06, df = 67, $p < .008$) and the overall fit of this model was very good (GFI = 0.92, NFI = 0.91, RMSEA = 0.054). The removal of SRE2 from Model 7 yielded

a marginally significant improvement in model fit ($\chi^2 = 83.62$, df = 55, $p < .01$; GFI = 0.92, NFI = 0.92, RMSEA = 0.057). Although the model did not change significantly, this modification was maintained because this indicator was not contributing to the overall fit of the model and this model was more parsimonious.

Models 9 and 10

A review of the modification indices for theta-epsilon revealed that the error covariance between several of the indicators could be estimated to improve model fit. First, the error covariance between FESS2 and TERS3 was estimated. This modification produced a statistically significant better fitting model ($\chi^2 = 74.30$, df = 54, $p = 0.035$; GFI = 0.93, NFI = 0.93, RMSEA = 0.049). This model fit was excellent and the model data discrepancy was approaching non significance. The error covariance between BAS and RSES was then estimated. The model improved significantly and the model data discrepancy was not statistically significant ($\chi^2 = 63.65$, df = 53, $p = 0.15$). The fit indices indicated that the fit of this model was excellent (GFI = 0.94, NFI = 0.93, RMSEA = 0.036).

Model 11-Final Model

One path, Path C, remained statistically non significant. Eliminating the non significant path from minority status stress to ethnic identity (Path C) from Model 10 did not change the fit of the model ($\chi^2 = 63.66$, df = 54, $p = 0.17$; GFI = 0.94, NFI = 0.93, RMSEA = 0.034). However, eliminating Path C produced a more parsimonious model and therefore, this modification was maintained. The fit of this model was excellent and, as desired, the model data discrepancy was not statistically significant. See Figure 5. All direct pathways outlined in this model were statistically significant ($p < .05$) and the factor loadings of each indicator to its respective latent variable in this model were all

statistically significant ($p < .01$). Therefore, for statistical and theoretical reasons, this model was considered to be the most plausible representation of the data for this sample.

The final respecified model, Model 11, differs from the hypothesized model, Model 1, in that this model suggests that minority status stress directly influences self-esteem and depression. Model 1 proposed that minority status stress directly influenced ethnic identity and was indirectly related to self-esteem and depression because of the mediating effects of ethnic identity. In addition, several indicators were removed from the hypothesized model and the method variance of two pairs of indicators were estimated.

The improved ethnic identity model (Figure 5) demonstrated statistically significant paths from biculturalism to ethnic identity (standardized $\beta = 0.43$, $z = 4.15$, $p < .01$, one-tailed test; Path A, Figure 5), family ethnic socialization to ethnic identity (standardized $\beta = 0.45$, $z = 3.48$, $p < .01$, one-tailed test; Path B, Figure 5), biculturalism to minority status stress (standardized $\beta = 0.21$, $z = 1.99$, $p < .05$, one-tailed test; Path D, Figure 5) minority status stress to family ethnic socialization (standardized $\beta = 0.48$, $z = 3.25$, $p < .01$, one-tailed test; Path E, Figure 5), family ethnic socialization to biculturalism (standardized $\beta = 0.39$, $z = 3.37$, $p < .01$, one-tailed test; Path F, Figure 5), ethnic identity to self-esteem (standardized $\beta = 0.32$, $z = 2.99$, $p < .01$, one-tailed test; Path G, Figure 5), self-esteem to depression (standardized $\beta = -0.63$, $z = -8.08$, $p < .01$, one-tailed test; Path H, Figure 5), minority status stress to self-esteem (standardized $\beta = -0.36$, $z = -3.40$, $p < .01$, one-tailed test; Path I, Figure 5), and minority status stress to depression (standardized $\beta = 0.23$, $z = 3.22$, $p < .01$, one-tailed test; Path J, Figure 5). All signs (positive or negative) of the paths in the improved model were in the predicted direction.

Sixteen statistically significant indirect effects were also found. Indirect relationships from biculturalism to family ethnic socialization ($\eta = 0.10$, $p < .05$), ethnic identity ($\eta = 0.06$, $p < .05$), self-esteem ($\eta = 0.14$, $p < .05$), and depression ($\eta = - 0.09$, $p < .05$) were found. Indirect effects were demonstrated from family ethnic socialization to minority status stress ($\eta = 0.08$, $p < .05$), ethnic identity ($\eta = 0.19$, $p < .01$), self-esteem ($\eta = 0.18$, $p < .05$), and depression ($\eta =$ - 0.09, $p < .05$). Indirect relationships from the experience of minority status stress to biculturalism ($\eta = 0.19$, $p < .01$), ethnic identity ($\eta = 0.31$, $p < .01$), self-esteem ($\eta = 0.08$, $p < .05$), and depression ($\eta = 0.18$, $p < .01$) were found. An indirect relationship from ethnic identity to depression was demonstrated ($\eta = -0.20$, $p < .01$). In addition, significant feedback loops were demonstrated for each of the three ecological factors ($\eta = .04$, $p < .05$).

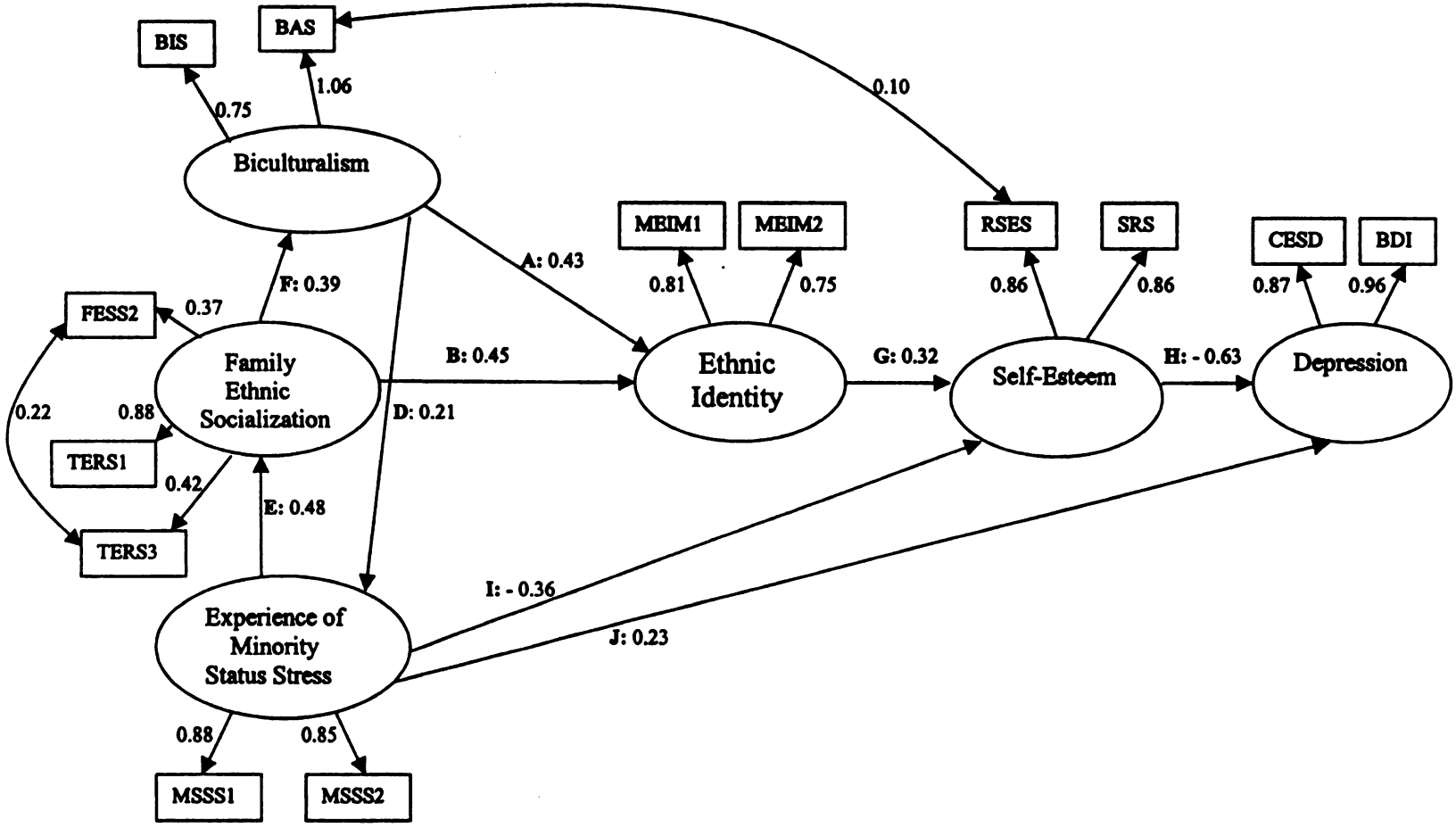

Figure 5. Respecified Ethnic Identity Model Results

Chapter 5

DISCUSSION

The purpose of this study was to empirically test an ecological model of Hispanic ethnic identity. Three ecological levels, the individual level (i.e., level of acculturation), the family level (i.e., family ethnic socialization), and the social context level (i.e., experience of minority status stress) were hypothesized to influence ethnic identity. In turn, ethnic identity was hypothesized to influence self-esteem and mediate the relationships between the individual, family, and social context factors, and self-esteem. Self-esteem was hypothesized to influence depression and to mediate the relationship between ethnic identity and depression. In addition, several relationships among the individual, family, and social context levels were hypothesized. Level of acculturation was hypothesized to influence the experience of minority status stress; the experience of minority status stress was hypothesized to influence family ethnic socialization; and family ethnic socialization was hypothesized to influence level of acculturation.

Although some previous research has empirically examined parts of this model (e.g., the influence of family ethnic socialization on ethnic identity, the influence of ethnic identity on self-esteem, the influence of self-esteem on depression), no empirical studies have examined an ecological model of ethnic identity. Furthermore, there has been limited theoretical and empirical research on the development of ethnic identity among Hispanic individuals. Thus, this study is the first to empirically evaluate an ecological model of Hispanic ethnic identity. The following sections discuss the results of this research, study limitations, and implications for future research.

Support of the Ethnic Identity Model

Results of this study support an ecological conceptualization of ethnic identity development and emphasize the importance of ethnic identity as a mediating variable between the three ecological factors and mental health. Consistent with previous research (e.g., Cuéllar et al., 1997; Marshall, 1995), two of the three ecological levels examined in this study, level of acculturation and family ethnic socialization, were directly related to ethnic identity. That is, respondents who preserved some aspects of Hispanic culture while adapting to American culture were more likely to have high ethnic identity. Respondents who reported that their families taught them about their culture, how to deal with discrimination and racism, and to be proud of their ethnicity were also more likely to have high ethnic identity.

A direct relationship between minority status stress and ethnic identity was not supported, and therefore, ethnic identity did not mediate the relationship between minority status stress and mental health, as expected. Rather, the improved ethnic identity model suggests that minority status stress is a direct predictor of self-esteem and depressive symptomology. Although these findings do not support the original hypotheses, these results are consistent with previous research. Studies have demonstrated associations between the experience of racism and discrimination and a variety of mental health problems (e.g., Utsey, 1998) and between greater perceptions of racism and discrimination and psychological distress (e.g., Vega et al., 1995). Furthermore, the improved ethnic identity model suggests that minority status stress also influences depression indirectly because of the mediating role of self-esteem. This indirect relationship is consistent with social identity theory (Tajfel & Turner, 1979),

which states that the experience of racism and discrimination impacts how minority individuals feel about themselves, which then leads to psychological distress.

Relationships among the individual, family, and social context levels were demonstrated. Bicultural individuals were more likely than assimilated individuals to experience minority status stress; respondents who experienced minority status stress were more likely to report that their family engaged in ethnic socialization practices; and individuals who experienced ethnic socialization practices were more likely to be bicultural. Results of this study provide initial support for the hypothesis that the three ecological levels continually influence one another and contribute, either directly or indirectly, to ethnic identity, as significant feedback loops for each of the three ecological factors were found.

The ecological model of ethnic identity suggests that ethnic identity is a direct predictor of self-esteem and self-esteem is a direct predictor of depressive symptomology. Previous studies have demonstrated associations between ethnic identity and various mental health variables (e.g., Munford, 1994); however, studies have not examined the mediating role of self-esteem in these relationships. Results from this study demonstrate that ethnic identity was related to depression because of the mediating effects of self-esteem; a direct relationship between ethnic identity and depression was not indicated.

In addition, previous research has consistently found a relationship between level of acculturation and mental health (e.g., Cortés et al., 1994; Cuéllar & Roberts, 1997; Rogler et al., 1991). Specifically, studies have found that assimilation is associated with poor mental health and biculturalism is the most adaptive acculturation option (e.g., Bautista de Domanico et al., 1994). Previous studies have ignored the possible mediating

effects of ethnic identity when examining this relationship. Results from this study demonstrated that assimilation was associated with low self-esteem and depressive symptomology because of the mediating role of ethnic identity; direct relationships between level of acculturation and the mental health variables were not indicated. Future research examining the relationship between acculturation and mental health should explore the mediating effects of ethnic identity, as these effects may help account for the inconsistencies in the literature regarding the direction of this relationship.

Results of this study also provide empirical support for a number of other indirect relationships. Level of acculturation was indirectly related to family ethnic socialization and ethnic identity. Family ethnic socialization was indirectly related to minority status stress, ethnic identity, self-esteem, and depression. Indirect effects from minority status stress to biculturalism, ethnic identity, self-esteem, and depression were also demonstrated. It appears that the experience of minority status stress may be attenuated by family ethnic socialization practices and low acculturation because these two factors appear to increase ethnic identity and ethnic identity appears to enhance mental health.

Finally, the influence of SES (parent education level and occupation) on level of acculturation was not found. Although many studies have demonstrated a relationship between SES and acculturation (e.g., Negy & Wood, 1992b), several studies using similar populations (i.e., college students) have not found this relationship (e.g., Gomez & Fassinger, 1994). Perhaps these results are due to the restricted range of SES among individuals in this population (Gomez & Fassinger, 1994). Contrary to predictions, relationships between gender and self-esteem, and gender and depression were also not found. These results are surprising given that previous research has generally found gender differences for self-esteem and depression, even among college populations (e.g.,

Kerner & Jacobs). In this sample, scores on measures of self-esteem and depression were slightly skewed, indicating that overall, the sample in this study was psychologically healthy; however, these results are consistent with previous research examining mental health among college populations (e.g., Kerner & Jacobs, 1983). Nonetheless, the restricted range of self-esteem and depression scores may also partly explain why gender was not significantly related to the mental health variables.

Limitations

A major shortcoming of this study involves the measures used to assess the latent constructs in the ethnic identity model. Because this area of research is in its infancy, few psychometrically sound measures have been developed for several of the latent constructs in the model (i.e., acculturation, family ethnic socialization, minority status stress, and ethnic identity). Even fewer measures have been developed for use with a Hispanic population. Consequently, of the twelve measures used in this study, one was created for this research (i.e., Family Ethnic Socialization Scale), four were adapted for use with a Hispanic population (Bicultural Involvement Scale, Teenage Experience of Racial Socialization Scale, Schedule of Racist Events, and the Jewish-American Identity Scale), and only four of the measures have undergone extensive evaluations and have been used many times previously (i.e., Rosenberg Self-Esteem Scale, Self-Rating Scale, Beck Depression Inventory, and the Center for Epidemiological Studies Depression Scale). Although the measures used in this study were selected because of their perceived adequacy in assessing the latent constructs, problems with many of the measures were evident when the initial confirmatory factor analyses demonstrated that the reported factor structures did not fit the data from this sample adequately. As a result,

most of the measures used in this study required exploratory factor analyses to improve the factor structure.

Problems with several indicators in the initial measurement model were also evident when testing the overall fit of the ethnic identity model. The correlations between the indicators of each latent variable in the ethnic identity model were all statistically significant ($p < .01$); this provides evidence for convergent validity among the two measures of each construct. Also, as expected, the two acculturation measures did not load on the construct ethnic identity, and the three ethnic identity indicators did not load on the construct acculturation. Many researchers have used the terms acculturation and ethnic identity interchangeably, although the two are believed to be separate processes (Cuéllar et al., 1997). Findings from this study provide additional evidence for two distinct factors. However, five indicators (Family Ethnic Socialization Scale1, Teenager Experience of Racial Socialization2, Jewish-American Identity Scale, Schedule of Racist Events 1 and 2) demonstrated poor discriminant validity (i.e., these indicators loaded on several constructs in the ethnic identity model), bad residuals (i.e., these indicators demonstrated a high degree of measurement error), and high error covariance (i.e., a high degree of shared method variance among indicators), which mainly caused the poor fit of the initial model.

As stated above, one of these five indicators, The Family Ethnic Socialization Scale, was developed for this study. This instrument did not undergo adequate investigation to improve the psychometric properties of this measure prior to its use in this study. The four other indicators were developed for use on a different ethnic population and were adapted for this study, and some of the items and/or wording of items may not have been completely applicable to a Hispanic population. Furthermore,

the family ethnic socialization measures asked participants to provide retrospective reports of their family's engagement in ethnic socialization practices during their childhood, which may have been influenced by their memory, mood, or other current or past experiences. In addition, this research relied exclusively on the use of self-report measures to assess the constructs in the ethnic identity model.

An alternative approach to data collection for future research would be to use semi-structured interviews in addition to the use of self-report measures, as interviews allow for qualitatively rich and more specific information to be obtained. Although conducting interviews would be more expensive and time consuming, the use of multiple data collection methods may provide stronger empirical support for the validity of this model. Also, more psychometrically sound measures for the constructs in this study are greatly needed for Hispanic populations. In general, future research examining this model should attempt to assess the latent constructs more precisely in order to provide stronger support for the overall model and the pathways in this model and increase the validity and reliability of the findings.

Another shortcoming of this research is the relatively small sample size. Sample size is a major concern for SEM analyses because small sample sizes are more likely to yield unreliable results (Chou & Bentler, 1995) and the test statistics and fit indices tend to be underestimated (Hu & Bentler, 1995). Procedures for estimating adequate sample sizes for SEM analyses are not available; however, Bentler and Chou (1987) recommend that the ratio of sample size to the number of parameters to be estimated should be 5:1. The number of parameters to be estimated in the initial ethnic identity model was 44, and thus, the sample size should have been at least 220. The sample size of this study (N = 159) was much less than this ideal size, which may have partly contributed to the poor fit

indices of the initial model. Nonetheless, the number of parameters to be estimated in the respecified model was 37. Therefore, a sample size of at least 185 was needed, slightly more than the final sample size in this study. Future research examining this model should use at least the minimum recommended sample size or develop a structural and measurement model with fewer pathways and/or indicators.

Finally, the generalizability of the results of this study is limited. There are few Hispanic individuals in this geographical location (U.S. Bureau of the Census, 1999) and at Michigan State University (1.6 % of MSU undergraduate students in Fall 1997; Hembroff & Clark, 1998). Consequently, the examination of a specific Hispanic subgroup was less feasible than the examination of Hispanic individuals in general. However, because the ethnic identity model was examined using Hispanic individuals in general, rather than a specific Hispanic subgroup, the findings may not generalize to all specific Hispanic subgroups. Also, because there had been limited research in this area among Hispanic individuals, there was little evidence to suggest specific factors that would influence ethnic identity among various Hispanic subgroups. However, participants were asked to provide their specific ethnicity and this information was provided along with other participant demographics.

Nonetheless, research using Hispanic populations has relied on the use of panethnic terms used to describe research participants (e.g., Hispanic, Latino, African American; Fisher, Jackson, & Villarruel, 1998). The use of panethnic terms "impedes the ability to understand and identify developmental patterns specific to distinct ethnic and cultural groups," for example, Puerto Rican and Mexican (Fisher et al., 1998, p. 1147). Persons of Hispanic descent living in the U.S. make up a large number of subgroups with considerable diversity and there is danger in assuming homogeneity among these

subgroups and generalizing from them (Zayas, 1994). Therefore, future research should replicate this model using various Hispanic subgroups and identify factors that influence ethnic identity development that are unique to different Hispanic subgroups.

In addition, because of the limited numbers of Hispanic individuals in this area and at this university, the ethnic identity model may not generalize to Hispanic individuals in other geographical locations and educational institutions with higher proportions of Hispanic individuals. However, the purpose of this study was to examine ethnic identity development as a general phenomena in order to provide initial evidence for the ecology of ethnic identity, and therefore, the ethnic identity model should be applicable to individuals from all Hispanic subgroups. The three ecological factors examined in this study had been previously examined using individuals from several ethnic backgrounds and thus, these factors were believed to be applicable to Hispanic individuals from different Hispanic subgroups. Nonetheless, future research should replicate this model using individuals from other geographical areas and institutions with higher proportions of Hispanic individuals. This model should also be replicated using non-college populations.

Conclusions and Implications

An ecological model of Hispanic ethnic identity was proposed and evaluated in this study to address the deficiencies of the current cognitive developmental models of ethnic identity (e.g., Cross, 1971; Kim, 1981; Poston, 1990) and the limited empirical work in this area. Current theoretical models conceptualize ethnic identity formation as a series of stages an individual passes through over time as one's attitudes toward one's ethnic group and the dominant group develop and ethnic issues are resolved (Phinney,

1991; Rowe et al., 1994). These models oversimplify ethnic identity development by focusing exclusively on intrapsychic factors and failing to consider the influence of contextual factors. Cognitive developmental models of ethnic identity formation have not been empirically validated, and thus, individuals may not progress through the stages in a more or less linear fashion, as these models suggest. Also, although these models emphasize cognitive development in the formation of ethnic identity, it is unclear which specific cognitive factors are involved. Furthermore, empirical studies examining ethnic identity within cognitive developmental frameworks purport to assess the psychosocial variables associated with the various stages of ethnic identity development (e.g., Munford, 1994; Parham & Helms, 1985); however, the stages of ethnic identity development described in these models are merely descriptions of low and high levels of ethnic identity. Therefore, these studies may have assessed psychosocial variables associated with low and high levels of ethnic identity rather than stages of ethnic identity development.

For example, Cross (1971, 1978) proposed a theory of Nigrescence, which attempts to explain African American racial identity development (i.e., positive attitudes and identification with other African Americans) as a self-actualization process. Cross's model describes five stages individuals progress through in the process of racial identity development, from low Black identity to high Black identity, (i.e., Preencounter, Encounter, Immersion-Emersion, Internalization, and Internalization-Commitment). Cross's model implies that progression occurs because of learning, evaluation of one's attitudes and beliefs over time, personal identity exploration, and increased cognitive abilities; however, the model does not provide a description of the specific intrapsychic factors that move individuals from lower stages to higher stages. In addition, Parham and

Helms (1981) developed the Racial Identity Attitude Scale (RIAS) to measure the stages in Cross's model. However, the RIAS assesses high and low levels of racial identity, which may or may not be indicative of stages of identity development.

This study proposed that ecological theory would be a more useful framework for the study of ethnic identity because ecological theory provides a more comprehensive view of psychological phenomena and human functioning by considering the effects of both intrapsychic and contextual factors. This study expands the literature on ethnic identity development by examining the influence of contextual variables and empirically testing a model of ethnic identity. Findings from this study provide evidence that contextual factors are involved, and thus, this study challenges the notion that ethnic identity development is an intrapsychic process involving self-exploration and the resolution of ethnic issues.

Nonetheless, this study only examined contextual variables within the individual, family, and social context ecological levels; intrapsychic factors were not examined. Although the ecological model of ethnic identity was developed to address the deficiencies of current theoretical models, the superiority of this model cannot be compared to the cognitive developmental models until these models are empirically evaluated. In order to empirically validate cognitive developmental models of ethnic identity formation, researchers need to examine the cognitive factors believed to be important in ethnic identity development in relation to high and low ethnic identity. Also, longitudinal studies need to be conducted to demonstrate progression through the hypothesized stages of ethnic identity development. Future research needs to address this limitation in the literature. As more studies examine the internal and external factors involved in ethnic identity development and models of ethnic identity development

undergo extensive evaluations, researchers can begin to work towards developing a more comprehensive and complete conceptualization of the development of ethnic identity for various ethnic groups.

This study also proposed that ecological theory would be a more useful framework for the study of ethnic identity because ecological theory takes into consideration the transactional relationships between internal and external factors. Because the ethnic identity model proposed in this study was examined at one point in time, the transactional nature of the variables in the model could not be demonstrated and a number of questions remain unanswered. For example, although level of acculturation and family ethnic socialization practices were directly related to ethnic identity and all three ecological factors were indirectly related to ethnic identity, it is unclear if these factors contribute to the formation of ethnic identity, the maintenance of ethnic identity, or both. Also, although, in this study, minority status stress predicted family ethnic socialization, the relationship between these variables is unclear. It may be that the experience of minority stress increases ethnic socialization practices by one's family or the experience of minority status stress may trigger memories regarding messages communicated prior to the experience of minority status stress, or both of these processes may contribute to ethnic identity. Only a longitudinal study would be able to examine these questions.

Moreover, because individuals do not develop in isolation from their families, peers, schools, communities, and many other social contexts, they are continually influenced by many external forces. According to Sameroff's (1980) transactional model, development in general is a dynamic process that results from the continual interplay between an individual, his/her environment, and his/her experiences, all of

which change over time. Thus, numerous intrapsychic and contextual factors, as well as the many transactions between them, that were not examined in this study may also contribute to ethnic identity. Future research should empirically test the proposed ecological model of ethnic identity as well as more comprehensive ecological models of ethnic identity using a longitudinal design in order to demonstrate the factors that influence ethnic identity, the continuous interplay between the ecological levels, and the dynamic quality of ethnic identity.

The direct relationship between ethnic identity and self-esteem and the indirect relationship between ethnic identity and depressive symptomology in this sample of Hispanic college students highlight the importance of determining factors that influence positive ethnic identity. Results of this study suggest that two factors may directly influence positive ethnic identity, biculturalism and family ethnic socialization practices, and therefore, it may be beneficial for caregivers and teachers to work towards increasing ethnic identity among Hispanic children by teaching them about their cultural and cultural practices and encouraging cultural pride. Results also provide additional evidence for the relationship between minority status stress and mental health problems, and highlight the potential benefits of teaching Hispanic children effective strategies for coping with racism and discrimination. It is hoped that results of this research move the literature in this area toward a more complete and comprehensive conceptualization of the development of Hispanic ethnic identity and toward a better understanding of the impact of ethnic identity on mental health.

Appendices A-M

Appendix A

Demographic Questionnaire

1. Your Age _____
2. Gender: (circle) male or female
3. Year in college _____
4. Average GPA: (circle) 1.0 1.5 2.0 2.5 3.0 3.5 4.0

5. Please indicate your specific ethnic background from the following Hispanic/Latino subgroups. Circle all that apply:
   1 = Argentina
   2 = Bolivia
   3 = Brazil
   4 = Chile
   5 = Colombia
   6 = Costa Rica
   7 = Cuba
   8 = Dominican Republic
   9 = Ecuador
   10 = El Salvador
   11 = Guatemala
   12 = Honduras
   13 = Mexico
   14 = Nicaragua
   15 = Panama
   16 = Paraguay
   17 = Peru
   18 = Puerto Rico
   19 = Spain
   20 = Uruguay
   21 = Venezuela
   22 = other (write in) _____

6. Your place of birth _____
7. U.S. Citizen: (circle) Yes or No
8. Your religion:_____
9. Your race: _____

10. How many organizations related to your ethnic group are you involved in at MSU?
    Circle: none one two three or more
    Please specify which organizations (if any)_____

11. How much is your physical appearance similar to that of members of your ethnic group?
    Circle: not at all a little bit somewhat quite a bit extremely

12. What is your mother's ethnicity: _____

13. Where was your mother born _____

14. What is your mother's occupation (please be specific): _____

15. What is the highest level of education your mother has completed? (Circle one)

1 = grades 1, 2, 3, 4, 5, or 6
2 = grades 7, 8, 9, 10, 11, or 12
3 = some college
4 = Associates Degree
5 = BA/BS
6 = some graduate school
7 = graduate degree
_____ MA?
_____ Ph.D.?
_____ Law?
_____ MD?
8 = other; Specify (e.g., Beauty School, Nursing School)
_____

12. What is your father's ethnicity: _____

13. Where was your father born _____

14. What is your father's occupation (please be specific): _____

15. What is the highest level of education your father has completed? (Circle one)

1 = grades 1, 2, 3, 4, 5, or 6
2 = grades 7, 8, 9, 10, 11, or 12
3 = some college
4 = Associates Degree
5 = BA/BS
6 = some graduate school
7 = graduate degree
_____ MA?
_____ Ph.D.?
_____ Law?
_____ MD?
8 = other; Specify (e.g., Beauty School, Nursing School) _____

Appendix B

The Bidimensional Acculturation Scale for Hispanics
(BAS; Marin & Gamba, 1996)

Please write the number that best describes your response to each question according to these scales:

1: Almost Never **2: Sometimes** **3: Often** **4: Almost Always**

_____ 1. How often do you speak English in comparison to other languages?
_____ 2. How often do you speak in English with your friends?
_____ 3. How often do you think in English?
_____ 4. How often do you watch television programs in English?
_____ 5. How often do you listen to radio programs in English?
_____ 6. How often do you listen to music in English?
_____ 7. How often do you speak Spanish?
_____ 8. How often do you speak Spanish with your friends?
_____ 9. How often do you think in Spanish?
_____ 10. How often do you watch television programs in Spanish?
_____ 11. How often do you listen to radio programs in Spanish?
_____ 12. How often do you listen to music in Spanish?

1: Very Poorly **2: Poorly** **3: Well** **4: Very Well**

_____ 13. How well do you speak English in comparison to other languages?
_____ 14. How well do you read English?
_____ 15. How well do you understand television programs in English?
_____ 16. How well do you understand radio programs in English?
_____ 17. How well do you write in English
_____ 18. How well do you understand music in English?
_____ 19. How well do you speak Spanish?
_____ 20. How well do you read Spanish?
_____ 21. How well do you understand television programs in Spanish?
_____ 22. How well do you understand radio programs in Spanish?
_____ 23. How well do you write in Spanish?
_____ 24. How well do you understand music in Spanish?

Appendix C

Bicultural Involvement Scale (BIS; Cortes et al., 1994)

Please answer the following questions using this scale:

not at all/none	**a little bit**	**quite a bit**	**very much/always**
1	**2**	**3**	**4**

_____ 1. How important is it to you to celebrate holidays in the American way?
_____ 2. How important is it to you to celebrate holidays in the Hispanic way?
_____ 3. How much are American values a part of your life?
_____ 4. How much are Hispanic values a part of your life?
_____ 5. How important is it to you to raise your children with American values?
_____ 6. How important is it to you to raise your children with Hispanic values?
_____ 7. How comfortable would you be in a group of Americans who don't speak Spanish?
_____ 8. How comfortable would you be in a group of Hispanics who don't speak English?
_____ 9. How proud are you of being American?
_____ 10. How proud are you of being Hispanic?
_____ 11. Do you think Americans are kind and generous?
_____ 12. Do you think Hispanics are kind and generous?
_____ 13. How much do you enjoy American TV programs?
_____ 14. How much do you enjoy Spanish TV programs?
_____ 15. How much do you enjoy speaking English?
_____ 16. How much do you enjoy speaking Spanish?
_____ 17. How many days a week would you like to eat American food?
_____ 18. How many days a week would you like to eat Hispanic food?

Appendix D

Family Ethnic Socialization Scale (FESS)

The following statements refer to your family while you were growing up. Please respond to the statements using the scale below by marking the number that best corresponds to your feelings.

Family includes: parents, grandparents, aunts, uncles, cousins, siblings, and other relatives

Strongly Disagree	**Somewhat Disagree**	**Slightly Disagree**	**Neutral**	**Slightly Agree**	**Somewhat Agree**	**Strongly Agree**
1	**2**	**3**	**4**	**5**	**6**	**7**

_____ 1. My family tried to teach me about the cultural practices of my ethnic group (e.g., special customs, traditions, food, music).
_____ 2. My family was not involved in the cultural practices of my ethnic group.
_____ 3. My family talked to me about the roots and history of my ethnic group.
_____ 4. My family did or told me things to help me know what it is to be a member of my ethnic group living in America.
_____ 5. My family told me to be proud of my ethnicity.
_____ 6. My family tried to teach me about how to get along in mainstream American culture.
_____ 7. My family talked to me about how to deal with experiences like name calling, negative stereotyping, and prejudice.
_____ 8. My family taught me little about racism in America.
_____ 9. My family talked to me about how to deal with discrimination or being treated rudely because of my ethnicity.
_____ 10. My family believed that all races are equal.
_____ 11. My family tried to prepare me for living in a culturally diverse society.

12. Please explain how your family has tried to teach you about the cultural practices of your ethnic group._____

_____

13. Please explain how your family has helped you learn how to deal with experiences like name calling or discrimination. _____

_____

14. Please explain what your family has told you about racial/ethnic differences.

_____

_____

Appendix E

Teenager Experience of Racial Socialization Scale
(TERS; Stevenson, Cameron, et al., 1996)

Did your parents, or relatives who took care of you, communicate to you any of the following messages when you were younger, or now?

Write one number depending on how often using this scale:

Never	**Once**	**A few times**	**Lots of times**	**Most of the time**
1	**2**	**3**	**4**	**5**

_____1. American society is fair toward Hispanic people.
_____2. Hispanic children will feel better about themselves if they go to a school with mostly White children.
_____ 3. You should be proud to be Hispanic
_____ 4. Racism and discrimination are the hardest things a Hispanic child has to face.
_____ 5. Having large families can help many Hispanic families survive life struggles.
_____ 6. All ethnic groups are equal
_____ 7. Hispanic children will learn more if they go to a mostly White school.
_____ 8. Knowing your heritage is important for your survival (for your life).
_____ 9. Racism is real, and you have to understand it or it will hurt you.
_____ 10. Too much talk about racism will keep you from reaching your goals in life.
_____ 11. Schools should be required to teach all children about Latin American history.
_____ 12. Teachers can help Hispanic children grow by showing signs of Hispanic culture in the classroom.
_____ 13. Getting a good education is still the best way for you to get ahead.
_____ 14. You should know about Latin American history so that you will be a better person.
_____ 15. You have to work twice hard as Whites in order to get ahead in this world.
_____ 16. Whites make it hard for people to get ahead in this world.
_____ 17. Be proud of who you are.
_____ 18. Going to a mostly Hispanic school will help Hispanic children feel better about themselves.
_____ 19. You need to learn how to live in a White world and a Hispanic world.
_____ 20. Never be ashamed of your ethnicity.
_____ 21. Whites have more opportunities than Hispanics.
_____ 22. A Hispanic child or adult will be harassed just because s/he is Hispanic.

Appendix F

Minority Student Stress Scale (MSSS; Saldana, 1994)

This questionnaire refers to your experience in college. Please indicate how *stressful* the following events have been using this scale

not applicable	**not at all stressful**	**slightly stressful**	**moderately stressful**	**quite a bit stressful**	**extremely stressful**
0	**1**	**2**	**3**	**4**	**5**

_____ 1. Not enough professors of my ethnic group.
_____ 2. Few students of my ethnic group in my classes.
_____ 3. Racist policies and practices at this university.
_____ 4. This university lacking concern and support for the needs of students of my ethnic group.
_____ 5. Few courses involving issues relevant to my ethnic group.
_____ 6. Seeing members of my ethnic group doing low-status jobs and Anglos are in high-status jobs.
_____ 7. Attitudes/treatment of faculty toward students of my ethnic group.
_____ 8. Anglo students/faculty expecting poor academic performance from students of my ethnic group.
_____ 9. Tense relationships between Anglos and minorities at this university.
_____ 10. Pressure that what "I" do is representative of my ethnic group's abilities, behaviors, etc.
_____ 11. Having Anglo friends.
_____ 12. Relationships between different ethnic groups.
_____ 13. Anglo-oriented campus culture.
_____ 14. Lack of unity/supportiveness among members of my ethnic group at this university.
_____ 15. Having to live around mostly Anglo people.
_____ 16. Having to always be aware of what Anglo people might do.
_____ 17. Maintaining my ethnic identity while attending this university.
_____ 18. Relationships between males and females of my ethnic group (available dating partners).
_____ 19. Wealthy campus culture.
_____ 20. This campus being an unfriendly place.
_____ 21. Being treated rudely or unfairly because of my ethnicity.
_____ 22. Being discriminated against.
_____ 23. Anglo people expecting me to be a certain way because of my ethnicity (stereotyping).
_____ 24. Others lacking respect for people of my ethnic group.
_____ 25. Having to "prove" my abilities to others (e.g., work twice as hard).

Appendix G

The Schedule of Racist Events (SRE; Landrine & Klonoff, 1996)

We are interested in your experiences with racism. As you answer the questions below, please think about your ENTIRE LIFE, from when you were a child to the present. For each question, please circle the number that best captures the things that have happened to you. Answer each question TWICE, once for what has happened to you IN THE PAST YEAR, and once for what YOUR ENTIRE LIFE HAS BEEN LIKE.

Use these numbers:

Circle **1** = If this has **NEVER** happened to you
Circle **2** = If this has happened **ONCE IN A WHILE** (less than 10% of the time)
Circle **3** = If this has happened **SOMETIMES** (10%-25% of the time)
Circle **4** = If this has happened **A LOT** (26%-49% of the time)
Circle **5** = If this has happened **MOST OF THE TIME** (50%-70% of the time)
Circle **6** = If this has happened **ALMOST ALL OF THE TIME** (more than 70% of the time)

1. How many times have you been treated rudely or unfairly by *teachers and professors* because you are Hispanic?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

2. How many times have you been treated rudely or unfairly by your *employers, bosses, and supervisors* because you are Hispanic?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

3. How many times have you been treated rudely or unfairly by your *coworkers, fellow students, and colleagues* because you are Hispanic?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

4. How many times have you been treated rudely or unfairly by *people in service jobs* (store clerks, waiters, bartenders, bank tellers and others because you are Hispanic?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

Circle **1** = If this has **NEVER** happened to you
Circle **2** = If this has happened **ONCE IN A WHILE** (less than 10% of the time)
Circle **3** = If this has happened **SOMETIMES** (10%-25% of the time)
Circle **4** = If this has happened **A LOT** (26%-49% of the time)
Circle **5** = If this has happened **MOST OF THE TIME** (50%-70% of the time)
Circle **6** = If this has happened **ALMOST ALL OF THE TIME** (more than 70% of the time)

5. How many times have you been treated rudely or unfairly by *strangers* because you are Hispanic?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

6. How many times have you been treated rudely or unfairly by *neighbors* because you are Hispanic?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

7. How many times have you been treated rudely or unfairly by *people in helping jobs* (doctors, nurses, psychiatrists, case workers, dentists, school counselors, therapists, social workers, and others) because you are Hispanic?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All				Extremely	
How stressful was this for you?	1	2	3	4	5	6

8. How many times have you been treated rudely or unfairly by *institutions* (schools, universities, law firms, the police, the courts, the Department of Social Services, the Unemployment Office and others) because you are Hispanic?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All				Extremely	
How stressful was this for you?	1	2	3	4	5	6

9. How many times have you been treated rudely or unfairly by your *friends or people that you thought were your friends* because you are Hispanic?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

Circle **1** = If this has **NEVER** happened to you
Circle **2** = If this has happened **ONCE IN A WHILE** (less than 10% of the time)
Circle **3** = If this has happened **SOMETIMES** (10%-25% of the time)
Circle **4** = If this has happened **A LOT** (26%-49% of the time)
Circle **5** = If this has happened **MOST OF THE TIME** (50%-70% of the time)
Circle **6** = If this has happened **ALMOST ALL OF THE TIME** (more than 70% of the time)

10. How many times have you been *accused or suspected of doing something wrong* (such as stealing, cheating, not doing your share of the work, or breaking the law) because you are Hispanic?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All				Extremely	
How stressful was this for you?	1	2	3	4	5	6

11. How many times have people *misunderstood your intentions and motives* because you are Hispanic?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All			Extremely		
How stressful was this for you?	1	2	3	4	5	6

12. How many times did you *want to tell someone off for being racist but didn't say anything*?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

13. How many times have you been *really angry about something racist that was said or done*?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

14. How many times were you *forced to take drastic steps* (e.g., filing a grievance, filing a lawsuit, quitting your job, moving away, and other actions) to deal with some racist thing that was said or done to you?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

Circle **1** = If this has **NEVER** happened to you
Circle **2** = If this has happened **ONCE IN A WHILE** (less than 10% of the time)
Circle **3** = If this has happened **SOMETIMES** (10%-25% of the time)
Circle **4** = If this has happened **A LOT** (26%-49% of the time)
Circle **5** = If this has happened **MOST OF THE TIME** (50%-70% of the time)
Circle **6** = If this has happened **ALMOST ALL OF THE TIME** (more than 70% of the time)

15. How many times have you or someone you know *been called a racist name*?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

16. How many times have you *gotten into an argument or a fight about something racist that was said or done to you or somebody else*?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All				Extremely	
How stressful was this for you?	1	2	3	4	5	6

17. How many times have you or someone you know been *made fun of, picked on, pushed, shoved, hit, or threatened with harm* because of being Hispanic.

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All			Extremely		
How stressful was this for you?	1	2	3	4	5	6

18. How *different* would your life be now if you HAD NOT BEEN treated in a racist and unfair way in the past year?

Same as now	A little different	Different in a few ways	Different in a lot of ways	Different in most ways	Totally different
1	2	3	4	5	6

in your entire life?

Same as now	A little different	Different in a few ways	Different in a lot of ways	Different in most ways	Totally different
1	2	3	4	5	6

19. Please describe the most stressful experience that you have had (if any) regarding discrimination, prejudice, or negative stereotyping/name calling in the space below. Please indicate when it happened, where it happened, and what happened. Also describe your reaction (i.e., how did you feel) and how you dealt with the event (i.e., what did you do).

Appendix H

Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992)

In this country, people come from a lot of different cultures and there are many different words to describe the different backgrounds or *ethnic groups* that people come from. Some examples of the names of ethnic groups are Mexican-American, Hispanic, Black, Asian-American, Native American, Anglo-American, and White. Every person is born into an ethnic group, or sometimes two or more groups, but people differ on how important their *ethnicity* is to them, how they feel about it, and how much their behavior is affected by it. These questions are about your ethnicity or ethnic group and how you feel about it or react to it.

In terms of ethnic group, I consider myself to be (please fill in)_____

Use the numbers given below to indicate how much you agree or disagree with each statement.

4: Strongly Agree 3: Somewhat Agree 2: Somewhat Disagree 1: Strongly Disagree

_____ 1. I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs
_____ 2. I am active in organizations or social groups that include mostly members of my ethnic group.
_____ 3. I have a clear sense of my ethnic background and what it means for me.
_____ 4. I think a lot about how my life will be affected by my ethnic group membership.
_____ 5. I am happy that I am a member of the group I belong to.
_____ 6. I am not very clear about the role of my ethnicity in my life.
_____ 7. I really have not spent much time trying to learn more about the culture and history of my ethnic group.
_____ 8. I have a strong sense of belonging to my own ethnic group.
_____ 9. I understand pretty well what my ethnic group membership means to me, in terms of how to relate to my own group and other groups.
_____ 10. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.
_____ 11. I have a lot of pride in my ethnic group and its accomplishments.
_____ 12. I participate in cultural practices of my own group, such as special food, music, or customs.
_____ 13. I feel a strong attachment towards my own ethnic group.
_____ 14. I feel good about my cultural or ethnic background.

Appendix I

Jewish-American Identity Scale (JAIS; Zak, 1973)

Please write the number that best describes your response to each question according to this scale:

StronglyDisagree	SomewhatDisagree	SlightlyDisagree	SlightlyAgree	SomewhatAgree	StronglyAgree
1	2	3	4	5	6

_____ 1. When an important newspaper insults people of my ethnic group, I feel that it is insulting me.

_____ 2. My fate and future are bound up with that of people of my ethnic group everywhere.

_____ 3. I regard people of my ethnic group everywhere as my kith and kin (as "one family").

_____ 4. It is necessary to take an active interest in people of my ethnic group and to be loyal to my ethnic group.

_____ 5. Being a member of my ethnic group plays an important part in my life.

_____ 6. When an important newspaper praises people of my ethnic group, I feel that it is praising me.

_____ 7. If I were to be born again, I would wish to be born a member of my ethnic group.

_____ 8. If someone were to meet me and mistake me as not being a member of my ethnic group, I would correct the misperception and tell the person my ethnicity.

Appendix J

Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965)

Please write the number that best describes your response to each statement according to this scale:

Strongly Agree	**Agree**	**Disagree**	**Strongly Disagree**
1	**2**	**3**	**4**

_____1. I feel that I am a person of worth, at least on an equal plane with others.

_____2. I feel that I have a number of good qualities.

_____3. All in all, I am inclined to feel that I am a failure.

_____4. I am able to do things as well as most other people.

_____5. I feel I do not have much to be proud of.

_____6. I take a positive attitude toward myself.

_____7. On the whole, I am satisfied with myself.

_____8. I wish I would have more respect for myself.

_____9. I certainly feel useless at times.

_____ 10. At times, I think I am no good at all.

Appendix K

The Self-Rating Scale (SRS; Fleming & Courtney, 1984)

Please write the number that best describes your response to each question according to this scale:

Never	Rarely	Sometimes	Moderately	Often	Very Often	Always
0	1	2	3	4	5	6

_____ 1. How often do you feel inferior to most of the people you know?

_____ 2. Do you ever think that you are a worthless individual?

_____ 3. How confident do you feel that someday the people you know will look up to you and respect you?

_____ 4. Do you ever feel so discouraged with yourself that you wonder whether you are a worthwhile person?

_____ 5. How often do you dislike yourself?

_____ 6. In general, how confident do you feel about your abilities?

_____ 7. How often do you have the feeling that there is nothing you can do well?

Appendix L

Beck Depression Inventory (BDI; Beck, 1967)

In answering these questions, think about each item carefully and circle the answer out of the group of 4 items that best reflects how you have been feeling **during the past week.**

1. [1] I do not feel sad.
   [2] I feel sad.
   [3] I am sad all the time and I can't snap out of it.
   [4] I am so sad or unhappy that I can't stand it.

2. [1] I am not particularly discouraged about the future.
   [2] I feel discouraged about the future.
   [3] I feel I have nothing to look forward to.
   [4] I feel that the future is hopeless and that things cannot improve.

3. [1] I do not feel like a failure.
   [2] I feel I have failed more than the average person.
   [3] As I look back on my life, all I can see is a lot of failures.
   [4] I feel I am a complete failure as a person.

4. [1] I get as much satisfaction out of things as I used to.
   [2] I don't enjoy things the way I used to.
   [3] I don't get real satisfaction out of anything anymore.
   [4] I am dissatisfied or bored with everything.

5. [1] I don't feel particularly guilty.
   [2] I feel guilty a good part of the time.
   [3] I feel quite guilty most of the time.
   [4] I feel guilty all of the time.

6. [1] I don't feel I am being punished.
   [2] I feel I may be punished.
   [3] I expect to be punished.
   [4] I feel I am being punished.

7. [1] I don't feel disappointed in myself.
   [2] I am disappointed in myself.
   [3] I am disgusted with myself.
   [4] I hate myself.

8. [1] I don't feel I am any worse than anybody else.
   [2] I am critical of myself for all my weaknesses or mistakes.
   [3] I blame myself all the time for my faults.
   [4] I blame myself for everything bad that happens.

9. [1] I don't have any thoughts of killing myself.
[2] I have thoughts of killing myself, but I would not carry them out.
[3] I would like to kill myself.
[4] I would kill myself if I had the chance.

10. [1] I don't cry any more than usual.
[2] I cry more now than I used to.
[3] I cry all the time now.
[4] I used to be able to cry, but now I can't cry even though I want to.

11. [1] I am no more irritated by things than I ever am.
[2] I am slightly more irritated now than usual.
[3] I am quite annoyed or irritated a good deal of the time.
[4] I feel irritated all the time now.

12. [1] I have not lost interest in other people.
[2] I am less interested in other people than I used to be.
[3] I have lost most of my interest in other people.
[4] I have lost all of my interest in other people.

13. [1] I make decisions about as well as I ever could.
[2] I put off making decisions more than I used to.
[3] I have greater difficulty in making decisions than before.
[4] I can't make decisions at all anymore.

14. [1] I don't feel that I look any worse than I used to.
[2] I am worried that I am looking old or unattractive.
[3] I feel that there are permanent changes in my appearance that make me look unattractive.
[4] I believe that I look ugly.

15. [1] I can work about as well as before.
[2] It takes an extra effort to get started at doing something.
[3] I have to push myself very hard to do anything.
[4] I can't do any work at all.

16. [1] I can sleep as well as usual.
[2] I don't sleep as well as I used to.
[3] I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
[4] I wake up several hours earlier than I used to and cannot get back to sleep.

17. [1] I don't get more tired than usual.
[2] I get tired more easily than I used to.
[3] I get tired from doing almost everything.
[4] I am too tired to do anything.

18. [1] My appetite is no worse than usual.
[2] My appetite is not as good as it used to be.
[3] My appetite is much worse now.
[4] I have no appetite at all anymore.

19. [1] I haven't lost much weight, if any, lately.
[2] I have lost more than five pounds.
[3] I have lost more than ten pounds.
[4] I have lost more than fifteen pounds.

20. [1] I am no more worried about my health than usual.
[2] I am worried about physical problems such as aches and pains, or upset stomach, or constipation.
[3] I am very worried about my physical problems and it's hard to think of much else.
[4] I am so worried about my physical problems that I cannot think about anything else.

21. [1] I have not noticed any recent change in my interest in sex.
[2] I am less interested in sex than I used to be.
[3] I am much less interested in sex now.
[4] I have lost interest in sex completely.

Appendix M

Center for Epidemiologic Studies Depression Scale (CESDS; Radloff, 1977)

Instructions for Questions: Below is a list of the ways you might have felt or behaved. Please tell how often you have felt this way during the past week using the following scale:

1 = Rarely or None of the time (less than 1 day)
2 = Some or a Little of the time (1-2 days)
3 = Occasionally or a Moderate amount of time (3-4 days)
4 = Most or All of the time (5-7 days)

_____ 1. I was bothered by things that don't usually bother me.

_____ 2. I did not feel like eating; my appetite was poor.

_____ 3. I felt that I could not shake off the blues even with help from my family or friends.

_____ 4. I felt that I was just as good as other people.

_____ 5. I had trouble keeping my mind on what I was doing.

_____ 6. I felt depressed.

_____ 7. I felt that everything I did was an effort.

_____ 8. I felt hopeful about the future.

_____ 9. I thought my life had been a failure.

_____ 10. I felt fearful.

_____ 11. My sleep was restless.

_____ 12. I was happy.

_____ 13. I talked less than usual.

_____ 14. I felt lonely.

_____ 15. People were unfriendly.

_____ 16. I enjoyed life.

_____ 17. I had crying spells.

_____ 18. I felt sad.

_____ 19. I felt that people dislike me.

_____ 20. I could not get "going."

REFERENCES

Aboud, F. (1987). The development of ethnic self-identification and attitudes. In J. Phinney & M. Rotheram (Eds.), Children's ethnic socialization: Pluralism and development (pp. 32-55). Newbury Park, CA: Sage.

Andujo, E. (1988). Ethnic identity of transethnically adopted Hispanic adolescents. Social Work, 33, 531-535.

Arce, C. (1981). A reconsideration of Chicano culture and identity. Daedalus, 110, 177-192.

Aries, E., & Moorehead, K. (1989). The importance of ethnicity in the development of identity of Black adolescents. Psychological Reports, 65, 75-82.

Asamen, J. K., & Berry, G. L. (1987). Self-concept, alienation, and perceived prejudice: Implications for counseling Asian Americans. Journal of Multicultural Counseling and Development, 146-159.

Baldwin, J. (1979). Theory and research concerning the notion of Black self-hatred. The Journal of Black Psychology, 5, 51-77.

Barker, R. G. (1968). Ecological psychology: concepts and methods for studying human behavior. Standford, CA: Standford Univ. Press.

Barona, A., & Miller, J. A. (1994). Short acculturation scale for Hispanic youth (SASH-Y): A preliminary report. Hispanic Journal of Behavioral Sciences, 16, 155-162.

Bautista de Domanico, Y., Crawford, I., & De Wolfe, A. S. (1994). Ethnic identity and self-concept in Mexican-American adolescents: Is bicultural identity related to stress or better adjustment? Child & Youth Care Forum, 23, 197-206.

Beck, A. T. (1978). The Beck Depression Inventory. USA: The Psychological Corporation.

Beck, A. T., & Steer, R. A. (1984). Internal consistencies of the original and revised Beck depression inventory. Journal of Clinical Psychology, 40, 1365-1367.

Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck depression inventory: Twenty-five years of evaluation. Clinical Psychology Review, 8, 77-100.

Bentler, P. M., & Chou, C. (1987). Practical issues in structural modeling. Sociological Methods and Research, 16, 78-117.

Berry, J. (1980). Acculturative stress: The role of ecology, culture, and differentiation. Journal of Cross-Cultural Psychology, 5, 382-406.

Berry, J., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. International Migration Review, 21, 491-511.

Betancourt, H., & López, S. R. (1993). The study of culture, ethnicity, and race in American psychology. American Psychologist, 48, 629-637.

Bollen, K. A. (1989). Structural equations with latent variables (pp.284-305). New York: John Wiley and Sons, Inc.

Bowman, P.J., & Howard, C. (1985). Race-related socialization, motivation, and academic achievement: A study of black youth in three-generation families. Journal of the American Academy of Child Psychiatry, 24, 2134-2141.

Boykin, A. W., & Toms, F. (1985). Black child socialization: A conceptual framework. In H. McAdoo & J. McAdoo (Eds.), Black children: Social, educational, and parental environments (pp. 32-51). Newbury Park, CA: Sage.

Bronfenbrenner, U. (1979). The ecology of human development. Cambridge, MA: Harvard University Press.

Brook, J. S., Whiteman, M., Balka, E. B., & Cohen, P. (1997). Drug use and delinquency: Shared and unshared risk factors in African American and Puerto Rican adolescents. Journal of Genetic Psychology, 158, 25-39.

Brook, J. S., Whiteman, M., Balka, E. B., Win, P. T., & Gursen, M. D. (1998). Drug use among Puerto Ricans: Ethnic identity as a protective factor. Hispanic Journal of Behavioral Sciences, 20, 241-254.

Brown, G. W., Andrews, B., Bifulco, A., & Veiel, H. (1990). Self-esteem and depression I: Measurement issues and prediction of onset. Social Psychiatry, 25, 200-209.

Brown, G. W., Bifulco, A., & Andrews, B. (1990). Self-esteem and depression III: Etiological issues. Social Psychiatry, 25, 235-243.

Carter, R. T. (1991). Racial identity attitudes and psychological functioning. Journal of Multicultural Counseling and development, 19, 105-114.

Chassin, L., Presson, C. C., Rose, J. S., & Sherman, S. J. (1998). Maternal socialization of adolescent smoking: Intergenerational transmission of smoking-related beliefs. Psychology of Addictive Behaviors, 12, 206-216.

Chavira, V., & Phinney, J. S. (1991). Adolescents' ethnic identity, self-esteem, and strategies for dealing with ethnicity and minority status. Hispanic Journal of Behavioral Sciences, 13, 226-227.

Chino, A. F., & Funabiki, D. (1984). A cross-validation of sex differences in the expression of depression. Sex Roles, 11, 175-187.

Chou, C. P., & Bentler, P. M. (1995). Estimates and tests in structural equation modeling. In R. H. Hoyle (Eds.), Structural equation modeling: Concepts, issues, and applications (pp. 37-55). Thousand Oaks, CA: Sage Publications.

Cortés, D. E., Rogler, L. H., & Malgady, R. G. (1994). Biculturality among Puerto Rican adults in the United States. American Journal of Community Psychology, 22, 707-721.

Crandall, R. (1973). The measurement of self-esteem and related constructs. In J. Johnson & P. Shaver (Eds.), Measures of social and psychological attitudes (pp. 45-168). Ann Arbor, MI: Institute for Social Research.

Cross, W. E. (1971). The Negro to Black conversion experience: Towards a psychology of Black liberation. Black World, 20, 13-27.

Cross, W. E. (1978). The Cross and Thomas models of psychological Nigresence. Journal of Black Psychology, 5, 13-19.

Cuéllar, I., Arnold, B., & Maldonado, R. E. (1995). Acculturation rating scale for Mexican Americans-II: A revision of the original ARSMA scale. Hispanic Journal of Behavioral Sciences, 17, 275-304.

Cuéllar, I., Harris, L. C., & Jasso, R. (1980). An acculturation scale for Mexican American normal and clinical populations. Hispanic Journal of Behavioral Sciences, 2, 199-217.

Cuéllar, I., Nyberg, B., & Maldonado, R. E. (1997). Ethnic identity and acculturation in a young adult Mexican-origin population. Journal of Community Psychology, 25, 535-549.

Cuéllar, I., & Roberts, R. E. (1997). Relations of depression, acculturation, and socioeconomic status in a Latino sample. Hispanic Journal of Behavioral Sciences, 19, 230-238.

de la Garza, R. O., DeSipio, L. F., Garcia, C., Garcia, J., & Falcon, A. (1992). Latino voices: Mexican, Puerto Rican, and Cuban perspectives on American politics. Boulder: Westview Press.

de Mendonca, E. M. (1989). Self-concept and perception of norms of public ethics. Arquivos Brasileiros de Psicologia, 41, 34-38.

Demo, D. H., & Hughes, M. (1990). Socialization and racial identity among Black Americans. Social Psychology Quarterly, 53, 361-374.

Der-Karabetian, A. (1980). Relation of two cultural identities of Armenian-Americans, Psychological Reports, 47, 123-128.

Deyo, R. A., Diehl, A. K., Hazuda, H., & Stern, M. P. (1985). A simple language-based acculturation scale for Mexican Americans: Validation and application to health care research. American Journal of Public Health, 75, 51-55.

DiLorenzo, T. M., Stucky-Ropp, R. C., Vander-Wal, J. S., & Gotham, H. J. (1998). Determinants of exercise among children: A longitudinal analysis. Preventive Medicine: An International Journal Devoted to Practice and Theory, 27, 470-477.

Dion, K. L., Earn, B. M., & Yee, P. H. N. (1978). The experience of being a victim of prejudice: An experimental approach. International Journal of Psychology, 13, 197-214.

Dukes, R. L., & Martínez, R. (1994). The impact of ethnicity and gender on self-esteem among adolescents. Adolescence, 29, 105-115.

Erikson, E. H. (1968). Identity, youth, and crisis. New York: Norton.

Féliz-Ortiz, M., Newcomb, M. D., & Myers, H. (1994). A multidimensional measure of cultural identity for Latino and Latina adolescents. Hispanic Journal of Behavioral Sciences, 16, 99-115.

Fisher, C. B., Jackson, J. F., & Villarruel, F. A. (1998). The study of African American and Latin American children and youth. In W. Damon & R.M. Lerner (Eds.), Handbook of child psychology: Vol. 1. Theoretical models of human development (5th ed., pp.1145-1207). New York: Wiley.

Fisher, A. R., & Shaw, C. M. (1999). African Americans' mental health and perceptions of racist discrimination: The moderating effects of racial socialization experiences and self-esteem. Journal of Counseling Psychology, 46, 395-407.

Fleming, J. S., & Courtney, B. E. (1984). The dimensionality of self-esteem. II. Hierarchical facet model for revised measurement scales. Journal of Personality and Social Psychology, 46, 404-421.

Ford, R. C. (1987). Cultural awareness and cross-cultural counseling. International Journal for the Advancement of Counseling, 10, 71-78.

Friedman, H. S., & DiMatteo, M. R. (1989). Health Psychology. Englewood Cliffs, New Jersey: Prentice-Hall.

Garcia, M., & Lega, L. (1979). Development of a Cuban ethnic identity questionnaire. Hispanic Journal of Behavioral Sciences, 1, 247-261.

Gil, A. G, Vega, W. A., & Dimas, J. M. (1994). Acculturative stress and personal adjustment among Hispanic adolescent boys. Journal of Community Psychology, 22, 43-54.

Golding, J. M., & Aneshensel, C. S. (1989). Factor structure of the center for epidemiologic studies depression scale among Mexican Americans and non-Hispanic Whites. Psychological Assessment, 1, 163-168.

Gomez, M. J., & Fassinger, R. E. (1994). An initial model of Latina achievement: Acculturation, biculturalism, and achieving styles. Journal of Counseling Psychology, 41, 205-215.

Grossman, B., Wirt, R., & Davids, A. (1985). Self-esteem, ethnic identity, and behavioral adjustment among Anglo and Chicano adolescents in West Texas. Journal of Adolescence, 8, 57-68.

Hembroff, L. A., & Clark, K. (1998). Undergraduate academic advising at Michigan State University: Report of the 1998 survey. [Online] Available http:// www.welcome.msu.edu/welcome/advising98/profile.htm, June 1998.

Hendrickson, J. M., Gable, R. A., & Shores, R. E. (1987). The ecological perspective setting events and behavior. The Pointer, 31, 40-44.

Hobfoll, S. E. (1998). Ecology, community, and AIDS prevention. American Journal of Community Psychology, 26, 133-144.

Holmes, T. H., & Rahe, R. H. (1967). The social readjustment rating scale. Journal of Psychosomatic Research, 11, 213-218.

Hovey, J. D., & King, C. A. (1996). Acculturative stress, depression, and suicidal ideation among immigrant and second-generation Latino adolescents. Journal of the Academy of Child and Adolescent Psychiatry, 35, 1183-1192.

Hoyle, R. H. (1995). The structural equation modeling approach: basic concepts and fundamental issues. In R. H. Hoyle (Eds.), Structural equation modeling: Concepts, issues, and applications (pp. 1-15). Thousand Oaks, CA: Sage Publications.

Hoyle, R. H., & Panter, A. T. (1995). Writing about structural equation models. In R. H. Hoyle (Eds.), Structural equation modeling: Concepts, issues, and applications (pp. 158-176). Thousand Oaks, CA: Sage Publications.

Hu, L. T., & Bentler, P. M. (1995). Evaluating model fit. In R. H. Hoyle (Eds.), Structural equation modeling: Concepts, issues, and applications (pp. 76-99). Thousand Oaks, CA: Sage Publications.

Hughes, D., & Chen, L. (1997). When and what parents tell children about race: An examination of race-related socialization among African American families. Applied Developmental Science, 1, 200-214.

Jackson, C., Henriksen, L., Dickinson, D. (1999). Alcohol-specific socialization, parenting behaviors and alcohol use by children. Journal of Studies on Alcohol, 60, 362-367.

Janis, I. S., & Field, P. B. (1959). A behavioral assessment of persuasibility: Consistency of individual differences. In C. I. Hovland & I. L. Janis (Eds.), Personality and persuasibility, (pp.55-68). New Haven, CT: Yale Univ. Press.

Jöreskog, K. G., & Sörbom, D. (1992). LISREL VIII: A guide to the program and applications. Mooresville, IN: Scientific Software.

Kaplan, M. S., & Marks, G. (1990). Adverse effects of acculturation: Psychological distress among Mexican American young adults. Social Science and Medicine, 31, 1313-1319.

Kazak, A. E. (1989). Families of chronically ill children: A systems and social-ecological model of adaptation and challenge. Journal of Consulting and Clinical Psychology, 57, 25-30.

Keefe, S. E. (1980). Acculturation and the extended family among urban Mexican-Americans. In a. M. Padilla (Ed.), Acculturation: Theory, models, and some new findings (pp.85-110). Boulder, CO: Westview.

Kerner, S. A., & Jacobs, K. W. (1983). Correlation between scores on the Beck depression inventory and the Zung self-rating depression scale. Psychological Reports, 53, 969-970.

Kerwin, C., Ponterotto, J. G., Jackson, B. L., & Harris, A. (1993). Racial identity in biracial children: A qualitative investigation. Journal of Counseling Psychology, 40, 221-231.

Kim, J. (1981). The process of Asian-American identity development: A study of Japanese American women's perceptions of their struggle to achieve positive identities. Unpublished doctoral dissertation, University of Massachusetts.

Knight, G. P., Bernal, M. E., Garza, C. A., Cota, M. K., & Ocampo, K. A. (1993). Family socialization and the ethnic identity of Mexican-American children. Journal of Cross-Cultural Psychology, 24, 99-114.

Knight, G. P., Cota, M. K., & Bernal, M. E. (1993). The socialization of cooperative, competitive, and individualistic preferences among Mexican American children: The mediating role of ethnic identity. Hispanic Journal of Behavioral Sciences, 15, 291-309.

Korzenny, F., & Schiff, E. (1987). Hispanic perceptions of communication discrimination. Hispanic Journal of Behavioral Sciences, 9, 33-48.

Landrine, H., & Klonoff, E. A. (1996). The schedule of racist events: A measure of racial discrimination and a study of its negative physical and mental health consequences. Journal of Black Psychology, 22, 144-168.

Lang, J. G., Munoz, R. F., Bernal, G., & Sorenson, J. L. (1982). Quality of life and psychological well-being in a bicultural Latino community. Hispanic Journal of Behavioral Sciences, 4, 433-450.

Lees, N. B., & Tinsley, B. J. (1998). Patterns of parental socialization of the preventative health behavior of young Mexican origin children. Journal of Applied Developmental Psychology, 19, 503-525.

Lewin, K. (1951). Field theory in social science. New York: Harper & Row.

Maldonado, D. (1975). Ethnic self-identity and self-understanding. Social Casework, 56, 618-622.

Marcia, J. E. (1966). Development and validation of ego identity status. Journal of Personality and Social Psychology, 3, 551-558.

Marín, G., & Gamba, R. J. (1996). A new measurement of acculturation for Hispanics: The bidimensional acculturation scale for Hispanics (BAS). Hispanic Journal of Behavioral Sciences, 18, 297-316.

Marín, G., & Marín, B. (1991). Research with Hispanic populations. Newbury Park, CA: Sage.

Marín, G., Sabogal, F., Marín, B., & Otero-Sabogal, R., & Pérez-Stable, E. J. (1987). Development of a short acculturation scale for Hispanics. Hispanic Journal of Behavioral Sciences, 9, 183-205.

Marshall, S. (1995). Ethnic socialization of African American Children: Implications for parenting, identity development, and academic achievement. Journal of Youth and Adolescence, 24, 377-396.

Mena, F. J., Padilla, A. M., & Maldonado, M. (1987). Acculturative stress and specific coping strategies among immigrant and later generation college students. Hispanic Journal of Behavioral Sciences, 9, 207-225.

Moos, R. H. (1976). The human context: Environmental determinants of human behavior. New York: Wiley.

Munford, M. B. (1994). Relationship of gender, self-esteem, social class, and racial identity to depression in blacks. Journal of Black Psychology, 20, 153-174.

Neff, J. A., Hoppe, S. K., & Perea, P. (1987). Acculturation and alcohol use: Drinking patterns and problems among Anglo and Mexican-American male drinkers. Hispanic Journal of Behavioral Sciences, 9, 151-181.

Negy, C. (1993). Anglo- and Hispanic-Americans' performance on the family attitude scale and its implications for improving measurements of acculturation. Psychological Reports, 73, 1211-1217.

Negy, C., & Woods, D. J. (1992a). The importance of acculturation in understanding research with Hispanic-Americans. Hispanic Journal of Behavioral Sciences, 14, 224-247.

Negy, C., & Woods, D. J. (1992b). A note on the relationship between acculturation and socioeconomic status. Hispanic Journal of Behavioral Sciences, 14, 248-251.

O'Connor, T. G., Deater-Deckard, K., Fulker, D., Rutter, M., & Plomin, R. (1998). Genotype-environment correlations in late childhood and early adolescence: Antisocial behavioral problems and coercive parenting. Developmental Psychology, 34, 970-981.

Olmedo, E. L., Martínez, J. L., & Martínez, S. R. (1978). A measure of acculturation for Chicano adolescents. Psychological Reports, 42, 159-170.

Olmedo, E. L., & Padilla, A. M. (1978). Empirical and construct validation of a measure of acculturation for Mexican-Americans. Journal of Social Psychology, 105, 179-187.

O'Neil, M.K., Lancee, W. J., & Freeman, S. J. J. (1985). Sex differences in depressed university students. Social Psychiatry, 20,186-190.

Padilla, A. M. (1980). The role of cultural awareness and ethnic loyalty in acculturation. In A. M. Padilla (Ed.), Hispanic psychology: Critical issues in theory and research (pp. 26-42). Thousand Oaks, CA: Sage.

Parham, T., & Helms, J. (1981). The influence of black students' racial identity attitudes on preference for counselor's race. Journal of Counseling Psychology, 28, 250-256.

Parham, T., & Helms, J. (1985). Relation of racial identity attitudes to self-actualization and affective states of Black students. Journal of Counseling Psychology, 32, 431-440.

Parsons, J. T., Butler, R., Kocik, S., Norman, L., & Nuss, R. (1998). The role of the family system in HIV risk reduction: Youths with hemophilia and HIV infection and their parents. Journal of Pediatric Psychology, 23, 57-65.

Perron, J., Vondracek, F. W., Skorikov, V. B. (1998). A longitudinal study of vocational maturity and ethnic identity development. Journal of Vocational Behavior, 52, 409-424.

Pettit, G. S., Brown, E. G., Mize, J., & Lindsey, E. (1998). Mothers' and fathers' socializing behaviors in three contexts: Links with children's peer competence. Merrill Palmer Quarterly, 44, 173-193.

Phinney, J. S. (1989). Stages of ethnic identity in minority group adolescents. Journal of Early Adolescence, 9, 34-49.

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. Psychological Bulletin, 108, 499-514.

Phinney, J. S. (1991). Ethnic identity and self-esteem: A review and integration. Hispanic Journal of Behavioral Sciences, 13, 193-208.

Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. Journal of Adolescent Research, 7, 156-176.

Phinney, J. S. (1996). When we talk about American ethnic groups, what do we mean? American Psychologist, 51, 918-927.

Phinney, J. S., & Alipuria, L. (1990). Ethnic identity in older adolescents from four ethnic groups. Journal of Adolescence, 13, 171-183.

Phinney, J. S., Cantu, C. L., & Kurtz, D. A. (1997). Ethnic and American identity as predictors of self-esteem among African American, Latino, and White adolescents. Journal of Youth and Adolescence, 26, 165-185.

Phinney, J. S., & Chavira, V. (1992). Ethnic identity and self-esteem: An exploratory longitudinal study. Journal of Adolescence, 15, 271-281.

Phinney, J. S., & Chavira, V. (1995). Parental ethnic socialization and adolescent coping with problems related to ethnicity. Journal of Research on Adolescence, 5, 31-53.

Phinney, J. S., Chavira, V., & Tate, J. D. (1993). The effect of ethnic threat on ethnic self-concept and own-group ratings. The Journal of Social Psychology, 133, 469-478.

Phinney, J. S., Chavira, V., & Williamson, L. (1992). Acculturation attitudes and self-esteem among high school and college students. Youth & Society, 23, 299-312.

Phinney, J. S., & Tarver, S. (1988). Ethnic identity search and commitment in Black and White eighth graders. Journal of Early Adolescence, 8, 265-277.

Plant, C. T., & Yanico, B. J. (1991). Relationship of racial identity and gender-role attitudes to Black women's psychological well-being. Journal of Counseling Psychology, 38, 315-322.

Poston, W. S. C. (1990). The biracial identity development model: A needed addition. Journal of Counseling and Development, 69, 152-155.

Quintana, S. M., Vogel, M. C., & Ybarra, V. C. (1991). Meta-analysis of Latino students' adjustment in higher education. Hispanic Journal of Behavioral Sciences, 13, 155-168.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. Applied Psychological Measurement, 1, 385-401.

Rice, F. P. (1996). The adolescent: Development, relations, and culture. Needham Heights, MA: Allyn & Bacon.

Richman, J. A., Gaviria, M., Flaherty, J. A., & Birz, S. (1987). The process of acculturation: Theoretical perspectives and an empirical investigation in Peru. Social Science and Medicine, 25, 839-847.

Roberts, W. L. (1999). The socialization of emotional expression: Relations with prosocial behavior and competence in five samples. Canadian Journal of Behavioral Science, 31, 72-85.

Roberts, J. E., & Monroe, S. M. (1992). Vulnerable self-esteem and depressive symptoms: Prospective findings comparing three alternative conceptualizations. Journal of Personality and Social Psychology, 62, 804-812.

Robertson, J. F., & Simons, R. L. (1989). Family factors, self-esteem and adolescent depression. Journal of Marriage and Family, 51, 125-138.

Rogler, L. H., Cortés, D. E., & Malgady, R. G. (1991). Acculturation and mental health status among Hispanics: Convergence and new directions for research. American Psychologist, 46, 585-597.

Rosenberg, M. (1965). Society and the adolescent image. New Jersey: Princeton University Press.

Rosenthal, D., & Hrynevich, C. (1985). Ethnicity and ethnic identity: A comparative study of Greek-, Italian-, and Anglo-Australian adolescents. International Journal of Psychology, 20, 723-742.

Rowe, W., Bennett, S. K., & Atkinson, D. R. (1994). White racial identity models: A critique and alternative proposal. The Counseling Psychologist, 22, 129-146.

Ruiz, A. S. (1990). Ethnic identity: Crisis and resolution. Journal of Multicultural Counseling and Development, 18, 29-40.

Sabogal, F., Marín, G., Otero-Sabogal, R., Marín, B. V., & Pérez-Stable, E. J. (1987). Hispanic familism and acculturation: What changes and what doesn't? Hispanic Journal of Behavioral Sciences, 3, 397-412.

Saldaña, D. H. (1994). Acculturative stress: Minority status and distress. Hispanic Journal of Behavioral Sciences, 16, 116-128.

Sameroff, A. J. (1980). Issues in early reproductive and caretaking risk: Review and current status. In Sawin, Hawkins, Walker, & Penticuff (Eds.), Exceptional Infant: Vol.4. Psychosocial risk in infant-environment transactions (pp. 343-359). New York: Brunner/Mazel.

Sameroff, A. J., & Chandler, M. J. (1975). Reproductive risk and the continuum of caretaking casualty. In F. D. Horowitz, E. M. Hetherington, S. Scarr-Salapatek, G. M. Siegel (Eds.), Review of child development research, Vol 4, (pp. 187-244). Chicago: University of Chicago Press.

Sarason, I.G., & Sarason, B.R. (1984). Life changes, moderators of stress, and health. In A. Baum, S. E. Taylor, and J. E. Singer (Eds.), Handbook of psychology and health: Vol. 4. Social psychological aspects of health. Hillsdale, NJ: Erlbaum.

Silber, E., & Tippet, J. (1965). Self-esteem: Clinical assessment and measurement validation. Psychological Reports, 16, 1017-1071.

Smith, E. J. (1991). Ethnic identity development: Toward the development of a theory within the context of majority/minority status. Journal of Counseling and Development, 70, 181-188.

Sodowsky, G. R., Lai, E. W. M., & Plake, B. S. (1991). Moderating effects of sociocultural variables on acculturation attitudes of Hispanics and Asian Americans. Journal of Counseling & Development, 70, 194-204.

Sommers, I., Fagan, J., & Baskin, D. (1993). Sociocultural influences on the explanation of delinquency for Puerto Rican youth. Hispanic Journal of Behavioral Sciences, 15, 36-62.

Spencer, M. B. (1983). Children's cultural values and parental child raring strategies. Developmental Review, 3, 351-370.

Stevenson, H. C. (1994). Validation of the scale of racial socialization for African American adolescents: Steps toward multidimensionality. Journal of Black Psychology, 20, 445-468.

Stevenson, H. C. (1995). Relationship of adolescent perceptions of racial socialization to racial identity. Journal of Black Psychology, 21, 49-70.

Stevenson, H. C., Cameron, R., & Herrero-Taylor, T. (1996). Merging the ideal and the real: Relationship of racial socialization beliefs and experiences for African American youth. In D. Johnson (Ed.), Racial socialization research (Advances in African American Psychology). Hampton, VA: Cobb & Henry.

Stevenson, H. C., Reed, J., & Bodison, P. (1996). Kinship social support and adolescent racial socialization beliefs: Extending the self to family. Journal of Black Psychology, 22, 498-508.

Swartz, J. L., & Martin, W. E. (1997). Ecological psychology theory: Historical overview and application to educational ecosystems. In J. L. Swartz, & W. E. Martin (Ed.), Applied ecological psychology for schools within communities: Assessment and intervention (pp.3-27). Mahwah, New Jersey: Lawrence Earlbaum.

Szapocznik, J., Kurtines, W. M., & Fernandez, T. (1980). Bicultural involvement and adjustment in Hispanic-American youths. International Journal of Intercultural Relations, 4, 353-365.

Szapocznik, J., Scopetta, M. A., Kurtines, W., & Aranalde, M. A. (1978). Theory and measurement of acculturation. Interamerican Journal of Psychology, 12, 113-130.

Tajfel, H. (1978). The social psychology of minorities. New York: Minority Rights Group.

Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In W. Austin & S. Worchel (Eds.), The social psychology of intergroup relations (pp. 33-47). Monterey, CA: Brooks/Cole.

Thomas, A. J., & Speight, S. L. (1999). Racial identity and racial socialization attitudes of African American parents. Journal of Black Psychology, 25, 152-170.

Thornton, M.C., Chatters, L. M., Taylor, R. J., & Allen, W. R. (1990). Sociodemographic and environmental correlates of racial socialization by black parents. Child Development, 61, 401-409.

U.S. Bureau of the Census. (1995). United States population estimates by age, sex, race, and Hispanic origin, 1990 - 1995. (Release PPL-41). Washington, DC: U.S. Government Printing Office.

U.S. Bureau of the Census. (1999). United States population estimates for counties by race and Hispanic origin, 1998. Population estimates program, Population Division, Washington, DC: U.S. Census Bureau 20233.

Utsey, S. O. (1998). Assessing the stressful effects of racism: A review of instrumentation. Journal of Black Psychology, 24, 269-288.

Vega, W. A., Khoury, E. L., Zimmerman, R. S., & Gil, A. G. (1995). Cultural conflicts and problem behaviors of Latino adolescents in home and school environments. Journal of Community Psychology, 23, 167-179.

West, S. G., Finch, J. F., & Curran, P. J. (1995). Structural equation models with nonnormal variables: Problems and remedies. In R. H. Hoyle (Eds.), Structural equation modeling: Concepts, issues, and applications (pp. 56-75). Thousand Oaks, CA: Sage Publications.

Yeh, C. J., & Huang, K. (1996). The collectivistic nature of ethnic identity development among Asian American college students. Adolescence, 31, 645-661.

Zak, I. (1973). Dimensions of Jewish-American identity. Psychological Reports, 33, 891-900.

Zak, I. (1976). Structure of ethnic identity of Arab-Israeli students. Psychological Reports, 38, 239-246.

Zayas, L. H. (1994). Hispanic family ecology and early childhood socialization: Health care implications. Family Systems Medicine, 12, 315-325.

Zayas, L. H., & Palleja, J. (1988). Puerto Rican familism: Implications for family therapy. Family Relations, 37, 260-264.

Zayas, L. H., & Solari, F. (1994). Early childhood socialization in Hispanic families: Context, culture, and practice implications. Professional Psychology: Research and Practice, 25, 200-206.

Zinn, M. (1980). Gender and ethnic identity among Chicanos. Frontiers, 5, 18-24.

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