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# HOW, WHEN, AND FOR WHOM? TOWARD A NUANCED UNDERSTANDING OF THE RELATION BETWEEN AFRICAN AMERICAN ETHNIC IDENTITY AND MENTAL HEALTH

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ABSTRACT OF DISSERTATION

Ignacio David Acevedo

The Graduate School

University of Kentucky

2008

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AFRICAN AMERICAN ETHNIC IDENTITY AND MENTAL HEALTH

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ABSTRACT OF DISSERTATION

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A dissertation submitted in partial fulfillment of the  
Requirements for the degree of Doctor of Philosophy in the  
College of Arts and Sciences  
at the University of Kentucky

By  
Ignacio David Acevedo

Lexington, Kentucky

Director: Dr. Tamara Lynette Brown, Associate Professor of Psychology

Lexington, Kentucky

2008

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## ABSTRACT OF DISSERTATION

### HOW, WHEN, AND FOR WHOM? TOWARD A NUANCED UNDERSTANDING OF THE RELATION BETWEEN AFRICAN AMERICAN ETHNIC IDENTITY AND MENTAL HEALTH

This study uses a causal modeling approach based on structural equation modeling to examine specific hypotheses regarding the relation among ethnic identity, its components, and various mental health outcomes in African American emerging adults. Data was provided by college students at the Florida Agricultural and Mechanical University. Results did not support a relation between ethnic identity components and adverse mental health. Ethnic identity components were related to positive mental health outcomes; however, this relation differed between gender groups. Among females, the ethnic identity component traditionally labeled ethnic commitment significantly predicted both positive mental health outcomes included in this study. Among males, only life satisfaction was predicted by ethnic identity, and this relation appeared to depend on the component of ethnic identity traditionally labeled ethnic exploration. Findings are discussed in terms of their implications for the current understanding of ethnic identity and its development among African American emerging adults.

**KEYWORDS:** African American mental health, ethnic identity, self-esteem, satisfaction with life, historically Black colleges and universities.

Ignacio David Acevedo

March 4, 2008

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March 4, 2008  
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DISSERTATION

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It is a long-standing fallacy of American culture to attribute milestone achievements, such as obtaining a PhD, to the individual. In truth, I have done nothing but follow a course set before me and learn from the people I have been fortunate to meet along the way. Had it not been for the grace of God and the help of the individuals below, I may have just as easily and happily been a potter (and not a good one at that). The following is a sampling of the people who have shaped my thinking and who deserve to be co-recipients of this degree. Undoubtedly, I have forgotten to acknowledge many others. I hope they will forgive me.

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## Chapter One

### Introduction

What does it mean to be Black?

How Black am I?

Can I be happy without being Black?

Must I be Black to be happy?

Do I have a choice?

These are among the important questions that, implicitly or explicitly, African Americans face in the development of their sense of self (Cross, 2003). Like most other people in affluent, industrialized, individualist nations, African Americans face the task of deciding who they are in terms of their personal preferences, values, ideas, etc. Unlike other people in these nations, there is one facet of identity that – for most African Americans – it will be almost impossible to avoid: having “Black” features in a society where these have been historically and chronically devalued along with the personal worth of individuals in the possession of these features and the cultures represented by them (Cross, 2004). Indirectly, this document addresses each of the questions listed above, although it directly pertains to the middle three. More specifically, this study examines the issue of whether African Americans can lead psychologically healthy lives without stopping to ponder, and obtain some resolution about, their personal feelings about being Black in US society.

This purpose of this first chapter is to introduce the conceptual models which have led to the current understanding of African American ethnic identity and its role in African American mental health. The first section of the chapter introduces the historical importance of ethnic identity in African American psychological scholarship, describes the ongoing importance of this construct in African American psychology, and its eventual incorporation into mainstream psychology as a result of the work of developmental psychologist Jean Phinney. The second section of this chapter describes some of the important current research areas in African American ethnic identity and its relation to mental health. Most notably, the notion that ethnic and ego identity development in African Americans may extend well into emerging adulthood is introduced, as is research suggesting that the relation between ethnic identity and African



American mental health may be much more nuanced than suggested in early conceptual models. These two sections provide the background for the three hypotheses to be tested in this study, which are described in the final section of this chapter.

### Section One: The Historical Importance of Ethnic Identity in African American Psychology

(The African American) wishes neither of the older selves to be lost. He would not Africanize America, for America has too much to teach the world and Africa. He would not bleach his Negro soul in a flood of white Americanism, for he knows that Negro blood has a message for the world. He simply wishes to make it possible for a man to be both a Negro and an American.

(DuBois, 1903, p. 3)

As exemplified in this quote, taken from W. E. B. DuBois' classic *The Souls of Black Folk: Essays and Sketches*, the role of ethnicity in the construction of the self has played a central role in African American psychological thought since its earliest origins. Although themes of identity resonate throughout DuBois' work (Levine, 1997), *The Souls of Black Folk* is perhaps his most direct discussion of the role of reconciling African and American origins in the personal well-being of African Americans, and of the intrapersonal struggle that this reconciliation entails given the chronic devaluation of African mores in the dominant European American society. On the latter of these themes, DuBois (1903) would write:

“One ever feels his two-ness,--an American, a Negro; two warring souls, two thoughts, two unreconciled strivings; two warring ideals in one dark body, whose dogged strength alone keeps it from being torn asunder”  
(p.3).

Although the themes of ethnic identity's importance for African Americans, and of the personal struggle to successfully define ethnic identity, can be glimpsed in earlier examples of African American thought including the works of Frederick Douglass (e.g., 1845) and Paul Laurence Dunbar (Martin, Primeau, & Gates, 2002), DuBois' arguably provides their most clear and direct early articulation. Indeed, as will become evident throughout this chapter, DuBois anticipated many of the issues that African American

ethnic identity research would continue to examine more than a century after *The Souls of Black Folk* was first published.

Three decades after *The Souls of Black Folk* was published, African American psychologists Kenneth Clark and Mamie Phipps Clark began a program of research that brought psychological thought on African American ethnic identity into the realm of empiricism. At the close of the 1930s, Clark and Clark (1939a, 1939b, 1940, 1947, 1950) began examining African American children's ethnic identification and preference. The African American children who participated in Clark and Clark's research tended to prefer dolls and drawings of European Americans over those depicting African Americans, and, when asked to color a drawing the same shade as their skin, the children frequently chose a lighter shade than their own.

When in 1954 Kenneth Clark was called to testify in front of the US Supreme Court considering the *Brown vs. the Board of Education (BOE)* case, he would state that the children in his studies:

“ . . . like other human beings who are subjected to an obviously inferior status in the society in which they live, have been definitely harmed in the development of their personalities; that the signs of instability in their personalities are clear, and I think that every psychologist would accept and interpret these signs as such” (cited in Beggs, 1995, ¶ 10).

Based largely on Dr. Clark's testimony, the US Supreme Court would go on to rule that racial segregation in US public education was unconstitutional, a decision widely acknowledged as the first instance in which a US Supreme Court ruling was based on the testimony of social scientists rather than established legal precedent.

Inspired by the civil rights struggle that surrounded the *Brown vs. the BOE* case, during the decade following this decision African American psychologists would begin developing and refining formal conceptual models highlighting the role of ethnic identity in the psychological well-being African Americans. By 1971, Thomas had coined the term *negromachy* to describe the condition of adult African Americans who displayed characteristics that paralleled those found in the African American children that were studied by Clark and Clark decades earlier. According to Thomas, these individuals had a confused self-worth that seemed dependent on white society's approval, and frequently displayed behaviors consistent with compliance, subservience, repressed rage, and

oversensitivity to racial issues (Thomas, 1971). Thomas speculated that negromachy could be overcome through a process of racial identity re-definition that gradually separated self value from the majority group evaluation, led individuals to recognize social injustice against African Americans, and empowered them to develop a self-esteem based on personal attributes rather than majority group evaluation. Thomas saw the end product of this process as enabling individuals to work against the oppressive social forces in place at that time (Thomas, 1971).

Also in 1971, Cross published his influential work detailing a stage model of *psychological nigrescence*, a term he defined as the process of becoming Black. Cross' model involves five stages: pre-encounter, encounter, immersion-emersion, internalization, and internalization-commitment. Like Thomas, Cross postulated that many adult African Americans of the time had internalized society's negative evaluation of their ethnic group, which led them to "think, act, and behave in a manner that degrades Blackness" (Cross, 1971, p. 16), a state that he termed pre-encounter. Cross suggested that certain personal or social experiences lead a person to abandon this de-valued African American identity (encounter), and begin an active re-construction of a positive and strong African American identity (immersion-emersion). As this re-constructed identity is merged with the old de-valued identity, individuals develop a balanced and psychologically healthy ethnic identity characterized by "ideological flexibility, psychological openness, and self-confidence about one's Blackness" (Cross, 1978, p. 18), a stage Cross labeled internalization. In contrast to Thomas, Cross suggests that not all individuals who achieve an internalized balanced identity will strike out against oppressive social forces. This activity, a reflection of an internal commitment to creating a positive perspective of African Americans in the broader culture, was reserved for individuals who reach the final stage, commitment. Subsequent revisions of this model by Cross (e.g., 2004) and other authors (e.g., Parham, 1989) have suggested that the linear process of development suggested in Cross' original postulation may be inaccurate, and that Black identity development is a life-span process of refinement that occurs as individuals recycle through these stages.

Although Cross' model remains one of the most influential conceptualizations of the role played by ethnic identity in African American psychological well-being (Fischer

& Moradi, 2001; Marks, Settles, Cook, Morgan, & Sellers, 2003), an active interest in the role of ethnic identity within African American psychology has led to the development and publication of several additional models by other authors. These are summarized in Table 1. As can be observed in Table 1, the vast majority of these models continue to emphasize the important role of ethnic identity in determining African American psychological well-being. The original articulation of one of the most recent models among these, Sellers et al.'s Multidimensional Model of Racial Identity (Sellers et al., 1998), focuses on the structure of ethnic identity and does not make an explicit connection between African American ethnic identity and psychosocial health. However, subsequent research conducted by the model's authors has focused extensively on explaining relation between African American identity and mental health (e.g., Caldwell et al., 2002, Rowley et al., 1998).

#### *Jean Phinney's Role in "Mainstreaming" the Study of Ethnic Identity*

Psychological scholarship occurs in the context of broader social forces and is not immune to the influence of social ills such as discrimination and prejudice (Guthrie, 1976). For instance, in 1925 Paschall and Sullivan published research findings that they interpreted as supporting the intellectual superiority of individuals with pure genetic European ancestry. Lest these findings be dismissed as unfortunate reflections of less illustrious times, it is worth highlighting that similar interpretations of research findings were presented – and given unusual amounts of public attention – by Jensen (1969) near the end of the civil rights movement, and by Hernstein and Murray (1994) in the mid 1990's. Given this context, it should not be surprising to learn that – with the exception of notable cases such as Clark and Clark's research – the vibrant psychological scholarship on the relation between ethnic identity and African American psychosocial health was long ignored by mainstream US psychologists (Cross, 2003). Indeed, it is only in the late 1980s, as a result of the work of Jean Phinney (e.g., Phinney, 1989, 1990; Phinney & Alipurria, 1990; Phinney & Tarver, 1988), a European American developmental psychologist, that debate on the importance of ethnic identity for the mental health of African Americans enters mainstream US psychology (Cross, 2003, 2004).

Phinney's work framed the relation between African American ethnic identity and psychological well-being under the parameters of two established mainstream

psychological paradigms, social identity theory and ego identity development. At the core of social identity theory is the notion that the feelings of identification and belonging that are associated with membership in a social group lead to increased well-being and improved self-concept (Lewin, 1948; Tajfel & Turner, 1979); however, when ethnic majority groups hold negative evaluations of ethnic minorities, ethnic minority identification may have negative effects on psychological health (Tajfel, 1981). Although this theory suggested that ethnic minority individuals could attempt to overcome this negative evaluation by identifying with the dominant group rather than their own ethnic group, Phinney (1990) noted that this solution may also carry negative consequences for psychological functioning and is generally not available to African Americans because of physiognomic characteristics. Other coping mechanisms that social identity theory suggested may help African Americans deal with the negative evaluations of their ethnic group are the reinterpretation of “inferior” characteristics (Bourhis, Giles, & Tajfel, 1973) and stressing the distinctiveness of their own group (Christian, Gadfield, Giles, & Taylor, 1976, Hutnik, 1985). Borrowing from the version of Cross’ (1978) model prevalent at that time, Phinney (1990) stated that the most psychologically healthy response to European Americans’ negative evaluation of African American membership was for African Americans to develop pride in their ethnic group.

Phinney also incorporated theories of ego identity development in her description of the relation between ethnic identity and African American mental health (Phinney and Alipuria, 1990; Phinney & Kohatsu, 1997). According to these theories, the formation of an ego identity is a key developmental task of adolescence (Blos, 1979; Erikson, 1968; Kroger, 1989). Adolescents who are able to successfully establish an ego identity enter adulthood with a secure sense of self that guides their adult development and behavior and will lead to better psychological health. Phinney argued that the incorporation of ethnic group membership and the feelings associated with this membership into ego identity was of particular importance for the psychologically healthy development of African American adolescents (Phinney & Alipuria, 1990; Phinney & Kohatsu, 1997). Mirroring the prevalent thinking about healthy ego identity development in adolescence, Phinney (1990) suggested that ethnic identity development occurred in three steps beginning with an unexamined ethnic identity. The second step was an exploratory one in

which individuals became increasingly involved in activities that inform and define their subjective understanding of ethnicity (e.g., conversations about ethnicity, participation in cultural practices). Phinney suggested that this process of exploration allowed for the establishment of a secure sense of ethnic identity, the third step in her model. According to Phinney's original model, the first of these steps was characteristic of children, the second typically began in early adolescence, and the third most often arrived prior to emerging adulthood. Mirroring previous models of African American identity, Phinney suggested that the third step of ethnic identity development was associated with the greatest psychological health (Phinney & Kohatsu, 1997).

Phinney's work greatly increased interest in the relation between ethnic identity and African American mental health within mainstream psychology (Cross, 2004). Reflecting the mainstream conceptual models that she incorporated into her work, much of this interest to date has focused on adolescence as a critical period of ethnic identity formation (Cross, 2004). In contrast to Phinney, most prior models of African American identity were focused on adults. As will be discussed in subsequent chapters, Phinney's belief that the timing of ethnic identity development in African Americans in the US would mirror the ego identity development European Americans is likely to have been mistaken (Cross, 2004; Phinney, 2004, 2005). Nevertheless, Phinney's marriage of mainstream psychological paradigms and ideas from historical African American identity models such as Cross' has done much to legitimize and promote the study of African American identity and its relation to mental health within mainstream psychology (Cross, 2003, 2004).

To summarize section one of this introduction, the belief that the incorporation of African origins and values into the subjective sense of self of African Americans is important for their optimal adjustment has played a central role in African American psychological thought since its earliest origins and can be glimpsed in the writings of Fredrick Douglass and Paul Laurence Dunbar. The most comprehensive early articulation of this belief in psychological terms was presented by DuBois in *The Souls of Black Folk*. This relation between ethnic identity and mental health is at the core of much of the African American psychological literature of the twentieth century, particularly as it developed after the US civil rights movement with increased access to higher education

by African Americans. Despite the vibrant scholarship focused on the development and refinement of conceptual models about the relation between ethnic identity and African American mental health, social and historical forces prevented these from being incorporated into mainstream psychology until the 1980s. Jean Phinney's work, which began near the end of the 1980's, did much to further the integration of these models into mainstream psychology by marrying them to two important mainstream conceptual models, social identity theory and ego identity development. Influenced by Phinney's original work, much of the subsequent research on ethnic identity and its relation to African American mental health has been focused on adolescents, a characteristic that was absent from this area of scholarly inquiry prior to Phinney.

## Section Two: Current Perspectives on Ethnic Identity and African American Well-being

Over the past 15 years, ethnic identity has arguably been the most prominent ethnicity-bound variable in psychological research involving African Americans and other US ethnic minority groups (Greig, 2003; Phinney, 1996). One salient feature of contemporary research on ethnic identity, particularly when compared to earlier scholarship directed at this topic, is an empirical focus on measurement and external validation (Cross, 2003). This research has suggested that ethnic identity is a phenomenon common to all humans, but one that holds the greatest relevance for ethnic minority group members, including African Americans (Phinney, 1990). Two of the most important themes that have emerged from this research are the understanding that ethnic identity development in African Americans may not occur only during adolescence but may instead expand well into emerging adulthood (e.g., Phinney, 2004, 2005), and the finding that the relation between ethnic identity and African American mental health may be more nuanced than suggested by the conceptual models described in the previous chapter. Each of these themes will be discussed separately in the two ensuing sections of this chapter along with their respective implications for future research in this area.

*Ethnic Identity Development in African Americans*



As may be recalled from the previous section, one result of Phinney's influence on the study of the relation between ethnic identity and African American mental health has been an almost exclusive focus on adolescence as a critical period in ethnic identity formation (Cross, 2003, 2004). This focus is associated with Phinney's reliance on mainstream psychological paradigms that stress adolescence as a critical period in ego identity formation among European Americans, and with the assumption that adolescence would then also be a critical period for ethnic identity development among African Americans. Recent research has begun to show that ethnic identity development in African Americans may extend well into emerging adulthood (Phinney, 2004, 2005), the developmental period immediately following adolescence in which young people have attained the legal rights of adults but do not fully see themselves as adults, and where they have not yet accepted the full range of responsibilities that characterize adults (Arnett, 2000). Researchers have suggested that African American identity development may require such an extended period of development as a result of the complex array of social experiences that African Americans are forced to incorporate into their personal identity (Phinney, 2005). These include their ethnic or cultural background, phenotypic appearance, and the social valuation (or de-valuation) of these by others (Phinney, 2005). In contrast, European Americans have most often formed a stable and well defined identity by emerging adulthood. It should be noted that this extended period of identity development among African Americans is not associated with an overarching delay in psychological development when compared to European Americans. In fact, African Americans tend to reach many psychological markers of adulthood, such as a sense of financial and emotional responsibility for their nuclear family and a sense of responsibility over the parenting and well-being of younger siblings, earlier than European Americans (Phinney, 2005).

There are both contextual and developmental influences that lead to this extended period of ethnic and ego identity development among African Americans. Contextually, African American and other ethnic minority children are often raised in family and educational settings where contact with members of their own ethnic group is the most normative experience (Phinney, 2005). Emerging adulthood may be the first time they have the opportunity to be meaningfully exposed to environments where their



ethnic/racial heritage is made salient by virtue of its minority status. These experiences can reignite the processes of ethnic exploration, even after an initial state of commitment has been reached. Because the social support offered by family is often less available to emerging adults as a result of the normative physical and/or psychological distancing from the family of origin that characterizes this developmental period, experiences of minority status can have a greater level of personal impact even for individuals previously exposed to similar experiences in childhood and adolescence (Phinney, 2005). Developmentally, increasing cognitive sophistication allows emerging adults a progressively more nuanced understanding of the implications of their own ethnicity (Quintana, 1994). Together, these developmental and contextual influences allow African American emerging adults to examine the perspectives of other ethnic minority groups, along with those of their own ethnic group and those of the European American majority. Most African American emerging adults seem to also increasingly recognize diversity within their own group. As each of these new insights is obtained, young African American men and women must examine its implications to their understanding of ethnicity and, in turn, their personal identity.

That ethnic identity development among African Americans may extend into emerging adulthood has two important implications for future research on the relation between ethnic identity and African American mental health. One implication is that this research may benefit from taking a closer look at the process of ethnic identity development as it occurs in emerging adults. As discussed previously, within mainstream psychology interest in ethnic identity tends emanate from Jean Phinney's recasting of ethnic identity under the light of established psychological theories that highlight adolescence as a critical period of ethnic identity formation (Cross, 2004). Consequently, much of the modern research and theoretical work on African American identity has focused on adolescents (Cross, 2004). However, recent research conducted with other ethnic groups highlights the limitations of using models of ethnic identity developed on adolescents to conceptualize this variable in emerging adults. When Lee and Yoo (2004) recently examined the structure of ethnic identity in a sample of Asian American emerging adults, their results suggested a structure more complex than that identified by the many studies examining ethnic identity in US ethnic minority adolescent samples

(e.g., Pegg and Plybon, 2005; Roberts et al., 1999; Spencer et al., 2000; Yancey et al., 2004). Lee and Yoo (2004) suggested that these differences may reflect the more complex cognitive styles of emerging adults.

A second implication of the finding that ethnic identity development in African Americans may extend into early adulthood is that researchers must be mindful that, compared to adolescents, there often is a wider variability of environmental contexts available to specific subgroups of African American emerging adults, and that these different contexts can have meaningfully different influences on ethnic identity (Shelton & Sellers, 2000) and its development. For instance, compared to emerging adults entering the workforce, emerging adults who are college students may be provided with greater opportunity for in-depth ethnic identity exploration as college can provide a moratorium from identity development during which multiple options can be explored before making commitments that begin to determine a person's standing on important identity domains (Phinney, 2005). Moreover, emerging research suggests that characteristics of the college environment, such as the ethnic composition of the student body, may also have an effect on ethnic identity and its development. Whereas Romero (2001) found ethnic identity to be a relatively stable construct among ethnic minority students at an urban university in which less than 20% of the student population was European American, Ethier and Deaux (1994) found far less stability among ethnic minority students at predominately White institutions.

#### *Factors Influencing the Relation Between Ethnic Identity and African American Mental Health*

As empirical research examining the relation between ethnic identity and African American mental health has burgeoned over the last few decades, a surprising finding has been that, despite the theoretical importance of this relation, across studies ethnic identity shows only a moderate effect on mental health in African Americans (Greig, 2003). For example, when Roberts et al. (1999) examined the correlation between ethnic identity and various indicators of psychological health in a sample of over 1,200 African American adolescents, all but one of the correlations with positive mental health outcomes (e.g., self-esteem, mastery) had a Pearson's correlation coefficient of less than .15. In this same study, the Pearson's correlation coefficients between ethnic identity and adverse mental

health (e.g., depression, loneliness) fell below .08. Perhaps more concerning than the moderate relation between ethnic identity and psychological health outcomes found in many studies, is the small but consistent proportion of studies that fails to find any effect of ethnic identity on African American psychological health. For instance, a recent study by Negy et al (2003) found that ethnic identity was a predictor of psychological health among Latina/o and European American college students, but not among their African American counterparts.

The variability in the size of the relation between African American ethnic identity and psychological health that is found across studies suggests that this relation is more nuanced than suggested by existing conceptual models. Specifically, these variable effect sizes point to the possibility that the specific strength and direction of the relation between African American ethnic identity and mental health may be moderated by third variables. Emerging research points to three potential moderators that are not frequently considered in this area of research: the dimension of mental health being investigated, the component of ethnic identity being investigated, and gender. The emerging literature supporting the potential importance of each of these three moderators is discussed in separate subsections below.

*Dimension of mental health.* In a recent narrative review of the empirical literature examining the role of ethnic identity in the mental health of African American and US Latina/o adolescents, Grieg (2003) noted that, with some exceptions (e.g., Negy et al., 2003), much of the literature focused on positive mental health outcomes (e.g., self-esteem, coping, optimism, subjective well-being, self-efficacy, etc.) finds a moderate but consistently positive relation between these variables and ethnic identity. In contrast, the results of studies using adverse mental health indicators (e.g., substance use, depression) seem to be influenced by whether a study uses an adverse mental health indicator focused on internalizing symptoms or one focused on externalizing symptoms (Grieg, 2003). Specifically, Grieg (2003) found tentative support for the role of ethnic identity as a protective factor against internalizing problems among African American adolescents, but mixed findings regarding the relation between ethnic identity and externalizing problems. Although some studies did find the theoretically expected negative relation between ethnic identity and externalizing mental health problems (e.g., Brook et al,

1998), some studies focused on substance use and alcohol use actually found a positive correlation between ethnic identity and these outcomes (e.g., James, Kim, & Armijo, 2000; Scheier et al., 1997). This study will empirically examine Grieg's (2003) suggestion that ethnic identity and its component variables are related to positive mental health indicators and to mental health problems within the internalizing spectrum, but are not related to indicators of externalizing mental health problems.

*Component of ethnic identity.* Current ethnic identity development models point to two important developmental and experiential components of the ethnic identity of US adolescents (Roberts et al., 1999; Spencer et al 2000), commitment and exploration. Commitment involves the feelings of attachment to an ethnic group and the positive feelings generally associated with this attachment (Roberts et al., 1999). Exploration is characterized by behaviors that are thought to indicate involvement in an ethnic group or an examination of the meaning of ethnic membership (Roberts et al., 1999). These behaviors include participating in ethnic events or customs, selecting social networks predominately from within one's ethnic group, and holding conversations about the meaning and implications of one's ethnicity (Phinney, 1992). As has been discussed previously, heightened exploration activities are thought to be characteristics of earlier phases of ethnic identity development as adolescents became increasingly involved in activities that inform and define their subjective understanding of ethnicity (Phinney, 1990). Exploration paves the way for commitment, such that exploration activities should decrease as commitment increases (Phinney, 1990). Because current conceptual models emphasize the establishment of a committed sense of ethnic identity as a central psychological task for African American adolescents, increased commitment is thought to predict improved psychological well-being (Phinney, 1990).

Increased ethnic exploration behaviors can occur after an original establishment of a committed sense of ethnic identity as a reaction to significant experiential events that force an individual to re-examine the role of ethnicity in his or her self understanding (Phinney, 2004). These experiential events include major changes in an individual's social support structure (e.g., departure to an out-of-state university or college) or salient experiences of discrimination (such as those that may be experienced by African Americans leaving a Black neighborhood in order to attend a predominately White

university). These types of significant experiential events are likely to both trigger an increase in exploration behaviors and a decrease in psychosocial well-being. Consistent with this interpretation, Phinney (2004) found that among Asian American and US Latina/o college students exploration was related to increased perceptions of discrimination whereas commitment was not. Based on existing conceptual models, the current study will examine the hypothesis that, among African American emerging adults, ethnic commitment will positively predict psychological well-being whereas ethnic exploration will be negatively predict psychological well-being.

*Gender.* Gender is a third factor that could explain the unexpectedly moderate relation between ethnic identity and African American mental health observed in some published studies. That little attention has been given to examining the possibility that this relation may differ according to gender is surprising because research in a related area, the study of ego identity, has found relatively consistent gender effects. US females tend to develop identities that are less stereotypic and relatively more complex than those of males (Cramer, 2000). These variegated female identity structures evince complicated relations with mental health. On the one hand, the incorporation of a broader range of personal characteristics into the structure of identity can serve an adaptive function, allowing women greater flexibility in dealing with psychological stressors. On the other hand, the management of these complex identities may in and of itself be a source of stress. In what is perhaps the only study to examine the influence that gender may have on the relation between ethnic identity and African American mental health, Cokley (2001) found that ethnic identity was positively related to social and academic adjustment in African American female college students, but not in males. These findings buttress the suggestion that gender effects are an important focus of study in research on the role of ethnic identity in African American mental health. Based on this emerging literature, this study will examine the exploratory hypothesis that the relation between ethnic identity and its components and mental health variables differs across gender groups.

To summarize, two important themes have recently emerged from the extensive empirical research into the relation between ethnic identity and African American mental health sparked in part by Phinney's original work in this area. The first is that ethnic and ego identity development in African Americans may extend well into emerging

adulthood, a period by which their European American counterparts are thought to have well-established identities. This extended identity development period is associated with both contextual and developmental factors, as African Americans must incorporate a greater array of social experiences into their subjective self-understanding, and emerging adults have increasingly developed cognitive abilities that allow for this incorporation to take place. The finding that African American identity development continues into emerging adulthood suggests that the almost exclusive focus on adolescence taken by existing research on the relation between ethnic identity and African American mental health may have been misplaced. A second important insight garnered from the many studies on the relation between ethnic identity and African American mental health conducted over the past 16 years is that this relationship may be in fact much more nuanced than suggested in early conceptual models. The many factors that may affect the strength of this relation include the specific domain of mental health being considered, the fact that specific components of ethnic identity seem to be differentially related to mental health outcomes, and the possibility that the relation between ethnic identity and African American mental health may differ according to gender. This study seeks to expand the existing understanding of the relation between African American ethnic identity and psychological well-being by examining the following three hypotheses in a sample of African American emerging adults:

*Hypothesis 1:* Ethnic identity and its component variables will be related both to positive mental health indicators and to mental health problems within the internalizing spectrum, but will not be related to externalizing mental health problems.

*Hypothesis 2:* Ethnic commitment will positively predict variables associated with psychological well-being whereas ethnic exploration will negatively predict variables associated with psychological well-being.

*Hypothesis 3:* The relation between ethnic identity and its components and mental health variables differs across gender groups.

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Table 1

Models of African American Identity by Publication Year

Author(s), publication year(s)	Summary and Distinguishing features
Jackson, 1975.	Four stage model where the individual progresses through the passive-acceptance, active-resistance, redirection, and internalization stages. The first of these stages is associated with a diminished self-concept, the next with anger toward Whites, the third with increased coping, and the final stage with mental health.
Milliones, 1980.	Four stage model of black consciousness where the individual progresses through the preconscious, confrontation, internalization, and integration stages. The first of these stages is associated with a diminished self-concept, the next with anger toward Whites, the third with increased coping, and the final stage with mental health.
Baldwin, 1984.	<i>African Self-Consciousness (ASC)</i> , a worldview emphasized by the spiritual essence common to all African people, is a biogenetic factor communicated through melanin and activated in environments that are affirming of African ideals and values. ASC can be measured behaviorally and is in essence positive psychological adjustment.
Sanders-Thompson, 1991.	<i>Multidimensional Model of African American Racial Identity</i> . Racial identity has four dimensions: physical, cultural, sociopolitical, and psychological, all of which can develop with relative independence from each other. Progress along the psychological dimension is associated with an improved self-concept and greater sense of belonging.
Sellers et al., 1998	<i>Multidimensional Model of Racial Identity</i> . Four dimensions of ethnic identity: centrality, salience, ideology, and regard. None of these dimensions are directly related to mental health.



## Chapter Two

### Method

#### *Participants*

One-hundred-and-eighty-four undergraduate students enrolled in psychology courses at Florida Agricultural and Mechanical University (FAMU) volunteered to provide data for this study, which is part of a larger study on culture-related variables and psychological adjustment. FAMU is a large publicly-funded historically black university located in Tallahassee, FL, which holds the distinction of graduating more African Americans with baccalaureate degrees than any other university in the nation (Borden & Brown, 2004). Over 95% of participants resided in Tallahassee and the surrounding area. On average, participants had between two and three years of college (mean = 2.57, SD = 1.10) and had a family income between \$30,000 and \$50,000 (mean = 4.36, SD = 2.28). The modal family income was between \$50,000 and \$75,000. One-hundred-and-seventy-six participants provided information on their sex. Of these, 65% were female. The average age of all participants was 21.4 years and did not significantly differ between females and males,  $F(1, 174) = 0.50, p = .48, r = .05$ .

#### *Measures*

*Ethnic identity, ethnic commitment, and ethnic exploration.* Participants completed a nine-item version of the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). Recent research examining the internal validity of the MEIM when used with African American undergraduate samples suggest this nine-item version as the most adequate for use among African American college students (Acevedo-Polakovich et al. 2007). Appendix A presents all of the items in this version of the MEIM. The items on this version of the MEIM can be used to assess ethnic identity and two underlying components, ethnic exploration (e.g., “I order to learn more about my ethnic background, I have often talked to other people about my ethnic group”) and ethnic commitment (e.g., “I feel good about my cultural or ethnic background”). Participants used a four-point Likert scale with options ranging from “strongly disagree” (1) to “strongly agree” (4) to indicate their agreement with each of the nine statements that make up this version of the MEIM. All items were averaged to calculate an ethnic identity score (Cronbach’s  $\alpha$  in current sample = .84). The ethnic commitment (Cronbach’s  $\alpha$  in current sample = .83)



and ethnic exploration (Cronbach's  $\alpha$  in current sample = .72) subscales represent the averages of five and four items, respectively.

*Broad positive mental health.* Two global indicators of positive mental health were examined in this study: self-esteem and life satisfaction. To assess self-esteem, participants were asked to complete the *Rosenberg Self-Esteem Scale* (RSE; Rosenberg, 1989), a 10-item self-report scale designed to assess respondents' feelings and thoughts about their own perceived worth (e.g., "I feel that I have a number of good qualities"). Appendix B presents all of the items in the RSE. Answers were recorded on a four-point Likert scale with options ranging from "strongly disagree" (0) to "strongly agree" (3). The internal consistency of this scale was adequate in the current sample (Cronbach's  $\alpha$  = .82). To assess life satisfaction, participants were asked to complete the *Satisfaction with Life Scale* (SWLS; Diener, Emmons, Larson, & Griffin, 1985), a 5-item self-report scale designed to assess respondents' global judgments about their life satisfaction (e.g., "I am satisfied with my life"). Appendix C presents all of the items in the SWLS. Participants indicated their agreement with each of the five items using a seven-point Likert scale with options ranging from "strongly disagree" (1) to "strongly agree" (7). The scale evinced adequate internal consistency in the current sample (Cronbach's  $\alpha$  = .82).

*Broad adverse mental health.* Internalizing symptomatology was assessed via the internalizing subscale of the Young Adult Self-Report Form (YASR; Achenbach, 1997). This subscale includes 39 items that reflect problems most frequently thought of as occurring within the self (e.g., feeling lonely or fearful). Externalizing symptomatology was assessed with the measure's externalizing subscale, which consists of 35 self-report items primarily involving conflicts with other people or with social mores (e.g., fighting, cheating). Participants respond to items by indicating whether, in terms of their self description, each item is "Not True" (0), "Somewhat or Sometimes True" (1), or "Very True or Often True" (2) of them. In the current sample, both the externalizing and the internalizing YASR scales evinced adequate internal consistency (Cronbach's  $\alpha$  of .84 and .91, respectively). Appendix D presents the YASR symptom items presented to the participants.

### *Procedure*

After providing informed consent, participants completed the measures described above in a group administration that included other measures not used in this study. After completing these measures, participants were provided with an educational debriefing form, given the opportunity to ask questions, thanked for their participation, and dismissed.

## Chapter Three

### Results

#### *Descriptive Analyses*

*Means and standard deviations* for each of the variables used in this study were computed separately by gender. These are presented in Table 3.1 along with the effect sizes and statistical significance for the difference between gender group means. No significant differences between males and females were observed regarding any of the adverse mental health variables (Internalizing Scale  $F(1, 170) = 0.19, p = .67, \eta^2 = .001$ ; Externalizing Scale  $F(1, 169) = 2.50, p = .12, \eta^2 = .015$ ; Total Problems Scale  $F(1, 170) = 0.14, p = .71, \eta^2 = .001$ ). Although there were also no significant differences between gender groups in either of the positive mental health variables (Self-esteem  $F(1, 176) = 0.001, p = .97, \eta^2 = .000$ ), there was a trend toward higher scores for the female participants on the Satisfaction with Life Scale ( $F(1, 175) = 3.21, p = .07, \eta^2 = .018$ ). On average, male participants reported slightly higher scores on each of the ethnic identity scales; however, the differences between their scores and those of the female participants only approximated significance (Overall Ethnic Identity  $F(1, 177) = 3.86, p = .06, \eta^2 = .022$ ; Ethnic Identity Exploration  $F(1, 177) = 2.94, p = .09, \eta^2 = .017$ ; Ethnic Identity Commitment  $F(1, 177) = 3.24, p = .07, \eta^2 = .018$ ).

*Pearson's correlations* among all variables included in this study are reported separately by gender in Table 3.2. The correlations obtained from data provided by the female participants are reported below the diagonal. The correlations obtained from data provided by the male participants are reported above the diagonal. As can be observed, results only partially support hypothesis one, which stated that ethnic identity variables would be related to positive mental health indicators and to internalizing mental health problems but not to externalizing mental health problems. Specifically, there were several significant correlations between ethnic identity variables and positive mental health indicators but no significant correlations between ethnic identity or its component variables and any of the mental health problems scales. Among females, correlations between ethnic identity variables and adverse mental health outcomes ranged from a low of  $r = .00$  (between ethnic commitment and externalizing symptoms, and between overall ethnic identity and internalizing symptoms) and a high of  $r = .08$  (between ethnic

exploration and total mental health problems). Among males, correlations between ethnic identity variables and adverse mental health outcomes ranged from a low of  $r = .03$  (between ethnic exploration and total mental health problems) and a high of  $r = .17$  (between ethnic commitment and both internalizing and externalizing symptoms).

With regard to the relation between ethnic identity variables and positive mental health outcomes, several interesting patterns of difference involving gender can be observed in Table 3.2. Consistent with hypothesis three, which suggests that there would be gender differences in the relation between ethnic identity (and its components) and mental health variables, the magnitude of the relations between life satisfaction and the ethnic identity component scales appears to differ by gender group. For female participants, life satisfaction was significantly positively correlated with ethnic identity commitment (Pearson's  $r = .31, p < .001$ ) and with overall ethnic identity (Pearson's  $r = .23, p < .05$ ) but not by ethnic identity exploration (Pearson's  $r = .12, NS$ ). The opposite seems to be true for male participants; among whom life satisfaction was significantly positively correlated with ethnic identity exploration (Pearson's  $r = .28, p < .05$ ) but not with ethnic identity commitment (Pearson's  $r = .07, NS$ ) or overall ethnic identity (Pearson's  $r = .19, NS$ ).

The magnitude of the relations between self-esteem and the ethnic identity component scales also appears to differ by gender group, which is also consistent with hypothesis three. Among males, self-esteem was significantly positively correlated with overall ethnic identity (Pearson's  $r = .32, p < .05$ ), ethnic identity exploration (Pearson's  $r = .30, p < .05$ ), and ethnic identity commitment (Pearson's  $r = .27, p < .05$ ). However, among females, self-esteem was only significantly positively correlated with ethnic identity commitment (Pearson's  $r = .22, p < .05$ ).

Interesting gender-related patterns are also evident in the relations between the positive mental health outcomes and the adverse mental health outcomes. Overall, positive mental health outcomes appear much more strongly negatively related to adverse mental health outcomes among female participants than they are among male participants. This is particularly evident in correlations involving life satisfaction. Among female participants, life satisfaction was significantly negatively correlated with internalizing symptoms (Pearson's  $r = -.33, p < .001$ ), the externalizing symptoms

(Pearson's  $r = -.19, p < .05$ ), and total problems (Pearson's  $r = .30, p < .01$ ). None of these correlations approach significance among male participants (Pearson's  $r$  with internalizing symptoms =  $-.05, NS$ ; Pearson's  $r$  with externalizing symptoms =  $.09, NS$ ; Pearson's  $r$  with total problems =  $.03, NS$ ).

### *Main Analyses*

Multigroup structural equation modeling was chosen as the main data analytical approach in this study. Its use allowed for the simultaneous examination of hypothesis two (regarding the relation among ethnic identity components and mental health outcomes), and hypothesis three (regarding gender differences in these relations). Specifically, structural models were first developed to test this study's second hypothesis, that ethnic commitment will positively predict psychological well-being whereas ethnic exploration will negatively predict psychological well-being. These structural models were then tested across gender groups in order to examine hypothesis three, which stated that the relation between ethnic identity variables and mental health variables would differ across gender groups. Because the descriptive analyses revealed no significant relations between adverse mental health outcomes and the ethnic identity variables, no models were developed that included these outcomes (i.e., internalizing symptoms, externalizing symptoms, and total problems) as dependent variables.

In multigroup structural equation modeling, baseline structural models representing the relations of interest are first separately developed in each of the groups being considered. Because there are a number of factors that can affect estimates of any one indicator of model fit, it is advisable to examine a model's performance on several indicators. In the current study, several fit indexes were considered in addition to  $\chi^2$  values. These include the Root Mean Square Residual (RMR), the Goodness of Fit Index (GFI), the Parsimony Goodness of Fit Index (PGFI), the Comparative Fit Index (CFI), the Parsimony-adjusted Comparative Fit Index (PCFI), the Root Mean Square Error of Approximation (RMSEA), and the Akaike Information Criterion (AIC). The following values for each of these indexes are consistent with a well fitting model: RMR values that are lower than those of other models being considered; GFI values approximating 1; PGFI values larger than .5, particularly if associated with acceptable values on other indices; CFI values approximating or greater than .95; PCFI values greater than .7;

RMSEA values approximating .05 (although values from .05 through .08 indicate reasonable fit); and AIC values that are lower than those of other models being considered. Baseline models that are equal in each of groups being compared are preferred but not necessary, and models can be altered for any particular group if doing so can be theoretically justified and improves the fit of the model (Byrne, 2001). Because the baseline models that are being developed in the current study seek to determine the roles of ethnic identity components in the relation between ethnic identity and mental health outcomes, they allow the evaluation of hypothesis two, which states that ethnic commitment will positively predict psychological well-being whereas ethnic exploration will negatively predict psychological well-being.

Once baseline models are established, their ability to fit the data across groups of interest is evaluated. In the current study, these cross group comparisons provide a direct test of hypothesis three, which states that the relation between ethnic identity variables and mental health differs across gender groups. Multigroup comparisons begin by examining a baseline model's ability to fit data without constraining parameters to be equal across groups. An unconstrained model allows for the value of specific parameters, for example the relation between ethnic commitment and life satisfaction, to differ across groups. Once the fit of an unconstrained model has been established, model fit is then re-evaluated constraining all parameters in the model to be equal across groups. If there is no appreciable difference between the fit of the constrained and unconstrained models, it is assumed that the model being evaluated is consistent across groups. However, if the unconstrained model offers a better fit, the model is determined to behave differently across groups. In this second case, model examination proceeds by examining different combinations of constrained parameters in order to determine the exact parameters that differ between groups. Typically, supplementary statistics such as the Lagrange Multiplier (LM) are used to determine which equality constraints are causing the fit decrement. Model testing ends when a partially-constrained model is identified whose fit to the data is as close to that of the unconstrained model as possible. The two subsections below provide the results obtained when this data analysis strategy was used to examine the relation between ethnic identity components and each of the positive mental health outcomes being considered in this study.

*Development and testing of models examining the relation among components of ethnic identity and satisfaction with life.* Table 3.3 summarizes the performance of various structural models, beginning with the one described in Figure 3.1, which test hypothesis two by examining whether ethnic commitment positively predicts life satisfaction while ethnic exploration negatively predicts life satisfaction. The model presented in Figure 3.1 includes ethnic commitment and ethnic exploration as correlated latent variables measured by five and four items, respectively. This model replicates that identified by Acevedo et al. (2007) as best representing the structure of the MEIM when used with African American college students. In the model presented in Figure 3.1, ethnic commitment and ethnic exploration are both allowed to predict life satisfaction (represented as a latent variable with five measured indicators).

As can be observed in Table 3.3, the model presented in Figure 3.1 moderately, but acceptably, fit data from both the female (i.e.,  $X^2 = 123.96$ ; RMR = .091; GFI = .872; PGFI = .614; CFI = .913; PCFI = .74; RMSEA = .078; AIC = 185.96) and male (i.e.,  $X^2 = 122.80$ ; RMR = .128; GFI = .801; PGFI = .565; CFI = .871; PCFI = .708; RMSEA = .106; AIC = 184.80) participants. Specific parameter values reflected the gender group differences in the relation between ethnic identity components and satisfaction with life that were observed in the descriptive analyses. Figure 3.2 presents a simplified version of the model in Figure 3.1 that incorporates specific parameter values. As can be observed, the relation between ethnic commitment and satisfaction with life was positive and significant among females ( $B = 1.62$ ,  $SE = .58$ ,  $p < .01$ ) but non-significant (and negative) among males ( $B = -.68$ ,  $SE = .43$ , *NS*), and the relation between ethnic exploration and satisfaction with life was positive and significant among males ( $B = .74$ ,  $SE = .37$ ,  $p < .05$ ) but non-significant (and negative) among females ( $B = -.49$ ,  $SE = .41$ , *NS*). The model accounted for 17% of the variance in life satisfaction with life among females, and 13% of the variance in males. These results offer partial support for hypothesis two, as ethnic commitment was positively related to life satisfaction among females. However, ethnic commitment was not negatively related to life satisfaction among females, and was in fact positively related to life satisfaction among males.

Based on the results obtained when examining the fit of the model summarized in Figure 3.1, two alternative baseline models were developed and tested in both gender

groups. The first alternative model reflected patterns observed among females and specified no direct relation between ethnic exploration and satisfaction with life (Alternative 1). The second alternative model reflected patterns observed among males and specified no direct relation between ethnic commitment and satisfaction with life (Alternative 2). The performance of each of these alternative models among female and male participants is also summarized in Table 3.3.

Because both alternative models are nested within the model described in Figure 3.1 (i.e., they can be obtained by imposing constraints on the model described in Figure 3.1), a formal test of the significance of the change in model fit between the alternative models and the model in Figure 3.1 can be conducted. This is achieved by first calculating a discrepancy  $X^2$  value, obtained by subtracting the  $X^2$  value of the less constrained model (i.e., the model summarized in Figure 3.1) from the  $X^2$  value of the more constrained model (i.e., Alternative 1 or Alternative 2). Similarly, the degrees of freedom of the less constrained model are subtracted from those of the more constrained model in order to determine a discrepancy degrees of freedom value. Once this is achieved, the significance of the change in model fit between the less constrained model and the more constrained model is determined by examining whether the discrepancy  $X^2$  value is significant at the discrepancy degrees of freedom. When this test was conducted using data provided by the male participants, results suggested that specifying no direct relation between ethnic exploration and satisfaction (i.e., Alternative 1) resulted in a significant decrement in model fit (i.e.,  $X^2_{(1)} = 4.97, p < .05$ ), whereas fit did not significantly change when no direct relation between ethnic commitment and satisfaction with life was specified (i.e.,  $X^2_{(1)} = 2.78, NS$ ). These findings suggest that among males the relation between ethnic identity and satisfaction with life is carried by ethnic exploration, and imply that hypothesis two does not accurately explain the relation between ethnic identity and life satisfaction among male participants.

When the same approach to evaluating the significance of changes in model fit between the more constrained models and the less constrained model was used to examine data provided by females, results differed from those observed among the male participants. Specifically, results suggested that specifying no relation between ethnic exploration and satisfaction with life (i.e., Alternative 1) did not significantly affect



model fit (i.e.,  $X^2_{(1)} = 1.49$ , *NS*); however, fit significantly decreased when no relation between ethnic commitment and satisfaction with life was specified (i.e.,  $X^2_{(1)} = 8.86$ ,  $p < .01$ ). These findings are consistent with hypothesis two and suggest that, among females in this sample, the relation between ethnic identity and satisfaction with life is carried by ethnic commitment.

The baseline structural models developed during this initial stage of the main analyses suggest that hypothesis two, which posits that ethnic commitment would positively predict life satisfaction whereas ethnic exploration would negatively predict psychological life satisfaction, is supported among females but not among males in this sample. Although these findings also provide some information in support of hypothesis three, which suggests that the relation between ethnic identity components and life satisfaction differs across gender groups, multigroup comparisons provide a formal test of this hypothesis. Results of these multiple group analyses are presented in Table 3.4. It can be observed that the unconstrained model (i.e., Model 1) offered a better fit than a fully constrained model (i.e., Model 2). Because these two models meet the nesting condition described earlier (i.e., one can be obtained by imposing constraints on the other), the same formal test of the significance of the change in model fit that was used to develop baseline models could be used to compare the significant of the difference in fit of between the constrained and unconstrained models. Results suggest that the fully constrained model offers a significantly worse fit for the data than the constrained model (i.e.,  $X^2_{(3)} = 11.48$ ,  $p < .01$ ), suggesting that different models may be required across gender groups.

In order to identify the source of the decrement in model fit, several partially constrained models were developed and their fit evaluated against the fit of the unconstrained model. These models are described in Table 3.4, which also includes their performance across each of the fit indexes being considered in this study. Reflecting the differences identified during the development of the baseline models, a model imposing equality constraints on the relation between ethnic commitment and satisfaction with life (i.e., Model 4) and a model imposing constraints on the relation between ethnic exploration and satisfaction with life (i.e., Model 3) also resulted in significant reductions in model fit (i.e.,  $X^2_{(2)} = 11.47$ ,  $p < .01$  and  $X^2_{(2)} = 7.37$ ,  $p < .05$ , respectively). The only

model tested that imposed some form of cross-group equality constraints and did not cause a significant decrease in model fit was one in which only the co-variance between the two ethnic identity components was forced to be equal in both gender groups fit (i.e., Model 5;  $\chi^2_{(1)} = .44$ , *NS*). These results support hypothesis three, that the relation between ethnic identity and its components and life satisfaction differs across gender groups, and suggest that this difference is not in the structure of ethnic identity but in the relation of specific ethnic identity components to life satisfaction. Among females, ethnic commitment seems to account for the relation between ethnic identity and life satisfaction. Among males, ethnic exploration seems responsible for this relation.

*Development and testing of models examining the relation among components of ethnic identity and self-esteem.* Table 3.5 summarizes the performance of various structural models, beginning with that summarized in Figure 3.3, which test hypothesis two by examining whether ethnic commitment positively predicts self esteem while ethnic exploration negatively predicts self esteem. As was the case for the model presented in Figure 3.1, the model presented in Figure 3.3 replicates the structure of the MEIM among African American college students identified by Acevedo et al. (2007). In the model presented in Figure 3.2, ethnic commitment and ethnic exploration are both allowed to predict self esteem (represented as a latent variable with ten measured indicators).

As can be observed in Table 3.5, the model presented in Figure 3.3 moderately, but acceptably fit the data from both the female (i.e.,  $\chi^2 = 255.49$ ; RMR = .051; GFI = .811; PGFI = .636; CFI = .848; PCFI = .739; RMSEA = .082; AIC = 337.49) and male (i.e.,  $\chi^2 = 261.53$ ; RMR = .073; GFI = .729; PGFI = .572; CFI = .741; PCFI = .646; RMSEA = .115; AIC = 343.53) participants. Figure 3.4 presents a simplified version of the model in Figure 3.4. As can be observed in Figure 3.4, specific parameter values were consistent with the gender group differences in the relation between ethnic identity components and self-esteem observed in the descriptive analyses. Among females, ethnic commitment acted as a significant and positive predictor of self-esteem ( $B = .51$ ,  $SE = .24$ ,  $p < .05$ ) while ethnic exploration was negatively, but non-significantly, related to self-esteem ( $B = -.14$ ,  $SE = .18$ , *NS*). Among males, neither ethnic commitment ( $B = .12$ ,  $SE = .22$ , *NS*) nor ethnic exploration ( $B = .27$ ,  $SE = .18$ , *NS*) were significantly related to

self-esteem. The model accounted for 10% of the variance in life satisfaction with life among females, and 16% of the variance in males.

These initial results supported the testing of two alternative models parallel to those developed for the analysis of results involving satisfaction with life. The first alternative model reflected patterns observed among females and specified no direct relation between ethnic exploration and self-esteem. The second alternative model specified no direct relation between ethnic commitment and self-esteem. Because both alternative models are nested within the model described in Figure 3.2, the formal test for the significance of the difference in fit among these models could be conducted. Results of this test using data provided by the male participants suggested that neither of these alternative models significantly decreased fit when compared to the model in Figure 3.2. (i.e.,  $X^2_{(1)} = 2.30$ , *NS* for Alternative Model 1;  $X^2_{(1)} = .29$ , *NS* for Alternative Model 2). These findings are unexpected, but consistent with the lack of significant relations between the ethnic identity components and self esteem observed in the model summarized in Figure 3.2. Given that these same relations were significant in the descriptive analyses (see Table 3.2), these findings may be affected by the relatively smaller number of male participants in this study, a phenomenon that is elaborated on in the following chapter.

When the same approach to evaluating the significance of changes in model fit between the more constrained models and the less constrained model was used to examine data provided by the female participants, results suggested that specifying no relation between ethnic exploration and self esteem (i.e., Alternative 1) did not significantly affect model fit (i.e.,  $X^2_{(1)} = .64$ , *NS*); however, fit significantly decreased when the relation between ethnic commitment and self-esteem was constrained to zero (i.e.,  $X^2_{(1)} = 4.86$ ,  $p < .01$ ). These findings are consistent with hypothesis two and suggest that, among females, the relation between ethnic identity and self-esteem is carried by ethnic commitment.

The baseline structural models developed during this initial stage of the main analyses suggest that hypothesis two, which posits that ethnic commitment would positively predict self esteem whereas ethnic exploration would negatively predict self esteem, is supported among females but not among males in this sample. Although these

findings also provide some information in support of hypothesis three, which suggests that the relation between ethnic identity components and self esteem differs across gender groups, multigroup comparisons provide a formal test of this hypothesis. Results of these multiple group analyses are presented in Table 3.6. It can be observed that all models being considered rendered remarkably similar fit estimates. Indeed, significance testing suggested that, compared to the unconstrained model presented in Figure 3.2, none of the alternative models created a significant decrement in model fit (i.e.,  $X^2_{(3)} = 2.30$ , *NS* for Model 2;  $X^2_{(2)} = 3.14$ , *NS* for Model 3;  $X^2_{(2)} = 1.6$ , *NS* for Model 4;  $X^2_{(1)} = 0.47$ , *NS* for Model 5). These results suggest that the gender differences observed in the development of the baseline structural models are not significant, a finding that runs contrary to hypothesis three, which suggested that the relation between ethnic identity components and self esteem would differ across gender groups. As previously noted, there is some possibility that the relatively small size of the male sample has an influence on the failure to arrive at significant findings. This possibility will be further discussed in the next chapter.

Table 3.1

Means and Standard Deviations for Study Measures in Male and Female Subsamples,  
Accompanied by Significance Levels and Effect Sizes

	<i>Females</i>		<i>Males</i>		<i>F</i>	$\eta p^2$
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>		
<i>Ethnic Identity</i>						
Overall	3.39	.46	3.53	.49	3.86 <sup>+</sup>	.022
Exploration	3.15	.60	3.31	.60	2.94 <sup>+</sup>	.017
Commitment	3.57	.43	3.70	.51	3.24 <sup>+</sup>	.018
<i>Positive Mental Health</i>						
Self-Esteem	2.42	.55	2.42	.50	0.00	.000
Life Satisfaction	4.64	1.34	4.26	1.25	3.21 <sup>+</sup>	.018
<i>Adverse Mental Health</i>						
Internalizing	15.90	11.38	15.08	12.34	0.19	.001
Externalizing	11.74	7.98	14.03	10.68	2.50	.015

<sup>+</sup>  $p < .10$ .

*Note.* Ethnic identity scores are averages of items answered on a four-point Likert scale and range from 1 to 4. Self-esteem scores are averages of items answered on a four-point Likert scale and range from 0 to 3. Internalizing symptomatology values range from 0 to 78. Externalizing symptomatology values range from 0 to 70.

Table 3.2  
Intercorrelations Among Study Variables

	1	2	3	4	5	6	7
1. <i>E. Identity</i>		.87***	.89***	.32*	.19	.13	.14
2. <i>E. Exploration</i>	.91***		.55***	.30*	.28*	.06	.08
3. <i>E. Commitment</i>	.89***	.63***		.27*	.07	.17	.17
4. <i>Self-esteem</i>	.16 <sup>+</sup>	.08	.22*		.34**	-.41**	-.14
5. <i>Life Satisfaction</i>	.23*	.12	.31***	.43***		-.05	.09
6. <i>Int. Symptoms</i>	.00	.06	-.05	-.50***	-.33***		.75***
7. <i>Ext. Symptoms</i>	.03	.04	.00	-.44***	-.19*	.69***	

*Note.* Correlations obtained from data provided by female participants reported below the diagonal; correlations obtained from data provided by male participants reported above the diagonal.

<sup>+</sup>  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Table 3.3

Summary of fit indices for structural equation modeling analyses examining the relation between two ethnic identity components and satisfaction with life in separate gender groups

Fit Indexes:	X <sup>2</sup>	Df	RMR	GFI	PGFI	CFI	PCFI	RMSEA	AIC
Target Values:				~1	>.5	≥.95	≥.7	≤.05	
Females									
Figure 3.1	123.96	74	.091	.872	.614	.913	.742	.078	185.96
Alternative 1 <sup>a</sup>	125.45	75	.096	.870	.621	.912	.751	.078	185.45
Alternative 2 <sup>b</sup>	132.82	75	.107	.861	.615	.899	.741	.083	192.82
Males									
Figure 3.1	122.80	74	.128	.801	.565	.871	.708	.106	184.80
Alternative 1 <sup>a</sup>	127.76	75	.149	.795	.568	.860	.709	.109	187.75
Alternative 2 <sup>b</sup>	125.57	75	.131	.799	.571	.866	.714	.107	185.57

<sup>a</sup> The relation between ethnic exploration and satisfaction with life is constrained to zero.

<sup>b</sup> The relation between ethnic commitment and satisfaction with life is constrained to zero.

Table 3.4

Summary of fit indices for structural equation modeling analyses examining the fit across gender groups of several models explaining the relation between two ethnic identity components and satisfaction with life

Fit Indexes:	$\chi^2$	Df	RMR	GFI	PGFI	CFI	PCFI	RMSEA	AIC
Target Values:				~1	>.5	≥.95	≥.7	≤.05	
Model 1 <sup>1</sup>	276.82	161	.155	.831	.637	.878	.777	.065	374.82
Model 2 <sup>2</sup>	288.30	164	.164	.824	.643	.869	.783	.067	380.30
Model 3 <sup>3</sup>	284.18	163	.166	.827	.642	.872	.781	.066	378.18
Model 4 <sup>4</sup>	288.29	163	.164	.284	.639	.868	.777	.067	382.29
Model 5 <sup>5</sup>	277.26	162	.155	.831	.641	.879	.782	.065	373.26

<sup>1</sup> Model presented in Figure 3.1 without any cross-group equality constraints.

<sup>2</sup> Model presented in Figure 3.1 with all parameters of interest constrained to be equal across groups.

<sup>3</sup> Model imposing cross-group equality on the covariance between ethnic identity components and on the direct relation between ethnic exploration and satisfaction with life.

<sup>4</sup> Model imposing cross-group equality on the covariance between ethnic identity components and on the direct relation between ethnic commitment and satisfaction with life.

<sup>5</sup> Model imposing cross-group equality only on the covariance between ethnic identity components (i.e., ethnic identity measurement model).



Table 3.5

Summary of fit indices for structural equation modeling analyses examining the relation between two ethnic identity components and self-esteem in separate gender groups

Fit Indexes:	X <sup>2</sup>	Df	RMR	GFI	PGFI	CFI	PCFI	RMSEA	AIC
Target Values:				~1	>.5	≥.95	≥.7	≤.05	
Females									
Figure 3.1	255.49	149	.051	.811	.636	.848	.739	.082	337.49
Alternative 1	256.14	150	.052	.810	.640	.849	.745	.081	336.14
Alternative 2	260.35	150	.055	.807	.637	.843	.739	.083	340.35
Males									
Figure 3.1	261.53	149	.073	.729	.572	.741	.646	.115	343.53
Alternative 1	263.83	150	.075	.728	.575	.738	.648	.115	343.83
Alternative 2	261.82	150	.073	.728	.575	.743	.652	.114	341.82

<sup>1</sup> The relation between ethnic exploration and self-esteem is constrained to zero.

<sup>2</sup> The relation between ethnic commitment and self-esteem is constrained to zero.

Table 3.6

Summary of fit indices for structural equation modeling analyses examining the fit across gender groups of several models explaining the relation between two ethnic identity components and self-esteem

Fit Indexes:	$X^2$	Df	RMR	GFI	PGFI	CFI	PCFI	RMSEA	AIC
Target Values:				~1	>.5	≥.95	≥.7	≤.05	
Model 1 <sup>1</sup>	519.51	300	.064	.779	.615	.807	.708	.067	679.51
Model 2 <sup>2</sup>	522.71	303	.066	.778	.621	.807	.715	.066	676.71
Model 3 <sup>3</sup>	522.65	302	.065	.778	.619	.806	.712	.067	678.65
Model 4 <sup>4</sup>	521.08	302	.064	.779	.619	.807	.713	.067	677.08
Model 5 <sup>5</sup>	219.99	301	.064	.779	.617	.808	.711	.067	677.99

<sup>1</sup> Model presented in Figure 2 without any cross-group equality constraints.

<sup>2</sup> Model presented in Figure 2 with all parameters of interest constrained to be equal across groups.

<sup>3</sup> Model imposing cross-group equality on the covariance between ethnic identity components and on the direct relation between ethnic exploration and self-esteem.

<sup>4</sup> Model imposing cross-group equality on the covariance between ethnic identity components and on the direct relation between ethnic commitment and self-esteem.

<sup>5</sup> Model imposing cross-group equality only on the covariance between ethnic identity components (i.e., the ethnic identity measurement model).

Figure 3.1. Unconstrained model explaining the theoretical relation among ethnic identity components and satisfaction with life.

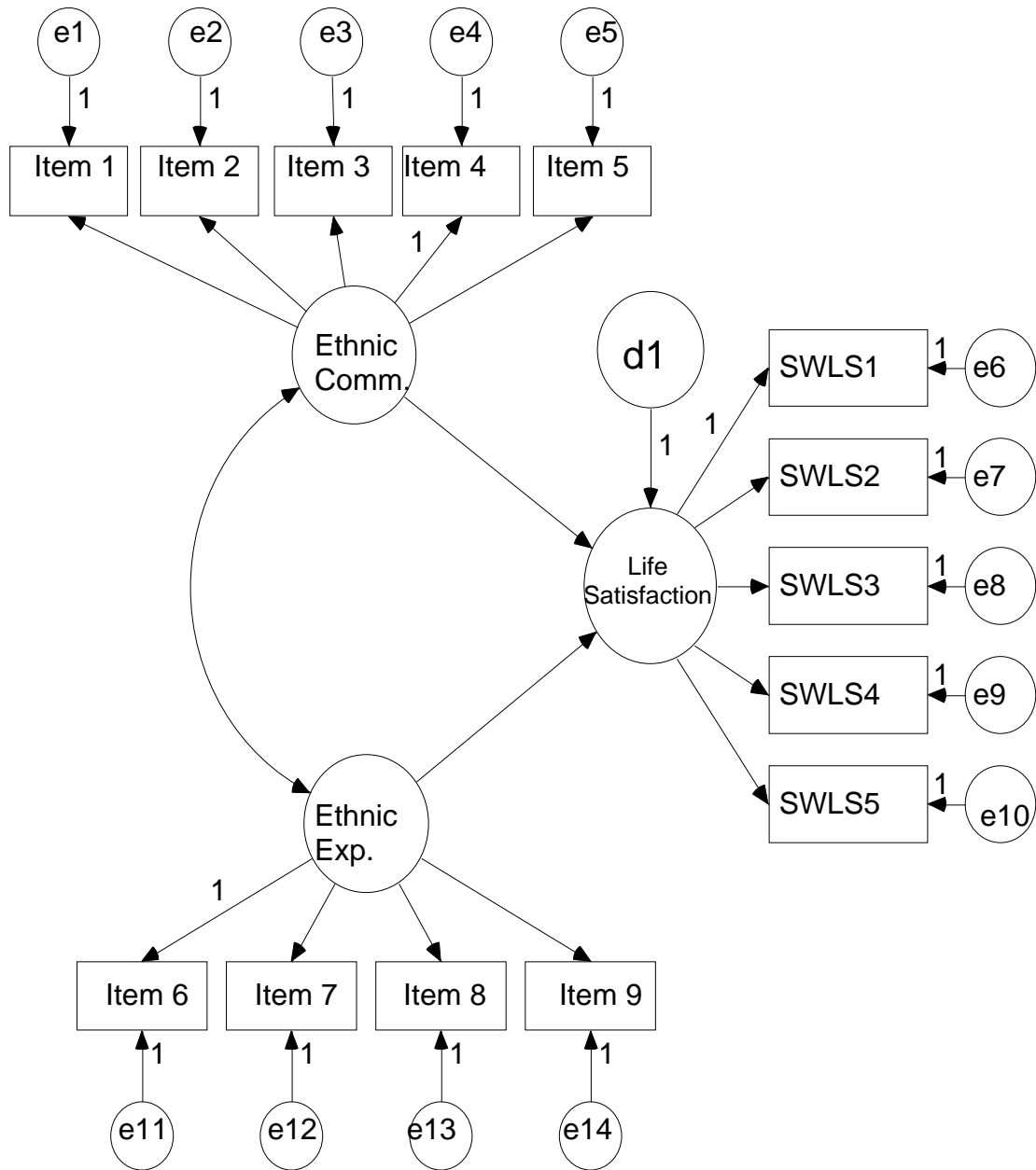


Figure 3.2. Parameter values obtained in unrestricted model.

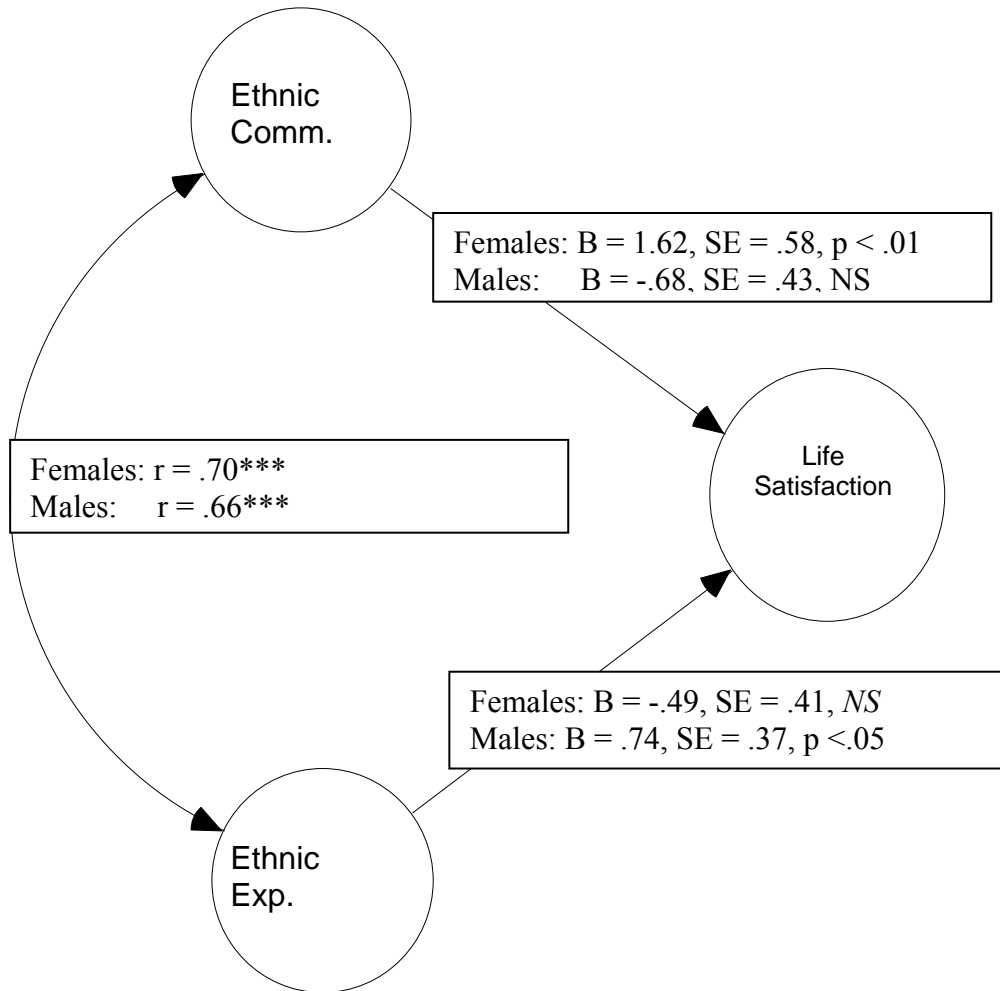


Figure 3.3. Unconstrained model explaining the theoretical relation among ethnic identity components and self-esteem.

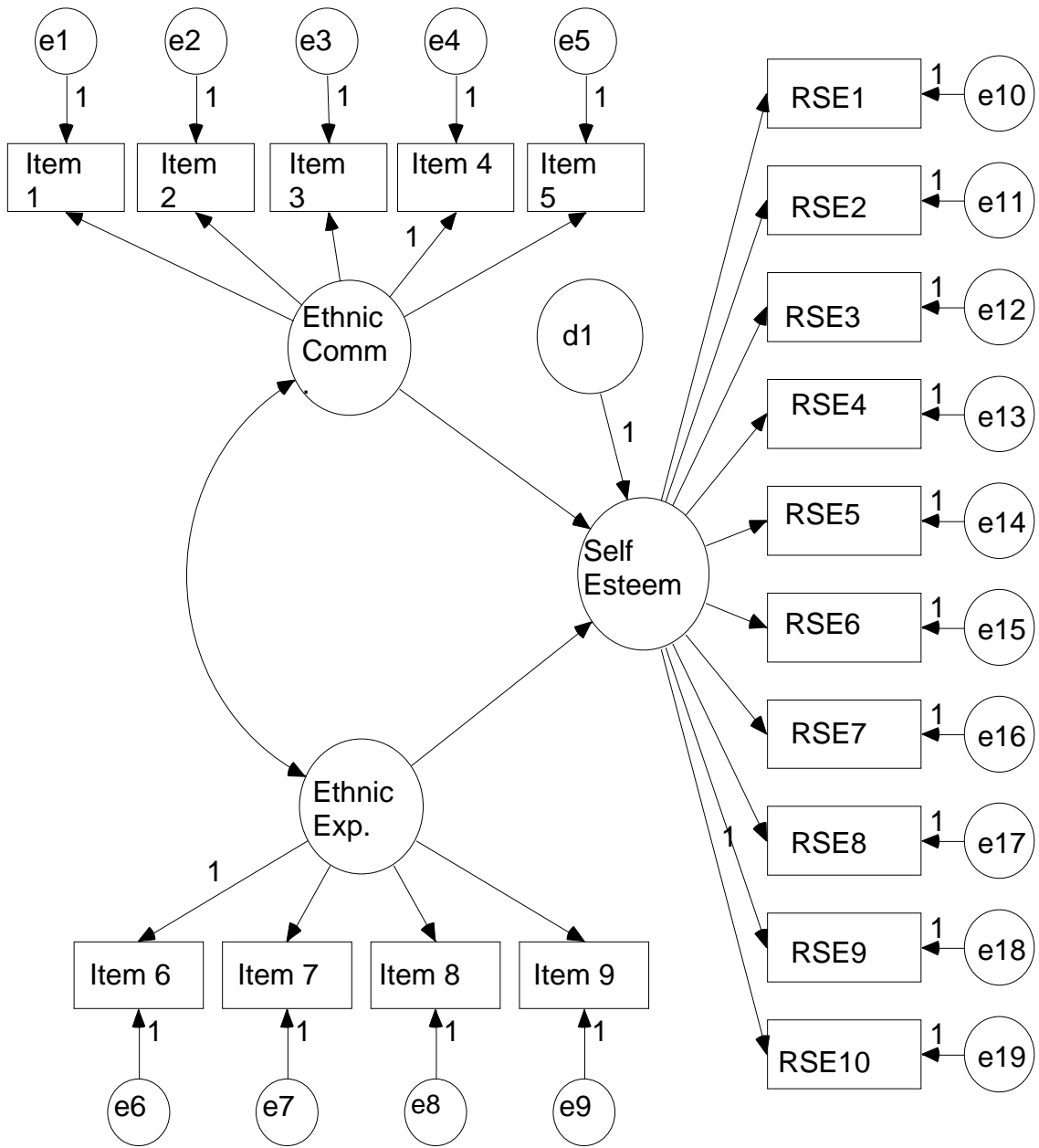
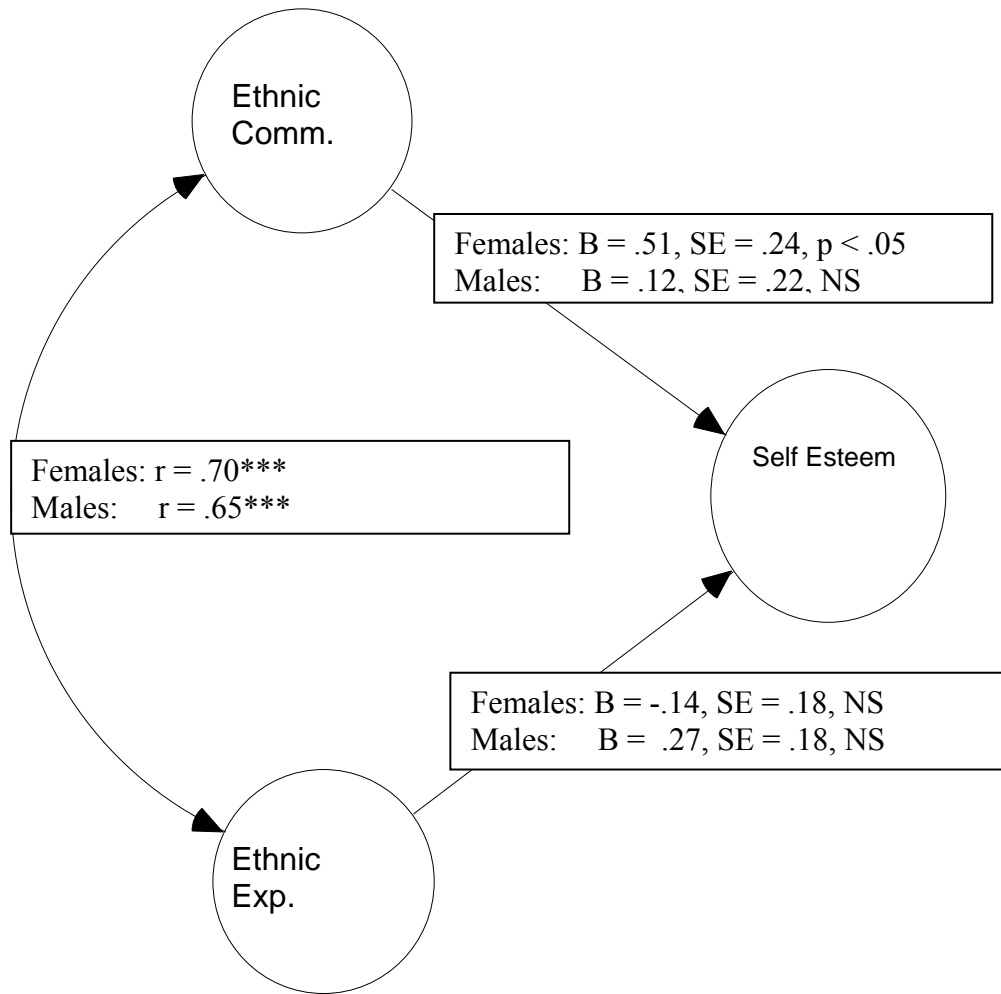


Figure 3.4. Parameter values obtained in unrestricted model.



## Chapter Four

### Discussion

A long history of scholarly inquiry has highlighted the important role of ethnic identity in the psychological health of African Americans. Grounded in this tradition, and informed by advances in the empirical study of African American identity and its connection to mental health that have occurred over the last 20 years, this study sought to develop the existing understanding of the relation between ethnic identity and mental health in African American emerging adults by examining three hypotheses regarding the roles of gender, specific ethnic identity components, and the dimensions of mental health being considered. Hypothesis one suggested that ethnic identity and its component variables would be related both to positive mental health indicators and to internalizing mental health problems, but would not be related to externalizing mental health problems. Hypothesis two suggested that ethnic commitment would positively predict variables associated with psychological well-being whereas ethnic exploration would negatively predict variables associated with psychological well-being. Finally, hypothesis three suggested that the relation between ethnic identity and its components and mental health variables differs across gender groups. This chapter dedicates specific sections to the discussion of findings relevant to each of these hypotheses. Limitations of this research specific to each hypothesis are also discussed in these dedicated sections along with directions for future research specific to each hypothesis. These first three sections are followed by a description of this study's overall limitations, which to some degree affect findings relevant to all three hypotheses. A final section summarizes the discussion and presents overall conclusions from this study.

#### *The Role of the Dimension of Mental Health Being Considered*

This study examined the proposition that the relation between ethnic identity variables and mental health outcomes is dependent on the specific dimension of mental health being considered. The hypothesis being tested suggested that ethnic identity variables would be related both to positive mental health indicators and to internalizing mental health problems, but would not be related to externalizing mental health problems. Results only partially supported this hypothesis as ethnic identity variables tended to significantly predict the positive mental health indicators considered in this study (i.e.,

satisfaction with life and self-esteem), but were unrelated to both externalizing mental health problems and internalizing mental health problems. As will be further discussed in a separate section, these findings were also more robust among females than they were among males.

There are several possibilities that may account for the failure to find the hypothesized relation between ethnic identity variables and internalizing mental health problems. One possibility is that ethnic identity variables may not be related to the full spectrum of internalizing problems, but instead may be related to discrete internalizing syndromes such as depression or anxiety. As such, future research may benefit from examining the relation between ethnic identity variables and specific internalizing syndromes. It is also possible that the relation between ethnic identity variables and internalizing symptoms is moderated by symptom severity such that ethnic identity variables are more strongly related to internalizing problems at some points in the severity spectrum. For instance, it may be that ethnic identity variables have a salutary effect on individuals with more severe internalizing problems but a non-significant effect on individuals who are relatively free of such problems. Future research is needed that helps clarify this question. Finally, it is possible that the strength of the relation between ethnic identity variables and internalizing problems varies across developmental periods such that it is stronger at some and not so strong in others. If this is the case, current results would suggest that the effect of ethnic identity on internalizing problems among emerging adults is negligible. Future studies can help clarify this potential developmental influence on the hypothesized salutary effect of ethnic identity on internalizing problems.

Although no direct link between ethnic identity or its components and adverse mental health outcomes was found in this study, findings point to a potential indirect link. Specifically, it will be noted in Table 3.2 that, particularly among females, the positive mental health indicators included in this study acted as significant negative predictors of various adverse mental health outcomes. This is consistent with the possibility that ethnic identity and its components may have an indirect effect on adverse mental health by promoting the development of positive mental health antithetical to mental illness. The examination of this last hypothesis is an interesting direction for future study, and one that would particularly benefit from the longitudinal, quasi-experimental, and



experimental designs advocated in the section that discusses the general limitations of this study.

### *The Role of Specific Ethnic Identity Components*

A second proposition examined by this study was that different components of ethnic identity would be differentially related to mental health outcomes. The specific hypothesis under consideration suggested that ethnic commitment would positively predict variables associated with psychological well-being whereas ethnic exploration would negatively predict variables associated with psychological well-being. Results only partially supported this hypothesis, and only among females was this partial support a robust finding. Specifically, among females ethnic commitment acted as a consistent predictor of psychological well-being whereas ethnic exploration tended to be unrelated to psychological well-being. Among males, ethnic commitment was unrelated to both indicators of psychological well-being being considered in this study. Results also offered the unexpected finding that, among males, ethnic exploration may act as a positive predictor of life satisfaction.

While a discussion of gender differences in the relation between ethnic identity variables and mental health is the focus of the next section of this chapter, some reference to gender is necessitated in this section as a result of the gender differences described in the opening paragraph of this section. In contrast to the next section of this chapter, discussion in this section will focus on the findings involving ethnic exploration, both the failure to find the hypothesized negative relation in both gender groups and the surprising positive relation with self-esteem among males. The discussion in this section should complement and enrich the ideas presented in the section focused on gender differences.

Emerging literature suggests that ethnic identity researchers' historical emphasis on early adolescence limits the degree to which the existing knowledge base can be generalized to emerging adulthood, and offers one explanation for the unexpected findings regarding ethnic exploration. Acevedo-Polakovich and colleagues (2007) have recently argued that the determination that the two MEIM components assess the developmental processes of ethnic commitment and ethnic exploration may be premature and is potentially inappropriate among emerging adults. These researchers note that developmental processes of theoretical importance in early and middle adolescence may

manifest differently, and have different indicators, at later developmental periods such as emerging adulthood. Behaviors that at early developmental periods were indicative of exploration may, at later developmental periods, reflect the expression of an already established ethnic identity. According to Acevedo-Polakovich et al. (2007), a strict content-based interpretation of the items comprising the MEIM subscales would suggest that the largest of these subscales assesses thoughts and feelings regarding ethnicity (rather than ethnic commitment), while the items comprising the second MEIM subscale reflect behaviors related to ethnic membership (rather than exploration). It is only when viewed under the light of existing identity development theory that these subscales are interpreted as reflecting certain developmental processes.

Should Acevedo-Polakovich et al's (2007) argument prove correct, current findings would suggest that ethnic thoughts and feelings are the stronger predictor of psychological well-being among African American females while ethnic behaviors are the stronger predictor among males. This last explanation is consistent with existing literature pointing to relatively higher importance of, and ability for, emotion management among US females when compared to US males (Wade, 2008). However, the fact that African American gender roles can differ appreciably from those of non African Americans (e.g., Wade, 2008; Hammon and Mattis, 2005) highlights the tentative nature of this explanation and the need for future research in this area. Alternatively, should the prevalent interpretation of the MEIM subscales be proven to be accurate among African American emerging adults, this study's findings would suggest that ethnic exploration is positively related to psychological well-being in African American males. This scenario would necessitate a revision of existing ethnic identity development theory, which currently points to ethnic commitment as the primary motor for the relation between ethnic identity and psychological well-being. In either case, much more theoretical and empirical work is needed that clarifies the components of ethnic identity during emerging adulthood and the manner in which these should be measured, and that examines the apparent gender differences regarding the manner in which these components are related to mental health.

## *Gender*

This study sought to fill an important gap in the empirical literature which, despite ample theoretical work suggesting gender-based differences in the relation between ethnic identity and psychological health, only offered a few limited studies examining the role of gender. This study's tentative hypothesis regarding gender was based on Cokley's (2001) seminal research in this area suggesting that the relation between ethnic identity or its components and mental health variables would differ across gender groups. This hypothesis is supported by the results of analyses examining the relation among ethnic identity components and life satisfaction. Different structural models were required in each gender group in order to accurately describe said relation. However, hypothesis three was not fully supported by the results of analyses examining the relation among ethnic identity components and self esteem. Although the results of initial model development suggested that different models would be required across gender groups, formal testing failed to support this suggestion. Sample imbalance issues, which are further discussed in the overall limitations section of this chapter, offer one possible explanation for the failure to arrive at statistical significance when examining potential differences between males and females regarding the relation among ethnic identity components and self-esteem.

Findings suggested gender differences in the explanatory pathways for the relation between ethnic identity and mental health. While strong thoughts and feelings about ethnic identity appeared to drive any relation between ethnic identity and positive mental health among females, frequent behaviors associated with ethnic identity appeared to account for these relations among males. These findings were unanticipated based on the existing literature and may require the revision of existing ethnic identity development models. Further theoretical and empirical work is needed that examines the apparent gender differences regarding the manner in which ethnic identity is related to psychological health among African American emerging adults, particularly the possibility that ethnic identity components may play different roles for each group at this developmental period. Qualitative research examining the meaning and manifestations of ethnic identity among African American emerging adults may be particularly informative in this regard.

### *General Limitations of this Study*

The strong contextual influences on ethnic identity suggest important limitations to the generalizability of this study's findings. As discussed in the introduction, the experiences of African American students at historically Black colleges and universities (HBCUs) can differ from those of African American students in other learning environments in manners that may have a direct effect on the processes of ethnic identity development. For instance, the educational environment provided to students attending an HBCU can facilitate ethnic exploration enriched by coursework and other experiences that celebrate African American history and culture in a manner that may not be available to African American students at predominately White universities (Phinney, 2005). Moreover, although college students are subject to many of the same developmental influences as other emerging adults who are not in college, there are also unique aspects to the college experience that may distinctly affect ethnic identity development (Phinney, 2005). The findings of this study generalize most directly to African American college students at HBCUs. Findings may also inform the existing understanding of ethnic identity among African American students enrolled in other post secondary learning environments (e.g., predominately White colleges and universities); however, any generalization to such environments should be tentative at best. The generalizability of current findings to African American adults not engaged in post-secondary education is uncertain. For these reasons, it will be important to replicate this study in samples of African American emerging adults in educational and occupational environments that differ from those of the current sample. Potentially important samples for future replication include African American students enrolled in predominately White colleges and universities and African American emerging adults who are not engaged in post-secondary education.

Despite the fact that the current study's overall sample size approximates Kline's (2005) criteria for a "large" SEM sample size (i.e.,  $N = 200$ ), the imbalance in sample sizes at the group level (i.e., male  $N = 61$ ; female  $N = 114$ ) raises some potential concerns. This is because cross-group imbalances where one of the group sample sizes does not exceed 100 can, under certain conditions, be associated with unstable coefficient estimates (Hox & Maas, 2001). Cheung and Au's (2005) work on the cross-cultural

applications of SEM suggests that coefficient instability is primarily a problem when the overall sample size is small, which was not the case in this study. These researchers have demonstrated that in large overall samples reliable estimates are obtained from group samples as small as 50. The current overall sample size is at the borders of Cheung and Au's (2005) guidelines, neither clearly exceeding them nor clearly falling outside of them. This suggests some degree of caution in interpreting findings from this study that are specific to males. Future replication and expansion of this research in samples that are larger, both overall and on a group basis, can overcome this limitation.

One final overall limitation of the current study has to do with the cross-sectional nature of the data and the necessarily correlational nature of the analyses. Although SEM offers several important advantages when compared to other data-analysis approaches, it can not overcome the limitations of correlational data. Current findings strengthen hypotheses about the nature of relation among the constructs being studied, but can not determine or establish causality (Kline, 2005). Future research implementing longitudinal, quasi-experimental, and experimental designs can help further examine any causal hypotheses emanating from this study.

#### *Summary and Conclusions*

The current study used a causal modeling approach based on SEM to examine specific hypotheses about the relation among ethnic identity, its components, and various mental health outcomes using data provided by 184 college students at the Florida Agricultural and Mechanical University. Although the current design included several notable strengths such as the use of established and reliable measures a sample drawn from one environmental context, there are several additional improvements that future studies should implement in order to overcome limitations of the current design. These include:

1. The use of longitudinal, quasi-experimental, and experimental designs that allow for a more direct examination of causality;
2. The recruitment of more balanced samples with equal representation of males and females, and;
3. The recruitment of samples from different populations that allow for comparisons across relevant environmental contexts including African

American students attending predominately White universities and African American emerging adults who are not enrolled in post-secondary education.

One specific hypothesis examined by this study suggested that ethnic identity and its component variables would be related to positive mental health indicators and to mental health problems within the internalizing spectrum but not to externalizing mental health problems. Findings suggest that – particularly among females – ethnic identity and its components are related to positive mental health outcomes such as self-esteem and subjective well-being, but are related neither to internalizing mental health problems nor to externalizing mental health problems. This study’s findings raise the possibility that ethnic identity may be indirectly related to adverse mental health as, particularly among females, many of the positive mental health outcomes predicted by ethnic identity variables were themselves significantly and negatively related to broad indicators of adverse mental health. It should also be noted that this study did not examine whether ethnic identity or its components were related to specific internalizing or externalizing symptoms (e.g., depression, conduct disorder, etc.). Future research in this area should examine the possibility that ethnic identity and its components are indirectly related to adverse mental health, and the possibility that their relation to adverse mental health may be limited to specific syndromes rather than broad dimensions of psychological illness.

A second specific hypothesis examined by this study suggested that any relation between African American ethnic identity and psychological well-being would be carried by ethnic commitment. Findings were consistent with this hypothesis only among female participants. Among males, ethnic exploration appeared to play a stronger role in predicting positive mental health. These findings suggest that developmental processes of theoretical importance in early and middle adolescence could behave differently, and have different indicators, at later developmental periods such as emerging adulthood. One possibility is that ethnic thoughts and feelings are more characteristic of ethnic identity among female African American emerging adults while ethnic behaviors are more characteristic of this same construct among male African American emerging adults. Alternatively, ethnic exploration may be positively related to psychological well-being in African American males, a possibility that runs counter to the understanding ethnic identity. This study’s findings suggest a strong need for research that further evaluates the

degree to which our existing understanding of African American ethnic identity and its development accurately explains its relation with psychological adjustment among emerging adults of both sexes.

The third specific hypothesis examined by this study suggested that the relation between ethnic identity (and its components) and mental health variables would differ across gender groups. Although tentative support for this hypothesis was found, sample characteristics prevent any strong conclusions regarding this hypothesis. However, unexpected findings regarding gender differences in the pathways that explain the relation among ethnic identity and psychological well-being suggest that future research examining the accuracy of the existing understanding of African American ethnic identity and its development accurately among emerging adults should be particularly mindful of gender differences. Given the relatively uncharted nature of conceptual and empirical work examining gender differences in this area, qualitative research approaches may be particularly beneficial.

The relation between ethnic identity and mental health has been an integral part of psychological scholarship focused on African Americans from its earliest origins. After taking a nuanced look at this relation, the current study confirms the importance of this relation, yet brings to question overly simplistic postulations of it. Results suggest a rich relation between ethnic identity and psychological health that is complex, contextualized, changing, and moderated by other important aspects of individuals' social and personal experiences. This study's findings highlight the complex subjective realities of the more than forty-million Americans of acknowledged African ancestry whose lives can neither be reduced to this common historical heritage nor be fully understood independent of it.

## Appendix A

### Items in Acevedo et al's (2007) MEIM Version

#### *Ethnic Commitment Items*

I am happy that I am a member of the group I belong to.

I understand pretty well what my ethnic group membership means to me.

I have a lot of pride in my ethnic group.

I feel a strong attachment towards my own ethnic group.

I feel good about my cultural or ethnic background.

#### *Ethnic Exploration Items*

I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.

I think a lot about how my life will be affected by my ethnic group membership

In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.

I participate in cultural practices of my own group, such as special food, music, or customs.

*Note.* Overall *Ethnic Identity* scores are obtained by averaging all nine items.



Appendix B  
Items in Rosenberg's (1989) Self Esteem Scale

- On the whole, I am satisfied with myself.  
At times I think I am no good at all. (R)  
I feel that I have a number of good qualities.  
I am able to do things as well as most other people.  
I feel I do not have much to be proud of. (R)  
I certainly feel useless at times. (R)  
I feel that I'm a person of worth, at least on an equal plane with others.  
I wish I could have more respect for myself. (R)  
All in all, I am inclined to feel that I am a failure. (R)  
I take a positive attitude toward myself.

*Note.* Items marked with (R), are reverse scored.

## Appendix C

### Items in Diener et al's (1985) Satisfaction with Life Scale

In most ways my life is close to my ideal.

The conditions of my life are excellent.

I am satisfied with my life.

So far I have gotten the important things I want in life.

If I could live my life over, I would change almost nothing.

Appendix D  
YASR Symptom Items

I am too forgetful  
I make good use of my opportunities  
I argue a lot  
I work up to my ability  
I blame others for my problems  
I use drugs (other than alcohol and nicotine) for nonmedical purposes (describe):  
I brag  
I have trouble concentrating or paying attention for long  
I can't get my mind off certain thoughts (describe):  
I have trouble sitting still  
I am too dependent on others  
I feel lonely  
I feel confused or in a fog  
I cry a lot  
I am pretty honest  
I am mean to others  
I daydream a lot  
I deliberately try to hurt or kill myself  
I try to get a lot of attention  
I damage or destroy my things  
I damage or destroy things belonging to others  
I worry about my future  
I break rules at work or elsewhere  
I don't eat as well as I should  
I don't get along with other people  
I don't feel guilty after doing something I shouldn't  
I am jealous of others  
I get along badly with my family  
I am afraid of certain animals, situations, or places (describe):  
My relations with the opposite sex are poor  
I am afraid I might think or do something bad  
I feel that I have to be perfect  
I feel that no one loves me  
I feel that others are out to get me  
I feel worthless or inferior  
I accidentally get hurt a lot  
I get in many fights  
My relations with neighbors are poor  
I hang around people who get in trouble  
I hear sounds or voices that other people think aren't there (describe):  
I am impulsive or act without thinking  
I would rather be alone than with others  
I lie or cheat

## Appendix D (Continued)

- I feel overwhelmed by my responsibilities
- I am nervous or tense
- Parts of my body twitch or make nervous movements (describe):
- I lack self-confidence
- I am not liked by others
- I can do certain things better than other people
- I am too fearful or anxious
- I feel dizzy or lightheaded
- I feel too guilty
- I have trouble planning for the future
- I feel tired without good reason
- My moods swing between elation and depression
- Physical problems without known medical cause:
  - a. Aches or pains (not stomach or headaches)
  - b. Headaches
  - c. Nausea, feel sick
  - d. Problems with eyes (not if corrected by glasses) (describe):
  - e. Rashes or other skin problems
  - f. Stomachaches
  - g. Vomiting, throwing up
  - h. Heart pounding or racing
  - i. Numbness or tingling in body parts
- I physically attack people
- I pick my skin or other parts of my body (describe):
- I fail to finish things I should do
- There is very little that I enjoy
- My work performance is poor
- I am poorly coordinated or clumsy
- I would rather be with older people than with people of my own age
- I have trouble setting priorities
- I refuse to talk
- I repeat certain acts over and over (describe):
- I have trouble making or keeping friends
- I scream or yell a lot
- I am secretive or keep things to myself
- I see things that other people think aren't there (describe):
- I am self-conscious or easily embarrassed
- I worry about my family
- I meet my responsibilities to my family
- I show off or clown
- I am too shy or timid
- My behavior is irresponsible
- I sleep more than most other people during day and/or night (describe):
- I have trouble making decisions
- I have a speech problem (describe):

## Appendix D (Continued)

I stand up for my rights  
My behavior is very changeable  
I steal  
I am easily bored  
I do things that other people think are strange (describe):  
I have thoughts that other people would think are strange (describe):  
I am stubborn, sullen, or irritable  
My moods or feelings change suddenly  
I enjoy being with people  
I rush into things without considering the risks  
I drink too much alcohol or get drunk  
I think about killing myself  
I do things that may cause me trouble with the law (describe):  
I talk too much  
I tease others a lot  
I have a hot temper  
I think about sex too much  
I threaten to hurt people  
I like to help others  
I dislike staying in one place for very long  
I have trouble sleeping (describe):  
I stay away from my job even when I'm not sick and not on vacation  
I don't have much energy  
I am unhappy, sad, or depressed  
I am louder than others  
People think I am disorganized  
I try to be fair to others  
I feel that I can't succeed  
I tend to lose things  
I like to try new things  
I wish I were of the opposite sex  
I keep from getting involved with others  
I worry a lot  
I worry about my relations with the opposite sex  
I fail to pay my debts or meet other financial responsibilities  
I feel restless or fidgety  
I get upset too easily  
I have trouble managing money or credit cards  
I am too impatient  
I am not good at details  
I drive too fast  
I tend to be late for appointments  
I have trouble keeping a job  
I am a happy person

## Appendix D (Continued)

In the past 6 months, about how many times per day did you use tobacco (including smokeless tobacco)?

In the past 6 months, on how many days were you drunk?

In the past 6 months, on how many days did you use drugs for nonmedical purposes (including marijuana, cocaine, and other drugs, except alcohol and nicotine)?

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**EDUCATIONAL INSTITUTIONS ATTENDED AND DEGREES ALREADY AWARDED**

**Pre-doctoral Internship**, Louis de la Parte Florida Mental Health Institute at the University of South Florida; Tampa, FL; August 2008.  
**B.S. Psychology**, Aquinas College; Grand Rapids, MI; May 1999.  
**Bachillerato**, Instituto México de Puebla; Puebla, Puebla, México; July 1994.

**PROFESIONAL POSITIONS HELD**

**Research positions**

- 08.2007-08.2008      **Visiting Research Assistant Professor.**  
Louis de la Parte Florida Mental Health Institute, University of South Florida.
- 08.2006-.08.2007      **Pre-doctoral Intern in Public Sector Psychology.** Louis de la Parte Florida Mental Health Institute, University of South Florida.  
**Policy/Research Rotation:**  
*Division of Teaching, Research, Evaluation, and Demonstration; Department of Child and Family Studies.*
- 08.2005-08.2006      **NIDA Pre-doctoral Trainee.** Department of Behavioral Science, University of Kentucky.

**Teaching positions**

- Summers 2004-2005      **Instructor.** Department of Psychology, University of Kentucky (PSY 331, Psychology of Adjustment).
- Spring 2005      **Teaching Assistant** (PSY 710, Multicultural Psychology: US Latinas/Latinos). Department of Psychology, University of Kentucky.
- Spring 2003      **Teaching Assistant** (PSY 534, Child Psychopathology). Department of Psychology, University of Kentucky.

09.2000 – 05.2001 **Teaching Assistant** (PSY 100, Introduction to Psychology).  
Department of Psychology, University of Kentucky.

### **Administrative positions**

07.2001 – 07.2002 **Coordinator**. Jesse G. Harris Jr. Psychological Services Center.  
Department of Psychology, University of Kentucky.

03.1999 – 12.1999 **Coordinator**. Translation and Interpretation Services Program.  
Patient Relations Department, Spectrum Health (Grand Rapids, MI).

05.1997 – 08.1997 **Coordinator**. JTPA Summer Employment Training Program.  
Hispanic Center of Western Michigan

### **Direct service positions**

08.2006 – 08.2007 **Pre-doctoral Intern in Public Sector Psychology**. Louis de la  
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08.2001 – 08.2006 **Bi-lingual Therapist**. Jesse G. Harris Jr. Psychological Services  
Center. Department of Psychology, University of Kentucky.

08.2004 – 08.2005 **Therapist**. Counseling and Testing Center. University of  
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08.1998 – 08.2000 **Residential Care Provider**. Center for Adolescent Residential  
Services. Pine Rest CMH.

06.1996 – 07.1996 **Supervisor**. JTPA Summer Employment Training Program.  
Hispanic Center of Western Michigan

06.1995 – 08.1995 **Supervisor**. Youth Initiative Summer Program. United Way of  
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### **SCHOLASTIC AND PROFESSIONAL HONORS**

#### **Research**

*Michael T. Nietzel Predoctoral Research Award* (Spring 2004)  
University of Kentucky Department of Psychology

*Charles H. Wesley Prize* (April 2004)  
University of Kentucky African American Studies and Research Program

*Distinguished Thesis Award* (nomination, October 2003)

Midwest Association of Graduate Schools  
Thesis selected as the University of Kentucky Graduate School's entry to this award

### **Service to the Profession**

*President's Award for Diversity* (April 2006)  
University of Kentucky

*Distinguished Student Service Award* (August 2005)  
Society of Clinical Psychology (APA div. 12)

*Excellence in Campus Leadership Award* (February 2003)  
American Psychological Association of Graduate Students

### **Academic**

*National Dean's List Award* (May 1999)

*All-American Scholar/Athlete* (May 1999)  
National Association of Intercollegiate Athletics

*Dean's List Awards* (May 1995 – May 1999)  
Aquinas College

*Who's Who Among Students in American Colleges and Universities* (March 1996)

### **PROFESSIONAL PUBLICATIONS**

(\*students working under I. D. Acevedo-Polakovich's direct supervision)

#### **Peer-reviewed publications**

1. **Acevedo-Polakovich, I. D.**, Reynaga-Abiko, G., \*Garriot, P. O., \*Derefinko, K. A., \*Wimsatt, M. K., \*Gudonis, L. C., & Brown, T. L. (2007). Beyond instrument selection: Cultural considerations in the psychological assessment of US Latinas/os. *Professional Psychology: Research and Practice*, 38(4), 375-384.
2. **Acevedo-Polakovich, I. D.**, Lorch, E. P., & Milich, R. (2007). Comparing television use and reading in children with ADHD and non-referred children across two age groups. *Media Psychology*, 9(2), 447-472.
3. **Acevedo-Polakovich, I. D.** (2007). The relevance of mainstream and critical psychology in the context of the culturally diversifying US society. *International Journal of Critical Psychology*, 19, 37-46.
4. **Acevedo-Polakovich, I. D.**, Lorch, E. P., Milich, R., & \*Ashby, R. D. (2006). Disentangling the relation between television viewing and cognitive processes in



children with attention deficit hyperactivity disorder and comparison children. *Archives of Pediatric and Adolescent Medicine*, 160, 354-360.

### **Invited contributions**

1. Isaacs, M.R., Huang, L.N., Hernandez, M. Echo-Hawk, H., **Acevedo-Polakovich, I.D.**, & Martinez, K. (in press). Services for Youth and their Families in Diverse Communities. In B.A. Stroul & G.M. Blau (Eds.) *The System of Care Handbook: Transforming Mental Health Services for Children, Youth, and Families*. Baltimore, MD: Paul H. Brookes Publishing Co.
2. Valencia, E. Y., & **Acevedo-Polakovich, I. D.** (in press). Latina/o Adolescent Substance Use. In H. Grey (Ed.). *Psychological Treatment of Ethnic Minority Populations*. New York, NY, USA: Oxford University Press.
3. **Acevedo-Polakovich, I. D.** & Valencia, E. Y. (in press). Latina/o Adolescent Depression. In H. Grey (Ed.). *Psychological Treatment of Ethnic Minority Populations*. New York, NY, USA: Oxford University Press.
4. **Acevedo-Polakovich, I. D.** (2006). Socioeconomic Status. In Y.K. Jackson (Ed.) *Encyclopedia of Multicultural Psychology* (pp. 434-435). Thousand Oaks, CA: Sage Publications.
5. Brown, T. L., **Acevedo-Polakovich, I. D.**, & Smith A. M. (2006). Cross-Cultural Issues Affecting the Supervisory Relationship in Counseling Children and Families. In T. K. Neill (Ed) *Helping Others Help Children: Clinical Supervision of Child Psychotherapy* (pp. 73-88). Washington, DC: APA Press.

### **Other publications**

1. Callejas, L. M., & **Acevedo-Polakovich, I. D.** (2007). *An Assessment of the Social Service Needs of Residents in the Changing Rural Communities of Hillsborough County 2006-2007* (FMHI Publication No. 242). Tampa, FL: Department of Child & Family Studies, Louis de la Parte Florida Mental Health Institute, University of South Florida.
2. **Acevedo-Polakovich, I. D.** (2007, March). Crossing borders: The role of the scientist in the current immigration debate – Building a knowledge base. *Communiqué, Special Section: Psychological Perspectives on Immigration, XVIII-XIX*.
3. **Acevedo-Polakovich, I. D.**, Lorch, E. P., & Milich, R. (2005). TV or Not TV: Questions and Answers Regarding Television and ADHD. *The ADHD Report*, 13, 6-11.

Ignacio David Acevedo. March 4, 2008