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**THE INFLUENCE OF
AFRICAN AMERICAN URBAN HIGH SCHOOL STUDENTS'
ETHNIC IDENTITY AND COPING STRATEGIES
ON ACADEMIC INVOLVEMENT AND PSYCHOLOGICAL ADJUSTMENT**

By

Hanik Jo

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ABSTRACT

THE INFLUENCE OF AFRICAN AMERICAN URBAN HIGH SCHOOL STUDENTS' ETHNIC IDENTITY AND COPING STRATEGIES ON ACADEMIC INVOLVEMENT AND PSYCHOLOGICAL ADJUSTMENT

By

Hanik Jo

The relationships among ethnic identity, coping strategies, academic involvement, and psychological adjustment were examined in African American urban adolescents attending a predominantly African American high school. One hundred fifty-five 9th graders completed the following instruments: the Multigroup Ethnic Identity Measure (MEIM: Phinney, 1992); the Coping Inventory for Stressful Situations (CISS: Endler & Parker, 1990); and a sixth grade reading level version of the Multiple Affect Adjective Check List-Revised (MAACL-R6: Lubin et al., 1995, 1997). Regression and Multivariate Analyses of Variance (MANOVA) showed that: (a) there was a significant relationship between ethnic identity and coping strategies, especially between ethnic identity achievement and task-oriented coping; (b) ethnic identity had a significant effect on GPA, whereas coping strategies didn't have an influence on GPA; (c) both ethnic identity and coping strategies significantly affected psychological adjustment; (d) the direct effects of ethnic identity on GPA were significantly mediated by psychological adjustment; (e) well-

being rather than negative affect significantly predicted GPA; and (f) significant sex-related differences were found in GPA, coping, and psychological adjustment and female students' higher levels of negative affect were largely mediated by their greater use of avoidance- and emotion-oriented coping. In addition, factor analysis of the CISS showed African American adolescents' collective and interpersonal approach to coping.

Accordingly, two points can be discussed. The first is that ethnic identity was a significant predictor of positive affect rather than negative affect, whereas coping strategies was a powerful predictor of negative affect more than positive affect. This finding that ethnic identity and coping strategies significantly affected the different aspects of psychological adjustment among African American adolescents deserves further research. Secondly, students' other-group orientation was found to be a significant predictor of both GPA and psychological adjustment in this study. This finding is quite interesting considering the fact that the sample of this study was drawn from a predominantly African American setting. This study's implications and recommendations for future research and practice are discussed.

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CHAPTER 1

INTRODUCTION

Ethnic identity development during adolescence has received limited attention despite the commonly-held view that one of the basic developmental tasks during adolescence is to establish a secure sense of self-concept and that ethnic identity is a core part of individual identity or self-concept for minority adolescents. Given the fact that ethnic identity has been considered an essential component of individual identity or self-concept among minority people (Cross, 1971; Tajfel, 1978; Parham & Helms, 1985a, 1985b; Phinney, 1989, 1992), the significance of ethnic identity becomes more salient especially for minority adolescents. Adolescents must explore and resolve personal identity issues and conflicts in order to secure a stable sense of self that Erikson (1968) and Marcia (1980) described as *an achieved identity*. But, minority youth face the additional developmental task to explore and resolve ethnic or group identity issues and conflicts in order to come to the genuine appreciation of their ethnicity that Phinney (1989) called as *an achieved ethnic identity*. Minority youth experience race-and culture-specific stress related to their minority status in American society. In this regard, several authors have theorized that there is an increased probability for minority adolescents to experience adjustment problems such as identity confusion, poor self-image, feelings of alienation (Erikson, 1968; Tajfel, 1978).

However, few empirical studies have been done specifically addressing minority adolescents' ethnic identity development. At this time, most of the ethnic and racial identity research has focused primarily on children or college students (Phinney, 1990).

Therefore, there is a strong need for empirical research on ethnic identity development and its implications for academic and psychological adjustment among minority adolescents. Research on minority adolescents' ethnic identity should examine the way minority youth cope with ethnic identity issues and conflicts and the way ethnic identity development contributes to psychological and academic outcomes for minority youth (Phinney et al., 1990).

Ethnic Identity Development of African American Urban Adolescents

This study focuses solely on African American urban high school students. The experience of discrimination, negative stereotypes, and economic and educational deprivation have contributed to high rates of psychological and academic problems among African American adolescents. In explaining diverse problems of African American youth, an ecological perspective (Bronfenbrenner, 1979) emphasizes the harsh social reality that African American youth may face and its detrimental influence on their academic, vocational, and psychological adjustment. This perspective holds that race and culture play a significant role in the lives of African American adolescents and acknowledges that these socio-cultural factors are likely to place African American adolescents at a disadvantage to White youth (Gibbs, 1990).

African American adolescents, the largest group of minority youth, have been identified as an at-risk population for academic and psychosocial dysfunction (Myers, 1989). In terms of academic underachievement and significantly higher school drop-out

rates, African American students remain a serious concern among many educators and teachers (Sedlacek & Webster, 1978; Sewell et al., 1982; Tracey & Sedlacek, 1984, 1985). Especially, the highest rates of school drop-outs have been found among African American urban male adolescents, which results in the high levels of functional illiteracy and unemployment for inner-city African American youth (Gibbs, 1990).

Unemployment for African Americans is nearly twice as high as that of the White population and can range from 37% up to 50 % among African American adolescents (Parham & McDavis, 1987). Therefore, the lower socioeconomic status of many African American families may be related directly to the high rates of educational deficiencies and accompanying unemployment. Many African Americans who experience such challenges live in urban areas. Residential concentration of such social deficiencies in urban areas can result in the creation of stressful and unpredictable environments that may negatively affect the psychosocial development of African American adolescents (Myers, 1989). Many of African American urban youth have been exposed to the stressful city environment composed of great levels of economic deprivation and violence, which may serve as barriers to the development of a secure ethnic identity in African American urban adolescents.

In the face of disadvantageous and discriminatory socio-cultural conditions, it is possible that African American urban adolescents may prematurely foreclose on their exploration of ethnic identity issues and make a hasty commitment to an oppositional ethnic identity. African American adolescents who choose an oppositional identity may engage in anti-social activities in order to seek to defend themselves against the majority White group (Fordham & Ogbu, 1986; Fordham, 1988). Findings have consistently shown

that a secure ethnic identity is essential to the positive academic and psychological outcomes for minority adolescents (Parham & Helms, 1985a, 1985b; Fordham & Ogbu, 1986; Phinney & Alipuria, 1990; Phinney, 1989, 1992). Therefore, it can be hypothesized that African American urban adolescents, when faced with adverse situations, may fail to make a satisfying commitment to ethnic identity and thus, show a variety of academic and psychosocial dysfunction.

Limited Research on Ethnic Identity Development of African American Adolescents

Through a long history of disadvantage and discrimination, African Americans appear to become more aware of ethnicity and to express a stronger sense of racial belonging and distinctiveness. Supporting this hypothesis is the fact that African American high school and college students tend to show higher ethnic identity scores than other ethnic group members (Phinney, 1992). Therefore, ethnic identity is assumed to play a crucial role in the self-identity of African American individuals. Specifically, for African Americans, ethnic identity may be a powerful intervening variable that explains the maintenance of a positive self and group identification, even in the face of prejudice and racism (Cross, 1971, 1994; Phinney, 1989, 1990).

During the past years, diverse research efforts have been made to better understand ethnic and racial identity development of African Americans. However, several concerns arise from the previous studies: (1) African American participants have been primarily limited to the college student population; (2) research has been typically conducted with African American participants in predominantly White settings; and (3) research has not adequately taken into account the presence of the “third” variables that

may mediate the effects of ethnic identity on academic and psychological adjustment among African Americans.

Therefore, further research efforts are required to investigate: (1) ethnic identity development and its effects on psychological and academic adjustment in African American adolescents; (2) ethnic identity development and its influence on psychological and academic outcomes among African American individuals in predominantly Black settings; and (3) the presence of the third variables that mediate the direct effects of ethnic identity on a variety of adjustment outcomes among African Americans. In this regard, the research framework of this study is designed to address the above-mentioned issues and concerns about ethnic identity studies on African Americans. As already noted, few studies have been done on the buffering effects of ethnic identity against adverse socio-cultural conditions in a sample of African American adolescents (Phinney, 1990). Thus, the first purpose of this study is to test the effects of African American adolescents' ethnic identity on their psychological and academic adjustment.

The Broader Conceptual Framework to Include Coping Strategies as a Mediator

Previous studies have shown the positive effects of ethnic identity on healthy psychological functioning (e.g., Phinney, 1989, 1992). But, little is known about the intermediate process by which ethnic identity impacts a variety of adjustment outcomes. This "how" question addresses the need for examining the presence of the third variables that mediate the effects of ethnic identity on various adjustment outcomes. In this context, the second purpose of this study is to examine the significance of coping strategies as a mediator that intervenes in the relationship between ethnic identity and a variety of adjustment outcomes. Incorporating coping strategies as a mediator into the relationship

between ethnic identity and various adjustment outcomes will provide an increasingly explanatory picture of how ethnic identity affects psychological and academic adjustment among African American adolescents.

Theories and models on ethnic identity development and its effects on adjustment have not been explicitly validated in terms of a broader notion of coping (Bagley, & Copeland, 1994; Neville et al., 1997). However, most of ethnic identity models imply that ethnic identity may play a significant role in the coping process of minority individuals. Although theoretical and empirical research adequately addressing a reliable link between ethnic identity and coping strategies is limited, the connection between ethnic identity attitudes and coping strategies is conceptually conceivable. Ethnic identity models assume that minority individuals are functioning at different stages of ethnic identity and outline specific differences among individuals on a continuum of ethnic identity development (e.g., Phinney, 1989; Cross, 1971, 1978). Moreover, ethnic identity models imply that such individual differences in ethnic identity development are reflected in coping with ethnic identity issues and conflicts in reality. Therefore, ethnic identity models theorize a close link between ethnic identity and coping strategies in dealing with ethnic issues and problems.

For example, African American adolescents who have trouble developing a secure ethnic identity are those who avoid to face issues and challenges related to their ethnicity, whereas African American adolescents who have a strong commitment to an ethnic identity are those who efficiently cope with and resolve ethnic issues and conflicts (Cross, 1971, 1978; Berry et al., 1987; Phinney, 1989). In other words, more advanced stages of ethnic identity predict effective and successful coping with ethnic issues, whereas less

mature stages of ethnic identity predict ineffective and unsuccessful coping with ethnic conflicts. Therefore, ethnic identity theories and models assume a close link between specific stages of ethnic identity development and its corresponding coping strategies. Moreover, ethnic identity models maintain ethnic identity development and its related coping strategies affect a variety of adjustment outcomes among minority individuals. For example, mature ethnic identity and its corresponding effective coping strategies contribute to positive adjustment outcomes, whereas immature ethnic identity and its accompanying ineffective coping strategies result in academic and psychological dysfunction (Cross, 1971; Fordham & Ogbu, 1986; Berry et al., 1987; Phinney, 1989, 1992).

Therefore, it can be hypothesized that there is a close relationship between ethnic identity development and coping strategies, and that such a relationship affects subsequent psychological and academic adjustment. Stated differently, ethnic identity is assumed to significantly contribute to academic and psychological adjustment, and coping strategies may mediate the effects of ethnic identity on positive adjustment outcomes. In this regard, the main purpose of this study is to test whether ethnic identity will affect academic and psychological adjustment, and also whether coping strategies will mediate the direct effects of ethnic identity on positive adjustment outcomes in African American urban adolescents.

Ethnic Identity of African American Adolescents in Predominantly Black Settings

The third purpose of this study is to examine ethnic identity and its implications for academic and psychological adjustment of African American adolescents operating in predominantly Black settings. As mentioned already, ethnic or racial identity research has

been typically conducted with African Americans in predominantly White settings. For example, ethnic or racial identity studies based on Cross's (1971, 1978) model of Black racial identity have been done exclusively with African American students in predominantly White colleges or universities (e.g., Parham & Helms, 1985a, 1985b; Carter, 1991).

Such studies have examined the relationship of ethnic identity to psychological functioning of African American students, assuming that African American students in predominantly White settings are more likely to encounter race-related stress, and therefore, that ethnic identity may play a more salient role in healthy psychological functioning of those students. In contrast, few empirical studies have been conducted about ethnic identity development and its effects on psychological and academic adjustment of African American students in predominantly Black settings (e.g., Fordham & Ogbu, 1986; Fordham, 1988; Pyant & Yanico, 1991). Although little has been known about the ethnic identity development of African Americans, especially adolescents in predominantly Black settings, Fordham and Ogbu (1986) and Fordham (1988) conducted an interesting study on this topic. They found that African American students in predominantly Black settings also experienced race-or culture-specific stress like those in predominantly White settings. Furthermore, they suggested that such cultural or racial stress was mainly caused by the cultural conformity pressure existing in the racially homogenous environment.

Specifically, Fordham and Ogbu (1986) have argued that African American students often perceive successful schooling as acting "White" or becoming unilaterally assimilated into the majority White society at the expense of their own ethnic identity or

cultural frame of reference. Therefore, some African American students may demonstrate their distinctive ethnic or cultural identity by intentionally failing to succeed in school. In an ethnographic study of African American urban adolescents in a predominantly Black public high school, Fordham and Ogbu (1986) and Fordham (1988) showed how African American adolescent students in a predominantly Black setting encountered cultural conformity pressure against academic involvement, and how those students coped with such anti-achievement peer pressure.

For example, some students used ineffective avoidance coping strategies to cope with the peer accusation of acting White by consciously putting little time and efforts in schoolwork. However, others successfully coped with such anti-achievement cultural conformity pressure, and made an active academic involvement without being rejected by peers who regarded academic success as acting White. In other words, cultural conformity pressure against academic involvement differently affected African American students' academic and psychological adjustment depending on the coping strategies employed by students. Students who succeeded in managing the anti-achievement peer pressure gained high levels of both peer support and academic involvement, whereas those who failed to cope with such pressure showed negative academic and psychological outcomes.

Fordham and Ogbu (1986) and Fordham (1988) provided a valuable perspective on a multifaceted relationship among ethnic identity, coping strategies, and academic and psychological adjustment in African American urban adolescents attending a predominantly Black high school. However, most of the studies on African Americans' ethnic identity issues in the predominantly Black environment have been descriptive and qualitative (e.g., Fordham, 1988; Fordham & Ogbu, 1986). Therefore, the findings have

exclusively depended on researchers' subjective observations and interpretations. Lack of the systematic empirical studies on this topic results from the immature status of this field of study (Arroyo & Zigler, 1995). Therefore, the final purpose of this study is to empirically test the effects of ethnic identity on academic and psychological adjustment and the role of coping strategies as a mediator among African American urban adolescents attending a predominantly Black high school.

CHAPTER 2

LITERATURE REVIEW

Several authors have theorized that minority adolescents are likely to have adjustment problems such as identity confusion, poor self-image, and feelings of alienation due to their minority status in society (Erikson, 1968; Tajfel, 1978). However, little empirical work has been done about ethnic identity development and its related issues of minority adolescents (Phinney, 1990). This chapter will provide a comprehensive summary of the existing empirical studies linking the constructs of ethnic identity and coping strategies to academic and psychological adjustment in African American adolescents. The literature review will be made to build a conceptual framework to relate the constructs of ethnic identity, coping strategies, and academic and psychological adjustment among African American urban adolescents.

Collective Ethnic Identity versus Individual Identity

Individual identity may be labeled as the self-concept. The establishment of a secure individual identity or self-concept is a central developmental task regardless of race (Erikson, 1968). However, in understanding the identity of persons from non-White origins, it is necessary to consider a group identity, or an ethnic identity which has been shaped by a unique history of a cultural heritage. A group or ethnic identity includes distinctive patterns of commonly shared cultural values, beliefs and behaviors among the

same ethnic group members.

In describing the collective ethnic identity of African Americans, not only a cultural heritage, but also socio-political factors have to be taken into account. A majority of African Americans have led lifestyles that are directly or indirectly influenced by racial discrimination in society. According to Cross (1971, 1978), the process of the Black ethnic or racial identity development is a psychological struggle to cope with racism and discrimination in the mainstream White society and adapt to the oppressive environments. All of these cultural and socio-political factors have contributed to a unique group identification or ethnic identity of African American individuals.

Ethnic Identity Theories and Models

Minority individuals living in the U.S. participate simultaneously in both their own ethnic culture and the dominant White culture. Acculturation and its related issues which minority individuals living in two different cultures face have been examined by several researchers (e.g., Berry, Kim, Minde, & Mok, 1987). Berry et al. (1987) described the following four different modes of acculturation: (1) marginalization; (2) separation; (3) assimilation; and (4) cultural integration.

Minority individuals who are marginal don't appreciate their own ethnic culture nor participate in the dominant culture. Separation is characterized by the exclusive identification with the ethnic culture and a rejection of the majority culture. Minority people with assimilation attitudes strive to be a part of the majority group by means of disassociating themselves from their own ethnic group. Finally, cultural integration is the most sophisticated mode of acculturation, in which minority individuals maintain their own ethnic identity and at the same time, participate in the majority culture. From an empirical

perspective, Berry and his colleagues (1987) found that minority individuals favoring cultural integration experienced much less acculturative stress, whereas those favoring separation or marginalization experienced the most stress.

Pinderhughes (1982) used the 4 different modes of acculturation to describe the within-group differences in African Americans' cultural orientations. First, African Americans with marginalization attitudes have neither a strong Afrocentric nor a Eurocentric cultural tradition. This cultural marginality, according to Pinderhughes (1982), may apply to a high percentage of African American population who have been exposed to high levels of poverty, crime, and educational and cultural deprivation. African Americans favoring assimilation prefer to identify with the majority Eurocentric culture, whereas African Americans who deeply value their unique cultural heritage are actively involved in an identity formation process leading to Afrocentrism. Finally, bicultural African Americans are those who are capable of being part of both African American and majority White groups.

The major theoretical framework for studying ethnic identity originates from Erikson's (1968) theory of ego identity formation, which described the developmental process by which people construct their identity. According to Erikson, ego identity achievement is the outcome of active exploration and clear commitment. That is, persons who have achieved a strong sense of ego identity are those who have actively explored identity options and made a firm commitment about them.

Marcia (1980) proposed four identity statuses in an attempt to empirically assess Erikson's (1968) theory of ego identity. Marcia's empirical conceptualization of four identity statuses has now become an important part of identity theory. Persons who show

the absence of both exploration and commitment are those in *an identity diffusion status*, whereas a clear commitment based on active exploration indicates *an achieved identity*. An immature and hasty commitment without exploration represents *an identity foreclosure status*, whereas persons who are actively exploring identity options without making a hasty commitment about them are those in *moratorium*.

Ethnic identity formation also involves a developmental process similar to ego identity formation. Therefore, several ethnic identity models have been proposed based on Erikson's (1968) theory of ego identity and Marcia's (1966, 1980) empirical framework for four identity statuses. Focusing on minority adolescents, Phinney (1989) proposed a three-stage model of ethnic identity development, in which minorities' ethnic identity progresses from the first stage of *unexamined ethnic identity* through the second stage of *ethnic identity search* to the final third stage of *achieved ethnic identity*.

The first stage, *an unexamined ethnic identity* is characterized by minority individuals' little thought and interest in their ethnicity. A second stage, *ethnic identity search* is represented by an active exploration of ethnic identity issues. This ethnic identity search, according to Phinney (1989), may often result from a shocking personal and social experience that awakens one's ethnic identity. This awakening experience of ethnicity is also described in the *encounter* stage of Cross's (1971, 1978) Black racial identity model, which will be discussed later. The third stage of *achieved ethnic identity* suggests that minority individuals finally come to a genuine appreciation of their own ethnicity and make a firm commitment about it as a result of active ethnic identity search. The ethnic identity model proposed by Phinney (1989) is aimed at describing the process of ethnic identity development that can be applied across various ethnic minority groups.

Cross (1971, 1978), focusing exclusively on African Americans, has developed a model of Black racial identity development. His model is characterized by a dynamic conversion experience of psychological nigrescence which moves African Americans from a Eurocentric White frame of reference to a Afrocentric Black frame of reference. The term *nigrescence* means the process of becoming “Black” (Cross, 1994). Cross’s (1971, 1978) model of Black racial identity development is most often operationalized by the Racial Identity Attitude Scale, Form-B (RIAS-B: Helms, 1990; Parham & Helms, 1981, 1985a, 1985b). The RIAS-B is a self-reported measure designed to assess characteristic attitudes of each of the four stages of Cross’s model. The RIAS-B has now become the most widely used instrument of its kind.

The four stages of Cross’s Black racial identity model are *pre-encounter*, *encounter*, *immersion/emersion*, and *internalization*. In the first *pre-encounter* stage, one is pro-White and anti-Black. One only embraces a Eurocentric White view of the world at the expense of a African American frame of reference. In the second stage of *encounter*, one’s old attitudes of pre-encounter is challenged and abandoned as a result of a series of negative racial experiences that awaken one’s Black racial identity. As a result of these encounters, in the third stage of *immersion/emersion*, one immerses oneself in African American frame of reference by distancing from a Eurocentric White world view. The denial of Whiteness is one’s effort to define a Black racial identity. This stage is the exact opposite of the pre-encounter stage.

Internalization is the final stage in one becomes more bicultural by resolving racial identity conflicts and internalizing a more realistic Black racial identity. Psychological flexibility and a general decline in anti-White feelings also characterize the internalization

stage. In Cross's model (1971, 1978), the impact of racism on Black racial identity development is greatly emphasized. According to Cross, his Black racial identity model describes African Americans' self-actualization experience of nigrescence through a psychological struggle to cope with racial discrimination in the dominant White society. The varying degree of theoretical emphasis on racism can distinguish racial identity models from ethnic identity models. In this regard, Helms (1995) suggested that identification with one's ethnic culture and identification with one's race may not be the same.

Regarding the differences between ethnic and racial identity models, Helms (1995) has argued that racial identity models (a) have a high emphasis on adverse socio-political factors such as racial discrimination, and (b) concern with how minority individuals overcome racism and develop a positive attitude toward their racial group. On the other hand, ethnic identity models (a) concern one's psychological attachment to his/her ethnic group members and culture, and (b) don't have a particular emphasis on racism in society, but more concern with how minority persons cope with the acculturative stress and cultural conflicts stemming from simultaneous participation in two different cultures.

In contrast, concerning the common assumptions shared by ethnic and racial identity models, Helms and Piper (1994) noted:

“(a) one's ethnic or racial group membership becomes a critical aspect of one's psychosocial identity; (b) healthy identity development occurs by means of a maturation process in which the person learns to substitute internal definitions and standards of ethnic or racial group identity for externally or socially imposed definitions; and (c) the maturation process potentially involves increasingly sophisticated differentiation of the ego, called “ego statuses” (Helms & Piper,

1994, p. 126).

Incorporating ethnic or racial identity models into counseling research, Parham and Helms (1981) pointed out that qualitative methods in which people are classified into a single stage on the basis of their most salient ethnic or racial identity attitudes can cause a problem of ignoring important variances associated with the different types of attitudes that people may hold at the same time. The reason is that ethnic or racial identity attitudes are assumed not to be mutually exclusive and therefore, that individuals can have different types of attitudes at the same time. In this regard, for ethnic or racial identity studies, Parham and Helms (1981, 1985a, 1985b) strongly recommended a quantitative rather than qualitative methods such as regression analysis in which each variance associated with each type of attitudes is independently taken into account.

The Relationship between Ethnic Identity and Psychological Adjustment

As an achieved ego identity has been found to have a positive effect on healthy psychological functioning (Marcia, 1966, 1980), empirical studies have shown that there is a significant relationship between ethnic identity and psychological adjustment (e.g., Phinney, 1989, 1992). Specifically, a secure ethnic identity is related to positive psychological outcomes and vice versa. For example, in a study of 91 minority tenth graders, Phinney (1989) found that about 50% of the students had not explored their ethnicity and thus, belonged to the immature stage of unexamined ethnic identity. About 25% of the students were involved in ethnic identity search and the remaining 25% of the students had achieved a secure ethnic identity. Moreover, it was found that those minority adolescents who had achieved a secure ethnic identity showed much higher scores on psychological adjustment measures of self-evaluation, sense of mastery, and peer and

family relations, compared to those who showed diffused or foreclosed ethnic identity.

Similar results were reported in the study of African-, Asian-, and Mexican-American and White college students. It was found that that students who were higher in ethnic identity search and commitment were more likely to have higher self-esteem and vice versa. (Phinney & Alipuria, 1990). Phinney (1992) also studied both 417 high school students and 136 college students to examine the relationship between ethnic identity and self-esteem and found that ethnic identity had a significantly positive correlation with self-esteem only for minority high school and college students. However, among White students, ethnic identity was not related to self-esteem. It is an important finding that the relationship between ethnic identity and psychological adjustment such as self-esteem was statistically significant only for ethnic minority students, but not for the White students. This evidence indicates that a relationship between ethnic identity and psychological adjustment is much stronger for minority students, especially African American high school and college students than for the White students.

In terms of Cross's (1971, 1978) Black racial identity attitudes and corresponding affective states, a few studies to date have comprehensively demonstrated the empirical relation between racial identity and particular affective states. In a study of 166 African American college students enrolled in four predominantly White universities, Parham and Helms (1985a) showed that pre-encounter and immersion/emersion attitudes were negatively associated with self-actualization, but positively associated with feelings of anxiety, inferiority, personal inadequacy, and hypersensitivity. Especially, immersion/emersion attitudes were a significant predictor of anger. By contrast, encounter attitudes were positively related to self-actualization and self-acceptance, but negatively

related to anxiety. Internalization attitudes were not significantly related to any measures of affective states and self-actualizing tendencies.

Parham and Helms (1985b) also examined the relations between the stages of Black racial identity attitudes and self-esteem among 166 African American college students attending predominantly White universities. The statistically significant results were that pre-encounter and immersion/emersion attitudes were associated with lower self-esteem, and that encounter attitudes were consistently related to higher self-esteem. Internalization attitudes were positively related to self-esteem in terms of the direction of the regression beta weight, but it was not statistically significant. In addition, in a sample of 95 African American college students, Carter (1991) found that pre-encounter attitudes were significantly positively related to self-reported anxiety, memory impairment, paranoia, hallucination, alcohol concerns, and global psychological distress. One possible explanation for a close link between alcohol concerns and pre-encounter attitudes is that individuals with high levels of pre-encounter attitudes may cope with high anxiety and low self-esteem by the use of alcohol. Immersion/emersion attitudes were also found to be significantly positively related to self-reported concerns about using drugs to cope with one's problems.

These findings suggested that pre-encounter and immersion/emersion attitudes are negatively related to mental health variables, which may be mediated by inefficient and avoidance coping strategies such as the use of alcohol and drugs. However, Pyrant and Yanico's (1991) study presented somewhat inconsistent results on the positive effects of encounter attitudes on psychological adjustment, which may be due to differences in the populations from which the samples were drawn. Parham and Helm's two studies (1985a,

1985b) were based on African American college men and women drawn from predominantly White universities, whereas Pyant and Yanico's (1991) study included only African American women who were non-students as well as college students drawn from a predominantly Black university. In Pyant and Yanico's (1991) study, in a sample of non-students, higher levels of encounter attitudes predicted lower self-esteem and more depressive symptoms. This result was the opposite of what Parham and Helms (1985a, 1985b) found. However, for both students and non-students, pre-encounter attitudes were negatively related to both general well-being and self-esteem, but were positively related to depressive symptoms (Pyant & Yanico, 1991), which was consistent with the previous findings.

Although Cross (1971, 1978) has convincingly speculated that internalization attitudes are more closely related to psychological adjustment and health than are any other racial identity attitudes, a number of empirical studies on African Americans' racial identity attitudes, including those mentioned above, have failed to find a significant relationship between internalization attitudes and psychological health variables. Only little empirical evidence that has validated the positive relationship between internalization attitudes and psychological adjustment among African Americans can be found.

For example, in a study conducted by Mitchell and Dell (1992), it was shown that racial identity attitudes significantly predicted participation in cultural (Black-oriented) and noncultural (non-Black Oriented) campus activities for African American undergraduates enrolled at a predominantly White university. More specifically, encounter, immersion/emersion, and internalization attitudes were found to be positively related to participation in cultural (Black-oriented) campus activities, whereas pre-encounter

attitudes were negatively related to those campus activities. Therefore, persons with higher levels of pre-encounter attitudes were less likely to participate in cultural Black-oriented campus activities and therefore, were more likely to become culturally isolated. Interestingly enough, internalization attitudes were found to be positively related to participation in both cultural and noncultural campus activities. This result may suggest that people with high levels of internalization attitudes are those who are able to be flexible with their racial identity and show genuine openness to both cultural and noncultural activities.

In addition, in a study of 146 African American university students and 83 African American adults, Munford (1994) also showed that pre-encounter attitudes were significantly positively correlated with depression, but negatively related to self-esteem. That is, persons with higher pre-encounter attitudes were more likely to have greater depression and lower self-esteem. In contrast, internalization attitudes were significantly negatively correlated with depression, but positively related to self-esteem. Therefore, persons with higher internalization attitudes were more likely to have lower depression and higher self-esteem. Finally, Neville et al. (1997) found that, for 90 African American college students, internalization attitudes were negatively related to the prediction of culture-specific stressors, although it was based on the one-tailed statistical significance. Therefore, individuals with higher levels of internalization attitudes were less likely to experience culture-specific stressors.

In summary, considerable empirical findings presented above have consistently suggested a close link between ethnic identity and various measures of psychological adjustment among African American high school and college students. Moreover, the

relationship between ethnic identity development and psychological adjustment has been found to be much stronger for African Americans than for the Whites (e.g., Phinney, 1990, 1992; Baldwin, 1979). Based on this evidence, the direct as well as indirect effects of ethnic identity attitudes on psychological adjustment among African American urban adolescents will be examined in this study.

The Multi-Dimensional Construct of Academic Involvement

The term *academic achievement* seems to give us the impression that it focuses exclusively on the cognitive aspects of students' academic activities such as grade point average (GPA). In contrast, the term *academic involvement* concerns more comprehensive dimensions of students' academic activities with respect to both GPA and academic persistence. The term *academic involvement* rather than *academic achievement* will be consistently adopted in this study because both cognitive and noncognitive aspects of African American students' academic activities will be investigated in this study. GPA focuses primarily on the cognitive dimensions of academic activities, whereas academic persistence measured by class attendance is closely related to noncognitive and psychosocial components of academic activities.

Therefore, in this study, cognitive and noncognitive dimensions of academic activities; that is, grade point average (GPA) and academic persistence (class attendance) will be examined together within the same construct of academic involvement. GPA and academic persistence interact with each other. For example, a student can't get a good grade if the student misses a lot of classes. Therefore, GPA and class attendance should be examined together within the integrated notion of academic involvement in order to accurately investigate the multi-dimensional concept of academic activities. This is the

rational for creating and using the term *academic involvement* in this study.

The View of Academic Involvement as a Function of Student-School Fit

The perspective of person-environment congruence may be useful in predicting academic involvement among both White and minority students. A good fit between students and the school environment increases students' academic involvement, whereas a poor fit causes negative academic and psychological outcomes (Thompson & Fretz, 1991). From the standpoint of student-school fit, Tinto's (1975) model explains the process by which students voluntarily decide whether or not to become academically involved in school. Tinto has postulated that the student-school fit is the best predictor of students' academic involvement, and proposed two different kinds of student-school fit. One is the academic fit between student and school, called as *academic integration*, and the other is the psychosocial fit between student and school, called as *social integration* (Tinto, 1975). According to Tinto, students who are successfully integrated into the psychosocial and academic systems of schools are very likely to show high levels of academic involvement, and the opposite is also true.

As another model of students' academic involvement, Bean and Metzner (1985) have also asserted that two major dimensions underlie students' intent to become academically involved in school. Those two underlying dimensions are: (a) *academic dimension*--- GPA and cognitive academic ability; and (b) *psychological dimension*--- satisfaction, goal commitment and stress. In this model, high academic performance and the experiences of satisfaction and goal commitment in school are predicted to increase students' academic involvement. In contrast, low academic performance and psychological stress are theorized to decrease students' academic involvement.

Tinto's (1975) and Bean and Metzner's (1985) models of academic involvement seem to share a lot of similarities, considering that they all view students' academic involvement as a function of two kinds of student-school fit. One is cognitive, and the other is noncognitive or psychosocial. Therefore, their models put a theoretical emphasis on both cognitive and noncognitive academic dimensions. For example, the notion of the "academic integration" proposed by Tinto (1975) focuses mainly on the cognitive aspects of academic activities, and it is similar to the "academic dimension" described in Bean and Metzner's (1985) model. However, the concept of the "social integration" described in Tinto's (1975) model centers primarily on noncognitive or psychosocial components of academic activities, and it is also similar to the "psychological dimension" proposed by Bean and Metzner (1985).

In sum, growing evidence indicates that noncognitive or psychosocial dimensions are more predictive of academic involvement for minority, especially African American students than for White students. Stated differently, noncognitive dimensions are more highly correlated with academic involvement of African American students than that of White students (e.g., Tinto, 1975; Tracey & Sedlacek, 1984, 1985, 1987). Given this fact, the traditional perspective on academic involvement may not be useful in explaining unique aspects of African American students' academic involvement because it has put an exclusive emphasis on the cognitive academic ability (Tracey & Sedlacek, 1985). In this regard, Tinto's (1975) and Bean and Metzner's (1985) models of academic involvement can be effectively applied in explaining and predicting African American students' academic involvement based on the fact that their models have an equally balanced emphasis on cognitive and noncognitive dimensions of academic activities.

The Relationship between Ethnic Identity and Academic Involvement among African American Students

A serious problem in the U.S. higher education is the high attrition rates among ethnic minority students. Ethnic minority groups have consistently shown higher attrition rates than the majority White group. Concerning the attrition rates of African American students, Sedlacek and Webster (1978) have shown that, compared to White students, the drop-out rate is much higher for African American students, especially those students attending predominantly White academic institutions. Supporting this fact is the empirical finding that a significant proportion of African American students in predominantly White institutions encountered racial discrimination and related mistreatment on campus, and that such incidents were negatively related to academic and psychological adjustment of those students (Suen, 1983; Smith, 1985).

Tinto's (1975) model also provides a possible explanation of the high attrition rates among African American students in predominantly White institutions. For example, it can be assumed that African American students in predominantly White institutions are very likely to have a poor student-school fit due to the culturally and racially different school environment, and that such a poor student-school fit decreases academic involvement of those African American students. Supporting this assumption is the empirical finding that African American college students attending a predominantly White (97 % of the students were White) public university were more likely than White students to feel racially or culturally alienated on a campus, and that this feeling of alienation was positively related to attrition among those African American students (Suen, 1983).

If African American students perceive the school environment as culturally

insensitive and racially exclusive, their academic involvement with respect to both GPA and academic persistence will be predicted to significantly decrease. Therefore, it is strongly suggested that noncognitive factors can be a significant predictor of academic involvement for African American students. In other words, noncognitive or psychosocial factors are as important or even more important to academic involvement of African American students than are the cognitive factors such as academic ability (Tinto, 1975; Tracey & Sedlacek, 1984, 1985, 1987).

In this regard, Tracey and Sedlacek (1984) proposed seven noncognitive variables affecting minority, especially African American students' academic involvement and those variables are: (1) positive self-concept, (2) realistic self-appraisal, (3) understanding of and ability to deal with racism, (4) preference for long-term goals over short-term goals, (5) availability of strong social support, (6) successful leadership experience, and (7) demonstrated community service. Tracey and Sedlacek (1985) examined the predictive validity of those seven noncognitive variables for both White and African American college students at various points over 4 years. They found that the noncognitive variables provided accurate predictions of grades for both races, usually equal to or better than predictions made only based on the traditional cognitive measure of academic ability (e.g., SAT scores). Regarding academic persistence, the noncognitive variables significantly predicted African American students' attrition. However, the traditional cognitive ability measure, SAT scores were not predictive of African American students' continued enrollment.

Across all periods of times, the noncognitive variables of positive self-concept and realistic self-appraisal were related to African American students' academic persistence.

As time went by, however, the importance of the ability to understand and deal with racism increased and thus, the noncognitive variable of coping with racism was found to be significantly related to academic persistence later in African Americans' academic careers. The two most important findings were that (1) none of the noncognitive variables mentioned above was found to be significantly related to academic persistence among White students, and (2) the cognitive academic ability represented by the SAT scores was not especially predictive of African American students' academic persistence.

The empirical evidence presented above indicates that noncognitive or psychosocial factors are as important or even more important to academic involvement of African American students than are the cognitive ability factors. But, there is also some opposite evidence. For example, Fox (1986) studied ethnic minority students with disadvantaged backgrounds in an urban commuter university and found that the cognitive factors of academic ability had the greatest direct influence on those students' academic involvement. That is, minority students who had high GPA were more likely to become academically involved, and vice versa. Surprisingly, noncognitive or psychosocial factors were found to have a negative effect on students' academic involvement. Fox (1986) hypothesized that this conflicting finding might result from the interaction between commuting students' psychosocial needs and the limited capacity of urban institutions to offer those students sufficient opportunities to meet their psychosocial needs.

In contrast, Mallinckrodt and Sedlacek (1987) showed that the noncognitive factors were more important than the traditional cognitive ability factors in predicting the retention of African American students. For example, more active participation in school activities was related to higher levels of identification with the school, which, in turn,

increased academic persistence among African American students. In a study of 196 African American undergraduates in technical programs, Williams and Leonard (1988) examined the relationship between academic involvement and noncognitive variables such as self-efficacy, racial identity, and vocational interests. They found that self-efficacy and several scales of vocational interests were significant predictors of academic involvement. That is, African American college students who scored higher on self-efficacy and vocational interests showed higher levels of academic involvement than did students with lower scores. However, racial identity didn't significantly predict academic involvement because the majority of African American students (81%) reported having internalization attitudes. In this case, it seems that social desirability may prevent African American students from revealing their true racial identity attitudes.

Bullock-McNeill (1992) investigated the extent to which academic involvement of African American students at a predominantly White university was affected by noncognitive variables, and found that the ability to understand and deal with racism had a positive relationship to the freshman grade point of average. Accordingly, Swanson (1994) studied a sample of 370 African American males and 192 females attending public middle schools in an urban city. His hypotheses were that ethnic identity would buffer against the negative effects of stress, especially for impoverished urban African American adolescents, and that ethnic and personal identity formation would relate to academic outcomes among African American youth. It was reported that ethnic identity as well as self-efficacy were a strong predictor of academic achievement of those African American urban adolescents. In addition, Aspinwall and Taylor (1992) indicated that self-esteem and positive mood had a significant relationship to academic involvement, and that coping strategies largely

mediated such a relationship.

Most recently, Zea and her colleagues (1997) studied 507 White and 139 ethnic minority university freshmen to examine the effects of each of cognitive and noncognitive factors on students' academic involvement. It was found that noncognitive factors such as identification with the university and experience of disrespect because of racial group significantly predicted academic involvement for all students. More specifically, identification with the university was positively related to academic involvement and experience of disrespect was negatively related to academic involvement. The cognitive ability factor of grade point average (GPA) also had an effect on academic involvement, especially for minority students. That is, GPA had a much stronger effect on the academic involvement of ethnic minority students than on that of White students. White students, compared to minority students, had higher levels of academic involvement regardless of GPA. The important finding is that those students who reported more experience of disrespect from their peers showed much lower levels of academic involvement, and that a significantly greater portion of ethnic minority students reported having experienced disrespect because of race or ethnicity.

In summary, the above-mentioned studies suggested that noncognitive or psychosocial factors are as important or even more important to academic involvement of African American students than are the cognitive ability factors, and also that noncognitive variables are significantly more predictive of academic involvement for African American students than for White students. The major noncognitive factors that have been found to affect African American students' academic involvement are self-concept, coping with racism, identification with the school, and experience of racial disrespect (Tracey &

Sedlacek, 1985; Mallinckrodt & Sedlacek, 1987; Williams & Leonard, 1988; Zea et al., 1997).

These noncognitive variables seem to be all interrelated to one another. For example, if African American students experience racial disrespect from their peers in school and cope ineffectively with such incidents, they are likely to show a negative self-concept and have trouble identifying with the school, which results in lower levels of academic involvement. Given the fact that ethnic identity significantly affects self-esteem among African American students (Phinney & Alipuria, 1990; Phinney, 1989, 1992; Parham & Helms, 1985a, 1985b; Munford, 1994), and that noncognitive factors such as self-esteem, coping with racism, and experience of racial disrespect are the important predictors of academic involvement among African American students (Suen, 1983; Tracey & Sedlacek, 1985; Mallinckrodt & Sedlacek, 1987; Bullock-McNeill, 1992; Swanson, 1994; Zea et al., 1997), the direct as well as indirect effects of ethnic identity attitudes on academic involvement in African American urban adolescents will be examined in this study.

Linking Ethnic Identity, Coping Strategies, and Psychological Adjustment

Coping is defined as any goal-directed sequence of cognitive, affective and behavioral activities and purposeful responses for managing internal and external demands or challenges (Heppner & Krauskopf, 1987). Coping has been conceptualized as an important construct that moderates the relations between stress and psychological well-being. Considerable research suggests that coping and problem-solving activities play an important role in maintaining physical and psychological well-being when people are confronted with negative or stressful events (e.g., D'Zurilla & Nezu, 1982; Friedman,

1991).

Although there are a number of ways of conceptualizing coping styles, Endler and Parker (1990) noted “If there is a consensus in the coping literature, it is the important distinction between *emotion-focused* and *problem-focused coping*” (p. 846). Problem-focused coping is cognitive, affective, and behavioral activities directed at altering the cause of the stressor, whereas emotion-focused coping is aimed at reducing emotional distress by avoiding direct confrontation with a stressful problem (Lazarus & Folkman, 1984). Problem-focused coping is an effective problem-solving activity, whereas emotion-focused coping involves avoidance, blaming others, and denial (Lazarus & Folkman, 1984). A second major conceptualization has defined coping as *approach* versus *avoidant activities* (e.g., Roth & Cohen, 1986). This approach versus avoidance distinction is made on the basis of whether one approaches or moves away from confronting and resolving stressful problems (Heppner et al., 1995).

Gender differences in coping strategies have also been addressed in the coping literature. The socialization theory has guided most of the gender-related research on coping. Specifically, it has been suggested that women are socialized to express emotion, to employ emotion-oriented coping, and to seek the emotional support of others (Pearlin & Schooler, 1978; Rosario et al., 1988). In this regard, several studies have indicated that women seem to be inclined to use more emotion-oriented coping and less problem-oriented coping than men (Folkman & Lazarus, 1980; Stone & Neals, 1984; Pearlin & Schooler, 1978; Brems & Johnson, 1989). As already mentioned, in terms of the effectiveness of coping strategies, problem-focused, or task-oriented coping has been related to positive psychological outcomes (Lazarus & Folkman, 1984; Compas et al.,

1988; Bowman & Stern, 1995). For example, Compas et al. (1988) found that the self-reported use of problem-focused coping strategies was negatively related to emotional and behavioral disturbance in junior high school students.

In contrast, avoidance-oriented coping has been generally associated with negative affect and aversive mood states (Bowman & Stern, 1995). Regarding emotion-oriented coping, some studies have found that emotion-oriented coping is less adaptive than problem-oriented coping (e.g., Latack, 1986), whereas others have suggested for a functional role for certain types of emotion-oriented coping that include affective efforts to influence the appraisal of the stressfulness of a problem (e.g., Parkes, 1990; Strentz & Auerbach, 1988). However, there is a consensus that escape-avoidance types of emotion-oriented coping have been strongly associated with negative psychological outcomes (Collins et al, 1983; Aldwin & Revenson, 1987; Bowman & Stern, 1995).

Ethnic identity development can be conceptualized on a approach versus avoidance dimension of coping although ethnic identity has not been explicitly and empirically validated in terms of a broader notion of coping. However, theories and models of ethnic identity development imply that ethnic identity development is a result of coping with ethnic issues and conflicts. For example, African American adolescents who have an insecure ethnic identity are those who use maladaptive avoidance coping strategies in dealing with their ethnicity. When faced with ethnic conflicts and acculturative stress, those people are likely to engage in avoidance coping strategies by not directly confronting race-and culture-specific problems. In contrast, African American youth who have a firm and secure ethnic identity are those who actively approach and resolve ethnic issues and conflicts, using effective problem-focused coping strategies. Therefore, ethnic

identity models suggest that a secure ethnic identity enhances the effectiveness of one's coping strategies and problem-solving ability in dealing with ethnic issues and stress, and vice versa.

There has been empirical evidence on the relationship between ethnic identity and coping strategies. Carter (1991) found a significant relationship between pre-encounter attitudes and ineffective avoidance coping strategies. More specifically, pre-encounter attitudes were positively related to self-reported concerns about drinking alcohol to cope with one's problems. Moreover, high levels of anxiety and global psychological distress associated with pre-encounter attitudes were also assumed to negatively affect the coping process. In addition, a significantly positive relationship was also found between immersion/emersion attitudes and self-reported concerns about using drugs to cope with one's problems (Carter, 1991).

In a recent study, Neville et al. (1997) tested the hypotheses that pre-encounter and immersion attitudes would predict one's tendency to avoid confronting problems and working on creative solutions to deal with stressors, whereas internalization attitudes would predict one's confidence in approaching problems and working on flexible and efficient solutions. They found that higher levels of immersion/emersion attitudes were significantly related to a more negative problem-solving appraisal and associated with greater levels of avoidant and suppressive coping strategies. Contrary to the hypotheses, internalization and pre-encounter attitudes were not related to problem-solving or coping strategies.

The findings discussed so far strongly indicate that there is a close relationship between ethnic identity attitudes and psychological adjustment, and that coping strategies

may mediate such a relationship. For example, pre-encounter and immersion/emersion attitudes have been found to closely relate to low levels of general psychological adjustment (e.g., Parham & Helms, 1985a, 1985b; Carter, 1991). Furthermore, ineffective and maladaptive coping strategies associated with those pre-encounter and immersion./emersion attitudes may mediate such a relationship (Carter, 1991; Bagley & Copeland, 1994; Neville et al., 1997).

Linking Ethnic Identity, Coping Strategies, and Academic Involvement

A small number of studies have evaluated the role of coping strategies in academic and psychological adjustment among minority students. Mantzicopoulos (1990) examined the coping strategies used by 120 elementary school children (4th, 5th, and 6th graders) when faced with a stressful failure experience in school. He found that children who used effective problem-focused and action-oriented coping strategies were more likely to have high levels of academic achievement and self-esteem. Specifically, high academic achievers tended to employ positive problem-focused and action-oriented coping strategies and therefore, had a high sense of self-esteem and competence in such areas as academic achievement and peer relations. Low academic achievers tended to be negative and ineffective copers who blamed others, denied the school failure, or engaged in destructive self-criticism when faced with a failure experience in school.

Students' cognitive appraisal of a failure experience has been shown to predict whether or not they can cope effectively with failure. Diener and Dweck (1978) conducted an experiment in which seventy 5th grade children were systematically exposed to a failure experience in school. In their study, it was found that mastery-oriented children, when faced with failure, were more likely to engage in positive problem-focused coping

strategies by perceiving failure as a challenge and attributing failure to controllable factors such as lack of effort. Effective coping strategies which these mastery-oriented children employed were to be less concerned about past failure and more concerned about finding ways to achieve future success. In contrast, maladaptive children were likely to engage in ineffective avoidance coping strategies by attributing failure to uncontrollable factors such as lack of ability and giving up finding possible problem solutions.

In a study of high school students in Nebraska, Andelt (1994) investigated a relationship between coping strategies used by students and academic involvement. Coping strategies used by students were found to account for 28 % of the variance associated with grade point average and thus, significantly predicted students' academic involvement. Accordingly, Weist et al. (1995) studied 164 ninth graders attending a large inner-city high school serving primarily African American (82%) and low income youth to examine the protective effects of the stress mediators (family cohesion, social support, and coping strategies) on both psychological outcomes (behavior problems and self-concept) and school-related outcomes (grades, absences, and disciplinary encounters). They found that the use of problem-focused strategies protected against behavior problems and low self-concept for female students. For male students, family cohesion was the only variable to protect against stress.

Talor and Brown (1988) have suggested that high self-esteem, optimism, and resulting positive mood are all associated with enhanced higher motivation, greater persistence in the face of obstacles, more effective task performance, and eventually, greater likelihood of success. In other words, Taylor and Brown (1988) have argued for the direct effects of self-esteem and positive mood on effective performance and

adjustment. However, Aspinwall and Taylor (1992) hypothesized that the direct effects of self-esteem and positive mood would be largely mediated by coping strategies. They conducted a study to confirm this hypothesis and found that the beneficial effects of self-esteem and positive mood on academic and psychological adjustment were significantly mediated by the less frequent use of ineffective avoidance coping, greater use of active problem-focused coping, and greater seeking of social support.

The empirical studies discussed above indicate that variables of family or social support and coping strategies may play a crucial role in mediating the effects of stress or failure on academic and psychological outcomes. For African American urban adolescents, the issue of stress becomes even more complicated because they encounter multiple stressors. Therefore, it can be suggested that the protective effects of family, social support, and coping strategies on academic and psychological adjustment may become even more salient for African American urban adolescents. Given the fact that self-esteem and positive mood have a significant relationship to psychological and academic adjustment, and that such a relationship is largely mediated by the use of coping strategies (Tolor & Brown, 1988; Aspinwall & Taylor, 1992), it can be suggested that African American students' ethnic identity, as a major influence on their self-esteem and positive mood (e.g., Parham & Helms, 1985a, 1985b; Phinney, 1992; Carter, 1991; Munford, 1994; Neville et al., 1997), has a significant relationship to their academic and psychological adjustment, and that such a relationship is mediated by coping strategies.

Taken together, the major hypotheses to be tested in this study are: (1) ethnic identity, as a major influence on self-esteem and positive mood, will significantly affect psychological and academic adjustment among African American urban high school

students; and (2) coping strategies will largely mediate this relationship.

Ethnic and Cultural Conformity Pressure in a Predominantly African American Setting

Fordham and Ogbu (1986), and Fordham (1988) provided an interesting description of the multifaceted relationship among ethnic identity, coping strategies, and academic involvement in African American adolescents attending a predominantly Black urban high school. Fordham and Ogbu (1986), and Fordham (1988) have argued that poor academic involvement among African American students can be interpreted as their attempts to maintain their distinctive ethnic or cultural identity. There have been continued conflicts between minority and majority groups in society and these long-standing racial and cultural conflicts lead minority people to form an oppositional ethnic identity or cultural frame of reference (DeVos, 1967). In particular, African American individuals are more likely to develop a collective sense of ethnic identity in opposition to the majority White group because of racism they have experienced (Green, 1981). Along with the oppositional ethnic identity formation, African Americans may also develop an oppositional cultural frame of reference in order to maintain their own boundary from the dominant White group. Therefore, African American individuals who exhibit behaviors and attitudes that are characteristic of White Americans may be negatively sanctioned by other African Americans (Fordham & Ogbu, 1986).

In this context, Fordham and Ogbu (1986) have asserted that high levels of academic involvement are often perceived by African American students as acting “White” because they may perceive active academic involvement as becoming unilaterally assimilated into the majority White society at the expense of their own ethnic identity or

cultural frame of reference. Therefore, African American students may try to demonstrate their distinctive ethnic or cultural identity from White Americans by intentionally failing to succeed in school. There are also some indications that other minorities in the U.S. such as American Indians and Mexican Americans often perceive academic involvement as one-way assimilation into the dominant White society. African Americans, and other minorities alike consider such assimilation to be detrimental to their ethnic or cultural identity (Ogbu & Matute-Bianchi, 1986, as cited in Fordham & Ogbu, 1986).

Fordham and Ogbu (1986) and Fordham (1988) conducted an ethnographic and qualitative study of African American adolescents attending a predominantly Black public high school located in a poor neighborhood of Washington, D.C. They showed how African American students in a predominantly Black setting encountered cultural conformity pressure against academic involvement, and how those students coped with such anti-achievement peer pressure. In their studies, it was well described that many African American academic underachievers used ineffective avoidance strategies to cope with the peer accusation of acting White by intentionally putting little time and efforts in schoolwork. In contrast, some high-achieving students coped successfully with the anti-achievement cultural conformity pressure. For example, they actively participated in athletic activities or other team-oriented activities in order to protect themselves from the rejection of their peers who consider high academic involvement as acting White. Other high achievers deliberately employed coping strategies such as acting as a clown or a comedian. The high-achieving African American students mentioned above seemed to use effective problem-focused coping strategies to deal with such cultural conformity pressure against academic involvement. As a result, they were able to succeed in obtaining good

grades without being rejected by peers for acting White.

However, there were also different kinds of high-achieving students who adopted ineffective avoidance strategies to cope with the peer accusation of acting White. These high achievers were those who pursued academic success by dissociating themselves from their own ethnic members and communities. Fordham and Ogbu (1986) proposed the term *raceless* to describe the characteristics of these maladaptive high-achieving African American students. Fordham and Ogbu (1986) and Fordham (1988) have suggested that those *raceless* African American students are very likely to experience cultural alienation, depression, and anxiety because of their lack of bicultural ability to integrate the demands of the academic environment with those of their own culture. As supporting empirical evidence, Arroyo and Zigler (1995) found that high-achieving African American college students reported higher levels of raceless attitudes and behaviors than their low-achieving counterparts, and that the “raceless” attitudes and behaviors were positively related to depression.

Therefore, the hypothesis of “racelessness” has important implications for understanding the multifaceted interrelationships among ethnic identity, coping strategies, academic involvement, and psychological adjustment in African American students, especially those operating in a predominantly African American environment. Based on the observations that coping with cultural conformity pressure affected the academic and psychological adjustment of both high- and low-achieving African American students, Fordham and Ogbu (1986) have concluded that the perception of academic involvement as acting “White” may strongly inhibit active academic involvement of minority, especially, African American students. The fear of being accused of “acting White” was found to

strongly discourage African American students' academic efforts. Therefore, it can be suggested that low levels of African American students' academic involvement may arise not only from a limited opportunity structure of the discriminatory society (e.g., Ogbu, 1987), but also from the way African American students perceive academic involvement (Fordham & Ogbu, 1986; Fordham, 1988).

As mentioned earlier, most of ethnic or racial identity research on African Americans has been done with African American college students attending predominantly White universities (e.g., Parham & Helms, 1985a, 1985b; Carter, 1991). Therefore, few studies have been done on African American adolescents, especially those operating in predominantly Black settings. In this regard, the major purpose of this study is to address a strong need for ethnic identity research on African American adolescents attending predominantly Black schools. Most of the previous studies on African American adolescents in predominantly Black settings have been descriptive and qualitative in nature. For example, Fordham and Ogbu (1986), and Fordham (1988) conducted an ethnographic study of African American adolescents attending a predominantly Black public high school. They argued that African American students in a predominantly Black setting encountered strong cultural conformity pressure against academic involvement and proposed the *raceless* hypothesis to describe African American high achievers who failed to integrate the demands of the academic environment with those of their own culture. However, their findings were exclusively based on researchers' subjective observations and interpretations. Lack of the systematic empirical studies on African Americans' ethnic identity issues in the predominantly Black environment is due to the immature status of this field of study. Therefore, this study will empirically test the effects of ethnic identity

on academic and psychological adjustment and the role of coping strategies as a mediator among African American adolescents attending a predominantly Black urban high school.

The Major Research Hypotheses of This Study

Based on the above literature review, the present study hypothesizes a conceptual model incorporating measures of ethnic identity and coping strategies in predicting academic involvement and psychological adjustment among African American urban high school students. Based on this model, the following 3 hypotheses will be tested in this study.

1. Ethnic identity, as the most important predictor in this study, will significantly affect academic involvement and psychological adjustment among African American urban high school students. Thus, ethnic identity attitudes will be a major predictor of the academic and psychological outcomes among African American urban adolescents.
2. Coping strategies will also significantly affect psychological adjustment and academic involvement among African American high school students. More specifically, task-oriented coping will predict high levels of psychological adjustment and academic involvement. Whereas, avoidance- and emotion-oriented coping will predict low levels of psychological and academic adjustment.
3. The direct effects of ethnic identity on academic involvement and psychological adjustment will be significantly mediated by coping strategies among African American urban high school students. That is, ethnic identity will exert an indirect influence on academic involvement and psychological adjustment through its effects on coping strategies.

CHAPTER 3

METHODOLOGY

Research Setting

Community High School is located in a predominantly African American community in Flint, Michigan. The community is generally of a low socio-economic status. According to data obtained by the school system, Community High School serves an average of 1123 students. Ninety-seven percent (97%) of the student body identify themselves as African Americans. In terms of the racial distribution of staff, the school staff consists of 43% of African Americans, 55% of Caucasians, and 2% of Hispanics. During the 1996-1997 academic year, the high school's average GPA was 1.72. The average GPA advanced from 1.69 to 1.72, but still ranked below the city average of 2.00. The average GPA of the ninth graders was 1.3 and fell far behind school's average. During the 1996-1997 academic year, attendance sharply improved from 82.8% to 88.2%. Students missed an average of 21 days a year. However, dropout rate jumped from 10.3 % to 21.7%.

Subjects

Participating students in this study included 155 African American 9th graders recruited from Community High School. The sample was racially homogeneous. 100% of

the participants identified themselves as African Americans.

Procedure

After reading a brief description of the study to the students, teachers asked all students to take parental/guardian consent forms (Appendix A) home in order to obtain a parent's signature. In addition, all students were also asked to provide their own written agreement by signing a consent form (Appendix B) at the time of assessment. Data collection occurred during normal school hours. Teachers instructed in the methods of administering the instruments provided each ninth grader with a packet containing a consent form, a demographic information form, the Multigroup Ethnic Identity Measure, the Coping Inventory for Stressful Situations, and the Multiple Affect Adjective Check List-R6. The instruments were carefully chosen for their applicability to the high school setting and their reading level requirements. The completion of these packets was scheduled to occur during one class period of the regular school day.

Instruments

Demographic Information Form. Subjects were asked to provide the following demographic information: name, sex, mother's educational level, father's educational level, and family's socio-economic status. Names were asked on this form in an effort to obtain data on students' GPA and average class absence from the school report cards. A copy of this form can be found in Appendix C.

The Multigroup Ethnic Identity Measure. The Multigroup Ethnic Identity Measure (MEIM: Phinney, 1992) was developed to assess ethnic identity attitudes among diverse minority groups. The MEIM consists of 14 items measuring three aspects of ethnic identity: (1) *Affirmation/Belonging* (5 items); (2) *Ethnic Identity Achievement*, including

both exploration and resolution of identity issues (7 items); and (3) *Ethnic Behaviors* (2 items). Item responses are obtained using a 4-point Likert scale ranging from 4 (strongly agree) to 1 (strongly disagree). Additional 6 items are included in the questionnaire to assess *Other-Group Orientation*. Scores are calculated by reversing the negatively keyed items, summing across items, and dividing by the number of items to obtain the mean. Scores range from 4 (indicating high ethnic identity) to 1 (low ethnic identity).

Affirmation/Belonging assesses ethnic pride, feeling good about one's ethnic background, and being happy with one's ethnic group membership, as well as feelings of belonging and attachment to the group (Phinney, 1992). *Ethnic Identity Achievement* measures both one's levels of exploration and resolution of ethnic identity issues. *Ethnic Behaviors* assess involvement in social activities with members of one's ethnic group and participation in cultural traditions. *Other-Group Orientation* measures one's attitudes and orientation toward other ethnic groups.

Reliability coefficients (Cronbach's Alphas) were reported for the Multigroup Ethnic Identity Measure and two of its subscales. Phinney (1992) found that overall reliability of the Multigroup Ethnic Identity Measure was .81 for the 417 high school students and .90 for the 136 college students. For the 5-item *Affirmation/Belonging* subscale, reliabilities were .75 for the 417 high school students and .86 for the 136 college students. For the 7-item *Ethnic Identity Achievement* subscale, reliabilities were .69 for the 417 high school students and .80 for the 136 college students. Reliabilities were not calculated for the subscale of *Ethnic Behaviors* because it has only two items. For the separate 6-item scale of *Other-Group Orientation*, reliabilities were .71 for the high school students and .74 for the college students. A copy of this form can be found in Appendix D.

The Coping Inventory for Stressful Situations. The Coping Inventory for Stressful Situations (CISS: Endler & Parker, 1990) is a self-report paper and pencil measure of coping, consisting of 48 items. Using a 5-point frequency Likert- scale format, the CISS asks respondents to indicate how much they engage in certain types of coping activities when they encounter a difficult, stressful, or upsetting situation. The respondent circles a number from 1 (not at all) to 5 (very much) to indicate the frequency of engaging in certain types of coping activities under stress. If there are 5 or fewer items that have been left blank or have more than one response circled, each ambiguous response should be assigned a response of “3.” If more than 5 items have ambiguous responses, valid scores can't be obtained. The potential range for each of the three main 16-item coping scales is from 16 to 80.

The CISS is a reliable multidimensional measure of basic coping styles and has three main scales: *Task-Oriented*, *Emotion-Oriented*, and *Avoidance-Oriented Coping*, with the last one also being divided into 2 subscales, distraction and social diversion. 16 items assess Task-Oriented Coping, another 16 items assess Emotion-Oriented Coping, and the remaining 16 items assess Avoidance-Oriented Coping. There are two subscales for the Avoidance-Oriented scale: distraction (8 items), and social diversion (5 items). There is an adult form as well as an adolescent form which was used in this study. For the adolescent version of the CISS, six of the original adult items were reworded for use with a younger population. The CISS (both adult and adolescent versions) can be completed in approximately 10 minutes by normal respondents.

Endler and Parker (1990) found the internal reliability coefficients of the CISS to be excellent for a variety of normative samples. On the Task-Oriented Coping scale, the

coefficient alphas were .885 for 537 adults, .90 for 1242 undergraduates, .91 for 313 early adolescents, and .90 for 504 late adolescents. On the Emotion-Oriented Coping scale, the coefficient alphas were .895 for 537 adults, .875 for 1242 undergraduates, .835 for 313 early adolescents, and .885 for 504 late adolescents. On the Avoidance-Oriented Coping scale, the coefficient alphas were .815 for adults, .84 for undergraduates, .835 for early adolescents, and .815 for late adolescents.

6-week test-retest reliabilities were also found to be adequate in a sample of 238 undergraduates including 74 males and 164 females (Endler & Parker, 1990). For example, on the Task-Oriented Coping scale, test-retest correlations were .73 for males and .72 for females. On the Emotion-Oriented Coping scale, test-retest correlations were .68 for males and .71 for females. On the Avoidance-oriented Coping scale, test-retest correlations were .55 for males and .60 for females. A copy of this form can be found in Appendix E.

The Multiple Affect Adjective Check List-R6. The adolescent version of the Multiple Affect Adjective Check List-Revised (MAACL-R6: Lubin, Whitlock, & Rea, 1995; Lubin, Grimes, & Whitlock, 1997) is a sixth grade reading level version of the Multiple Affect Adjective Check List-Revised (MAACL-R: Zuckerman & Lubin, 1985). The MAACL-R6 is a briefer version of the original MAACL-R, and it includes only adjectives ($n = 59$) that were empirically found to be at or below the sixth grade reading level. Preliminary study of MAACL-R6 demonstrated the acceptable psychometric characteristics of the MAACL-R6 (Lubin, Whitlock, & Rea, 1995). The MAACL-R6 consists of five individual scales: *Anxiety (A)*; *Depression (D)*; *Hostility (H)*; *Positive Affect (PA)*; and *Sensation Seeking (SS)*. The individual scale scores of the MAACL-R6

are obtained by summing the number of adjectives checked on each of the five respective scale.

In addition to the 5 individual scale scores, the MAACL-R6 has several composite scores. For example, The Dysphoria (Dys) score, so-called “the Negative Affect score” is obtained by adding the raw scores of the Anxiety (A), Depression (D), and Hostility (H) scales. The Positive Affect and Sensation Seeking (PASS) composite score, so-called “the Well-Being score” is obtained by adding the raw scores of the Positive Affect (PA) and Sensation Seeking (SS) scales. These two composite scores as well as the five individual scale scores of the MAACL-R6 were used in this study. The MAACL-R6 has the two different versions. One is a state version (“how do you feel now-today”), and the other is a trait version (“how do you generally feel”). The state version of the MAACL-R6 was used in this study.

Zuckerman and Lubin (1985) found the internal reliability coefficients of the MAACL-R to be satisfactory for a variety of normative samples. On the Anxiety scale, the coefficient alphas were .80 for 536 college students, .77 for 285 adolescents, and .85 for 105 mental health center outpatients. On the Depression scale, the coefficient alphas were .82 for 536 college students, .76 for 285 adolescents, and .87 for 105 mental health center outpatients. On the Hostility scale, the coefficient alphas were .82 for college students, .85 for adolescents, and .82 for mental health center outpatients. On the Positive Affect scale, the coefficient alphas were .93 for college students, .91 for adolescents, and .93 for mental health center outpatients. Finally, on the Sensation Seeking scale, the coefficient alphas were .74 for college students, .69 for adolescents, and .60 for mental health center outpatients.

Reliability coefficients (Cronbach's Alphas) of the MAACL-R and the MAACL-R6 are almost identical for the five scales. On the Anxiety scale of the MAACL-R6, the coefficient alphas were .86 for 78 college students and .87 for 202 mental health center outpatients. On the Depression scale of the MAACL-R6, the coefficient alphas were .88 for 78 college students and .85 for 202 mental health center outpatients. On the Hostility scale, the coefficient alphas were .89 for college students and .88 for mental health center outpatients. On the Positive Affect scale, the coefficient alphas were .94 for college students and .92 for mental health center outpatients. Finally, on the Sensation Seeking scale, the coefficient alphas were .60 for college students and .63 for mental health center outpatients (Lubin, Whitlock, & Rea, 1995; Lubin, Grimes, & Whitlock, 1997). 2-week test-retest reliabilities for the MAACL-R6 were .63 for the Anxiety scale, .65 for the Depression scale, .65 for the Hostility scale, .60 for the Positive Affect scale, and .52 for the Sensation Seeking scale (Lubin, Whitlock, & Rea, 1995). A copy of this form can be found in Appendix F.

Academic Involvement. Students' academic involvement was measured by both GPA and average class absence. Data on participating students' GPA and average class absence were objectively obtained from the school report cards. The average GPA and class absence during the 1st and 2nd marking periods of the 1997 were used as the measure of students' academic involvement because data collection occurred during those periods.

Data Analysis Plan

This study uses a nonexperimental and correlational design. Thus, the internal validity of this study would be low because the independent variables were not

systematically manipulated and participants were not randomly sampled. Regarding the treatment of missing data, if respondents missed scores for one or two scales, the sample means for these scales were imputed to them. When respondents missed several items from a multi-item scale, the mean of the subjects' own responses to the rest of the scale was imputed to the missing items. The following is the specific data analysis plan of this study.

1. Descriptive statistics will be calculated for each of the measures of the proposed variables as well as for the appropriate demographic variables (e.g., sex, mother's educational level, father's educational level, and family's socio-economic status).
2. Coefficient alpha, a measure of internal consistency reliability will be computed for all the measures used in this study. In addition, intercorrelations among all the measures will be calculated to examine the relationship among the proposed variables.
3. Several hierarchical multiple regressions will be conducted to assess the magnitude of association between predictors and the dependent variable. In this study, the dependent variable will be either academic involvement or psychological adjustment and the major predictors will be ethnic identity and coping strategies. To control for the confounding variances associated with the sample's demographics, the demographic variables will be first entered into every regression analysis.
4. Multivariate analyses of variance (MANOVA) will be used to detect significant sex-related group differences in ethnic identity, coping strategies, academic involvement, and psychological adjustment among African American high school

students.

- 5. Factor analysis will be conducted on all the items of the Coping Inventory for Stressful Situations (CISS) to find whether the CISS has a reasonable construct validity and accurately measures African American adolescents' coping.**
- 6. The final stage of data analysis will consist of examining the variable that may mediate the relationship among the proposed variables. This analysis of finding a potential mediator will be conducted by using hierarchical multiple regressions. The direct effects of the predictor on the dependent variable will be substantially eliminated when both the predictor and the mediator are entered into regression analysis, but the mediator is entered just before the predictor (Baron & Kenny, 1986). Therefore, it will be tested in this study whether or not the direct effects of ethnic identity on academic involvement and psychological adjustment will be substantially eliminated when the hypothetical mediator of coping strategies is entered into regression analysis before ethnic identity.**

CHAPTER 4

RESULTS

Participants

A total of 155 African American high school 9th graders participated in this study. However, data on five students were excluded from the analysis because they didn't make any response on one or a combination of the instruments. Therefore, data on a total of 150 students were analyzed to test the proposed hypotheses.

Demographic Information

Students were asked to provide the following demographic information: sex, mother's education, father's education, and family socio-economic status. With regard to the demographic information, missing values were often found for mother's education (n= 20), father's education (n= 44), and family socio-economic status (n= 27). The majority of the students who did not respond to the question about parents' education were those who currently live with either of their parents because their parents were divorced or one of their parents was dead. Table 1 contains descriptive information on the demographic characteristics of the sample. With regard to sex, 44% (n= 66) of the sample were males and 56% (n= 84) were females. Concerning family socio-economic status, 41.5% (n= 51) of the students in this study who responded to the question about family socio-economic status indicated that their family belonged to more than middle

class and 58.5% (n= 72) identified that their family belonged to either middle class or less than middle class.

In terms of mother's education, 45.4% (n= 59) of the students who responded to the question about mother's education showed that their mothers received high school or less than high school education and 54.6% (n= 71) indicated that their mothers finished college or graduate school. Regarding father's education, 47.2% (n= 50) of the students responded that their fathers received high school or less than high school education and 52.8% (n= 56) identified that their fathers finished college or graduate school. Overall, results on students' demographics seem to be elevated in a positive direction, which may be partly due to the fact that data on students' demographics were obtained not from objective sources, but from self-reported questions.

Table 1. Sample Demographic Information

Variable	Frequency	Percent
Sex		
Males	66	44%
Females	84	56%
Mother's Education		
Primary Education	3	2%
High School Graduation	56	37.3%
College Graduation	56	37.3%
Graduate School	15	10%
No Response	20	13.3%
Father's Education		
Primary Education	3	2%
High School Graduation	47	31%
College Graduation	47	31%
Graduate School	9	6%
No Response	44	30%
Self-Reported Family Socio- Economic Status		
Lower Working Class	1	0.6%
Working Class	19	12.7%
Lower Middle Class	9	6%
Middle Class	43	35%
Upper Middle Class	33	22%
Upper Class	18	12%
No Response	27	18%

Note. $n = 150$.

Descriptive Statistics

Means and standard deviations for all the variables examined in this study are presented in Table 2. Participating students' average GPA was 1.92, which ranks above the school average of 1.88. Participants' average class absence during the 1st and 2nd marking periods of the 1997 was 19.5 hours, which falls behind the school average of 23.6 hours. The average GPA and absence of the whole 9th graders were 1.30 and 28.9 hours.

Table 2. Descriptive Statistics for All the Variables

Variable	Mean	SD	N
Multigroup Ethnic Identity Measure (MEIM)			
Ethnic Identity Achievement	2.80	.56	150
Affirmation/Belonging	3.30	.66	150
Ethnic Behaviors	2.80	.81	149
Other-Group Orientation	3.02	.63	150
Coping Inventory for Stressful Situations (CISS)			
Task-Oriented Coping	3.45	.77	149
Emotion-Oriented Coping	3.03	.77	149
Avoidance-Oriented Coping	3.53	.83	149
Academic Involvement			
GPA	1.92	.96	138
Average Absence	19.50	16.94	138
Multiple Affect Adjective Checklist-R6 (MAACL-R6)			
Anxiety	1.52	1.76	150
Depression	1.15	1.92	150
Hostility	2.33	2.84	150
Positive Affect	10.14	5.35	150
Sensation Seeking	3.05	2.09	150
Negative Affect (Composite Score)	5.00	5.49	150
Well-Being (Composite Score)	13.19	6.93	150

Given the fact that this study's 9th grade participants showed higher GPA and lower class absence than other 9th graders in the same school, it can be suggested that this study's participants, when compared with an average 9th grader, were more academically involved. Concerning the MEIM scales, participants, as compared to the established norm, showed slightly higher scores on the Ethnic Identity Achievement, Affirmation/Belonging, and Ethnic Behaviors scales. However, they scored lower on the Other-Group Orientation scale. The established norm of the MEMI for the 417 minority high school students was: (1) Ethnic Identity Achievement ($M= 2.78$, $SD= .53$); (2) Affirmation/Belonging ($M= 3.32$, $SD= .59$); (3) Ethnic Behaviors ($M= 2.71$, $SD= .76$); and (4) Other-Group Orientation ($M= 3.15$, $SD= .59$).

In addition, this research's participants, as compared to the norm, scored higher on the all scales of the CISS. The established norm of the CISS for the 504 late adolescents was: (1) Task-Oriented Coping ($M= 3.09$, $SD= .68$); (2) Emotion-Oriented Coping ($M= 2.75$, $SD= .73$); and (3) Avoidance-Oriented Coping ($M= 2.95$, $SD= .67$). For the MAACL-R6, the norm has been established only for college students and mental health center outpatients.

Correlations among All the Variables

Pearson Product correlations were conducted for all the variables examined in this study. The results for the correlations among the proposed variables are shown in Table 3. As expected, significant relationships among ethnic identity, coping strategies, academic involvement, and psychological adjustment were identified. The following are the correlations that were found to be statistically significant at the $p < .01$ level. First of all, a significantly large correlation was found between GPA and average absence ($r = -.67$).

The negative correlation between GPA and average absence was in the expected direction. Moreover, GPA was significantly correlated with the Affirmation/Belonging ($r = .24$) and Other-Group Orientation scales ($r = .26$), indicating that one's positive feelings of belonging and attachment to the ethnic group and one's open attitudes toward other ethnic groups are positively associated with one's active academic involvement indicated by high GPA.

With regard to the relationship of ethnic identity to coping strategies and psychological adjustment, correlation data suggested a positive relationship among secure ethnic identity, effective coping strategies, and mental health. For example, the Ethnic Identity Achievement scale was positively correlated with the Task-Oriented Coping ($r = .34$), Positive Affect ($r = .25$), and Well-Being scales ($r = .23$). Similarly, the Affirmation/Belonging scale was positively correlated with the Task-Oriented Coping ($r = .22$), Sensation Seeking ($r = .23$), Positive Affect ($r = .44$), and Well-Being scales ($r = .41$). However, the Affirmation/Belonging scale was negatively correlated with the Depression scale ($r = -.29$).

Therefore, it was shown that one's successful exploration and resolution of ethnic identity issues and feeling good about one's ethnic group membership are positively related to one's use of effective coping strategies and mental health. In addition, The Other-Group Orientation scale was positively correlated with the Positive Affect ($r = .33$) and Well-Being scales ($r = .31$), indicating a close relationship between one's positive attitudes toward other ethnic groups and one's mental health.

Concerning the relationship between coping strategies and psychological adjustment, the Avoidance-Oriented Coping scale was positively correlated with the

Hostility ($r = .29$) and Negative Affect scales ($r = .28$). The Emotion-Oriented Coping scale was also positively correlated with the Anxiety ($r = .29$), Depression ($r = .37$), Hostility ($r = .26$), and Negative Affect scales ($r = .36$). The Task-Oriented Coping scale was positively correlated with the Positive Affect ($r = .22$) and Well-Being scales ($r = .22$). Taken together, consistent with the theoretical assertions, correlation data confirmed a positive relationship between effective coping strategies and mental health, and a positive relationship between ineffective coping strategies and psychopathology.

With regard to the intercorrelations among the psychological adjustment scales of the MAACL-R6, the Positive Affect and Well-Being scales were not significantly correlated with any of the Anxiety, Depression, Hostility, and Negative Affect scales in either positive or negative directions. This result can evidence the independence of positive affect and negative affect proposed by Watson and Clark (1984), and Zuckerman (1980) who have asserted that positive affect is defined as more than the absence of negative affect.

Table 3. Correlations among All the Variables Examined in This Study

Var./GPA	ABS	ACH	BEL	ETH	OTH	AVO	EMO	TAS	ANX	DEP	HOS	POS	SEN	
GPA	1.00													
ABS	-.67**	1.00												
ACH	.17	-.13	1.00											
BEL	.24*	-.10	.52**	1.00										
ETH	.14	-.14	.49**	.49**	1.00									
OTH	.26*	-.18	.33**	.39**	.11	1.00								
AVO	-.08	-.03	.19	.05	.09	.001	1.00							
EMO	-.03	-.06	.13	-.01	.06	.12	.39**	1.00						
TAS	.04	-.04	.34**	.22*	.20	.14	.61**	.38**	1.00					
ANX	-.07	.13	.02	-.06	.06	.001	.21	.29**	.21	1.00				
DEP	-.18	.13	-.12	-.29**	-.14	-.09	.16	.37**	.03	.58**	1.00			
HOS	-.14	.16	-.06	-.13	-.02	-.10	.29**	.26*	.15	.51**	.58**	1.00		
POS	.17	-.04	.25*	.44**	.22*	.33**	.18	.05	.22*	.11	-.08	-.12	1.00	
SEN	.20	-.06	.12	.23*	.13	.18	.13	.01	.19	.16	-.02	.06	.67**	1.00

Note: GPA= Grade Point Average; ABS= Average Absence; ACH= Ethnic Identity Achievement; BEL= Affirmation/Belonging; ETH= Ethnic Behaviors; OTH= Other-Group Orientation; AVO= Avoidance-Oriented Coping; EMO= Emotion-Oriented Coping; TAS= Task-Oriented Coping; ANX= Anxiety; DEP= Depression; HOS= Hostility; POS= Positive Affect; SEN= Sensation Seeking.

* P < .01, ** p < .001.

Internal Consistency

Internal consistency reliability coefficients (Cronbach's Alphas) were calculated for all measures used in this study such as the Multigroup Ethnic Identity Measure (MEIM), the Coping Inventory for Stressful Situations (CISS) and the Multiple Affect Adjective Check List-R6 (MAACL-R6). They were presented in Table 4. With regard to the MEIM, the coefficient alphas were .67 for the Ethnic Identity Achievement scale, .79 for the Affirmation/Belonging scale, .32 for the Ethnic Behaviors scale, and .71 for the Other-Group Orientation. For the CISS scales, the coefficient alphas were .90 for the Task-Oriented Coping scale, .87 for the Emotion-Oriented Coping scale, and .89 for the Avoidance-Oriented Coping scale. For the MAACL-R6 scales, the coefficient alphas were .68 for the Anxiety scale, .80 for the Depression scale, .84 for the Hostility scale, .90 for the Positive Affect scale, and .74 for the Sensation Seeking scale.

Overall, the internal consistency values reported in this study are within the acceptable range (e.g., Alpha= .70 or greater; Nunnally, 1978). This indicates that the items adequately assess a common construct. Especially, the internal consistency reliabilities for the 3 scales of the CISS (Alpha= .90, .87, and .89, respectively), and the MAACL-R6 composite scores such as Negative Affect (Alpha= .89) and Well-Being (Alpha= .91) are well above the acceptable range for internal consistency reliability coefficients. However, the internal consistency of the 2-item Ethnic Behaviors scale (Alpha =.32) is far below the acceptable standard. This low value may indicate that the two items are too short to adequately assess the construct.

Table 4. Internal Consistency of Scales

Measure	Scale Name	# of Items	Cronbach's Alpha
The Multigroup Ethnic Identity Measure			
	Ethnic Identity Achievement	7	.6658
	Affirmation/Belonging	5	.7886
	Ethnic Behaviors	2	.3157
	Other-Group Orientation	6	.7090
The Coping Inventory for Stressful Situations			
	Task-Oriented Coping	16	.9022
	Emotion-Oriented Coping	16	.8680
	Avoidance-Oriented Coping	16	.8912
The Multiple Affect Adjective Check List-R6			
	Anxiety	10	.6782
	Depression	11	.7958
	Hostility	12	.8442
	Positive Affect	19	.8995
	Sensation Seeking	7	.7384
	Negative Affect (Composite Score)	33	.8929
	Well Being (Composite Score)	26	.9136

Multivariate Analyses of Variance (MANOVA)

Sex-Related Group Differences in Academic Involvement. As mentioned before, the construct of academic involvement consists of the two variables such as GPA and average absence. In order to detect sex-related differences in academic involvement consisting of GPA and average absence, multivariate analyses of variance (MANOVA) procedure was used because the multiple dependent variables of both GPA and average absence were analyzed and these variables were not conceptually independent, but rather related to each other (Biskin, 1980). Therefore, a multivariate analyses of variance (MANOVA) was performed with two levels of student sex (male and female), and with GPA and average absence as dependent variables. It was found that there was a significant main effect for sex (student gender), $F(2, 135) = 6.91, p = .001$. Subsequent univariate F-tests revealed a significant main effect for sex on GPA, $F(1, 136) = 9.66, p = .002$. However, there was a insignificant univariate F for the sex main effect on average absence. As follow-up tests on this significant MANOVA for sex, t-tests were performed to examine the possible impact of sex (student gender) on GPA. Means, standard deviations, and t-test statistics for the academic involvement variables by sex are presented in Table 5.

Table 5. Means and T-test Statistics for GPA and Average Absence by Sex

Criterion Measure	<u>Males</u>		<u>Females</u>		t-value	p-value
	Mean	SD	Mean	SD		
GPA	1.64	0.93	2.14	0.93	-3.11	.002
Average Absence	20.48	19.45	18.74	14.82	0.59	.554

As can be seen in Table 5, female students had significantly higher GPA ($M= 2.14$) than males ($M= 1.64$), $t(136)= -3.11$, $p < .01$.

Sex-Related Group Differences in Coping Strategies. A multivariate analysis of variance (MANOVA) comparing male and female groups on the coping strategy variables (the CISS scales) also yielded significant group differences. There was a significant main effect for sex (student gender), $F(3, 145)= 4.80$, $p = .003$. Subsequent univariate F-tests revealed a significant main effect for sex on Avoidance-Oriented Coping, $F(1, 147)= 6.78$, $p = .01$, and Emotion-Oriented Coping, $F(1, 147)= 11.75$, $p = .001$. There was not a significant univariate F for the sex main effect on Task-Oriented Coping. As follow-up tests on this significant MANOVA for sex, t-tests were performed to examine the possible impact of sex (student gender) on each of the coping strategy variables. Means, standard deviations, and t-test statistics for the coping strategy variables by sex are presented in Table 6. As shown in Table 6, female students used significantly more Avoidance-Oriented Coping ($M= 3.69$) than males ($M= 3.34$), $t(147)= -2.60$, $p = .01$, and Emotion-Oriented Coping ($M= 3.22$) than males ($M= 2.80$), $t(147)= -3.43$, $p = .001$. There were no significant differences between genders on Task-Oriented Coping.

Table 6. Means and T-test Statistics for Coping Strategy Variables by Sex

Criterion Measure	<u>Males</u>		<u>Females</u>		t-value	p-value
	Mean	SD	Mean	SD		
Avoidance Coping	3.34	0.86	3.69	0.77	-2.60	.01
Emotion Coping	2.80	0.76	3.22	0.74	-3.43	.001
Task Coping	3.36	0.78	3.53	0.76	-1.39	.168

Therefore, it can be suggested that African American female adolescents, when experiencing stress, were more likely than males to try to reduce emotional distress by avoiding the direct confrontation and resolution of stressful problems. However, it is important to notice that, despite females' more use of ineffective coping strategies, males and females didn't differ in task-oriented coping, the effective coping strategies to change the cause of the stressor.

Sex-Related Group Differences in Psychological Adjustment. Data on the relationship between sex (student gender) and the psychological adjustment variables (the MAACL-R6 scales) were analyzed with a MANOVA between the two groups (male and female) with Negative Affect and Well-Being as the dependent variables. Negative Affect and Well-Being used here are the composite scores of the MAACL-R6. The Negative Affect composite score is obtained by adding the raw scores of the Anxiety, Depression, and Hostility scales. The Well-Being composite score is also computed by adding the raw scores of the Positive Affect, and Sensation Seeking scales. As a result, it was found that there was a statistically significant main effect for sex, $F(2, 147) = 3.59, p = .03$, apparently due to a significant univariate F for Negative Affect, $F(1, 148) = 7.07, p = .009$. But, there was not a significant univariate F for the sex main effect on Well-Being. This statistically significant MANOVA for sex was followed by separate T-tests. Means, standard deviations, and t-test statistics for the coping strategy variables by sex are presented in Table 16. Findings indicate that female students showed significantly higher levels of Negative Affect ($M = 6.04$) than males ($M = 3.68$), $t(147) = -2.76, p < .01$. There were no significant differences between genders in Well-Being.

Instead of using the Negative Affect and Well-Being composite scores as the dependent variables, another MANOVA comparing males and female groups on Anxiety, Depression, Hostility, Positive Affect, and Sensation Seeking was conducted. It was found that there was not a significant main effect for sex, $F(5, 144) = 1.61, p = .160$. However, on an univariate level, there were significant univariate Fs for the sex main effect on Depression, $F(1, 148) = 4.38, p = .038$, and Hostility, $F(1, 148) = 7.27, p = .008$. As follow-up tests, several t-tests were performed to examine the possible effect of sex on each of the dependent variables. Table 7 contains descriptive and t-test statistics for the variables involved. As presented in Table 7, females showed significantly higher depression ($M = 1.44$) than males ($M = 0.79$), $t(148) = -2.16, p < .05$, and higher hostility ($M = 2.87$) than males ($M = 1.64$), $t(148) = -2.78, p < .01$. There were no significant differences between genders in Anxiety, Positive Affect, and Sensation Seeking.

Table 7. Means and T-test Statistics for Psychological Adjustment Variables by Sex

Criterion measure	Males		Females		t-value	p-value
	Mean	SD	Mean	SD		
Anxiety	1.26	1.52	1.73	1.92	-1.62	.106
Depression	0.79	1.60	1.44	2.10	-2.16	.032
Hostility	1.64	2.38	2.87	3.06	-2.78	.006
Sensation Seeking	3.14	1.78	2.99	2.32	0.44	.658
Positive Affect	10.33	4.74	9.99	5.81	0.40	.689
Negative Affect (CS)	3.68	4.38	6.04	6.06	-2.76	.007
Well-Being (CS)	13.47	5.99	12.98	7.62	0.44	.658

Note. (CS) = (The Composite Score of the MAACL-R6).

In summary, significant sex differences were found in coping strategies, academic involvement, and psychological adjustment. No sex differences were found in ethnic identity development. Specifically, African American female students, when compared to males, had higher GPA, used more avoidance- and emotion-oriented coping strategies, and showed higher levels of negative affect. Major sex differences found in this study are depicted in Figure 1.

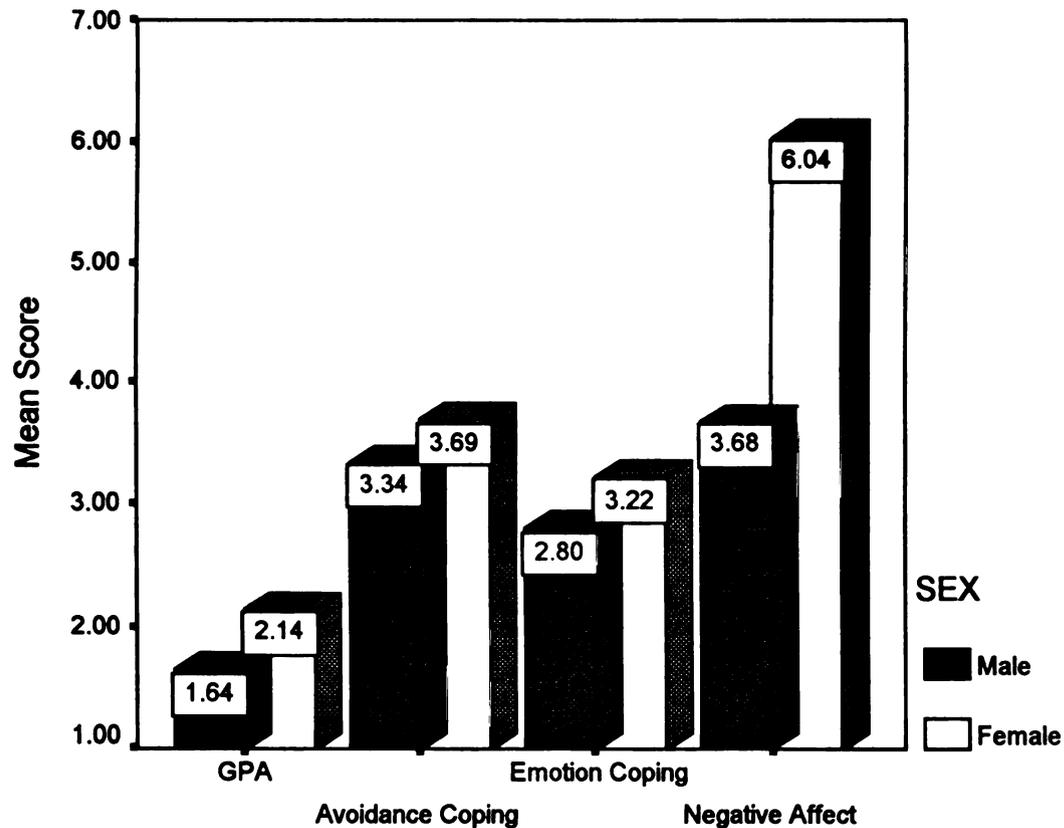


Figure 1. Significant Sex Differences among African American Adolescents

Multiple Regression Analyses

The Relationship between Ethnic Identity and Coping Strategies. Multiple regression analyses were conducted in order to determine the relationship between coping strategies and ethnic identity among African American urban high school students. A series of simultaneous multiple regressions were performed with each of the coping strategy variables (the CISS scales) as the dependent variable, and the ethnic identity variables (the MEIM scales) as predictors. These regression analyses were used to test whether ethnic identity significantly contributed to explaining the variance associated with coping strategies. Table 8 contains the results of these analyses. It was found that the entire ethnic identity variables accounted for 12 % of the explained variance in Task-Oriented Coping and this amount was statistically significant ($F(4, 143) = 4.74, p < .01$). Out of the ethnic identity variables entered in the equation, only Ethnic Identity Achievement emerged as a significant predictor of Task-Oriented Coping. In terms of the regression coefficients, the positive relationship between Ethnic Identity Achievement and Task-Oriented Coping ($\beta = .40$) indicates that persons with successful exploration and resolution of ethnic identity issues are more likely to employ task-oriented coping, the effective coping strategies to directly change the cause of the stressor.

Another series of simultaneous multiple regressions were performed to test whether coping strategies significantly predicted ethnic identity. Therefore, in these analyses, each of the ethnic identity variables (the MEIM scales) was the dependent variable, and the entire coping strategy variables (the CISS scales) were used as predictors. Summary statistics for these multiple regressions are also shown in Table 8. It was found that the entire coping strategy variables accounted for 12 % of the variance in

Ethnic Identity Achievement and also explained 7 % of the variance in Affirmation/Belonging. These results were all statistically significant ($F(3, 145)= 6.34, p < .001$, and $F(3, 145)= 3.44, p < .05$, respectively). Out of the coping strategy variables entered in the equation, Task-Oriented Coping emerged as a significant predictor of both Ethnic Identity Achievement and Affirmation/Belonging. The positive relationship was found between Task-Oriented Coping and Ethnic Identity Achievement ($\beta= .26$), and between Task-Oriented Coping and Affirmation/Belonging ($\beta= .27$), indicating that an individual who uses more task-oriented coping strategies is more likely to feel good about one's ethnic group membership and successfully explore and resolve ethnic identity issues.

Table 8. Multiple Regression of the Relationship between Ethnic Identity and Coping

Dependent Variable and Predictors Entered	β	t	p -value
(1). Task-Oriented Coping			
Ethnic Identity Achievement	.40**	2.96	.0036
Affirmation/Belonging	.05	0.37	.7125
Ethnic Behaviors	.04	0.42	.6738
Other-Group Orientation	.02	0.22	.8264
(2). Ethnic Identity Achievement			
Avoidance-Oriented Coping	-.02	-0.26	.7971
Emotion-Oriented Coping	9.87987E-04	0.02	.9874
Task-Oriented Coping	.26***	3.54	.0005
(3). Affirmation/Belonging			
Avoidance-Oriented Coping	-.09	-1.15	.2513
Emotion-Oriented Coping	-.07	-0.95	.3437
Task-Oriented Coping	.27**	3.15	.0020

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

The above regression analyses suggest that there is a reciprocal relationship between coping strategies and ethnic identity. That is, it appears that coping strategies and ethnic identity have a simultaneous effect on each other. Especially, a reciprocal relationship was found between Task-Oriented Coping and Ethnic Identity Achievement. That is, persons who use greater levels of task-oriented coping strategies are more likely to have a higher sense of ethnic identity achievement, and the reverse is also true. These results are consistent with the ethnic identity literature which has suggested a reliable link between coping strategies and ethnic identity.

Ethnic identity theories have asserted that persons who have a secure ethnic identity are those who use effective coping strategies in dealing with ethnic identity conflicts, and vice versa (Cross, 1971; Berry et al., 1987; Phinney, 1989). In other words, more advanced ethnic identity predicts effective coping with ethnic identity issues, whereas less mature ethnic identity predicts ineffective coping with ethnic issues and conflicts. Ethnic identity models seem to assume that the relationship between coping strategies and ethnic identity is unilateral, and that ethnic identity is a major predictor of coping with ethnic issues and conflicts. However, the important finding in this study is that the relationship between ethnic identity and coping strategies was not unilateral, but rather reciprocal.

The Relationship between Ethnic Identity and Psychological Adjustment. Another series of simultaneous multiple regressions were performed with each of the psychological adjustment variables (the MAACL-R6 scales) as the dependent variable, and the ethnic identity variables (the MEIM scales) as predictors. Regarding the dependent variable, not only each of the five psychological adjustment scales of the MAACL-R6 was used as the

dependent variable, but also each of the two composite scores of the MAACL-R6, Negative Affect and Well-Being was employed as the dependent variable. These regression analyses were conducted to test whether ethnic identity significantly predicted psychological adjustment. Table 9 presents the results of these analyses. The statistically significant results were that the entire ethnic identity variables accounted for 8 % of the explained variance in Depression ($F(4, 144) = 3.23, p < .05$), 22 % of the variance associated with Positive Affect ($F(4, 144) = 10.42, p < .0001$), and 19 % of the variance in Well-Being ($F(4, 144) = 8.59, p < .0001$).

Table 9. Multiple Regression Predicting Psychological Adjustment from Ethnic Identity

Dependent Variable and Predictors Entered	β	t	p -value
Depression			
Ethnic Identity Achievement	.16	0.46	.6440
Ethnic Behaviors	-.03	-0.11	.9128
Other-Group Orientation	.07	0.25	.8011
Affirmation/Belonging	-.91**	-3.01	.0031
Positive Affect			
Ethnic Identity Achievement	-.21	-0.23	.8165
Ethnic Behaviors	.20	0.34	.7347
Other-Group Orientation	1.66*	2.37	.0189
Affirmation/Belonging	2.97***	3.81	.0002
Well-Being			
Ethnic Identity Achievement	-.33	-0.28	.7810
Ethnic Behaviors	.34	0.43	.6677
Other-Group Orientation	2.00*	2.17	.0315
Affirmation/Belonging	3.53***	3.43	.0008

Note. $n = 149$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Out of the ethnic identity variables entered in the equation, Affirmation/Belonging emerged as a significant predictor of Depression, Positive Affect, and Well-Being. Other-Group Orientation was found to be a significant predictor of Positive Affect, and Well-Being. In terms of the regression coefficients, the positive relationship of Affirmation/Belonging to Positive Affect ($\beta= 2.97$), and Well-Being ($\beta= 3.53$) and the negative relationship between Affirmation/Belonging and Depression ($\beta= -.91$) suggest that a person with positive attitudes about his/her own ethnic group is more likely to show higher levels of positive affect and well-being, and lower levels of depression. In addition, the positive relationship of Other-Group Orientation to Positive Affect ($\beta= 1.66$), and Well-Being ($\beta= 2.00$) indicates that persons with positive attitudes toward other ethnic groups are likely to have greater levels of positive affect and well-being in this setting.

The Relationship between Coping Strategies and Psychological Adjustment.

Several multiple regressions were conducted in order to determine the relationship between coping strategies and psychological adjustment. A series of simultaneous multiple regressions were performed with each of the psychological adjustment variables (the MAACL-R6 scales) as the dependent variable, and the coping strategy variables (the CISS scales) as predictors. These regression analyses were conducted to test whether coping strategies significantly predicted psychological adjustment. Table 10 contains the results of these analyses. The statistically significant results were that the entire coping strategy variables accounted for 10 % of the explained variance in Anxiety ($F(3, 145)= 5.26, p < .01$), 16 % of the variance associated with Depression ($F(3, 145)= 9.44, p < .0001$), 12 % of the variance in Hostility ($F(3, 145)= 6.35, p < .001$), 5 % of the variance in Positive

Affect ($F(3, 145)= 2.70, p < .05$), 16 % of the variance in Negative Affect ($F(3, 145)= 8.90, p < .0001$), and 6 % of the variance in Well-Being ($F(3, 145)= 2.88, p < .05$).

Table 10. Multiple Regression with Coping as a Predictor of Psychological Adjustment

Dependent Variable and Predictors Entered	β	t	p -value
Anxiety			
Avoidance-Oriented Coping	.16	0.75	.4577
Emotion-Oriented Coping	.53**	2.63	.0095
Task-Oriented Coping	.18	0.76	.4510
Depression			
Avoidance-Oriented Coping	.30	1.34	.1810
Emotion-Oriented Coping	.98****	4.73	.0000
Task-Oriented Coping	-.50*	-2.06	.0414
Hostility			
Avoidance-Oriented Coping	.92**	2.68	.0082
Emotion-Oriented Coping	.70*	2.21	.0288
Task-Oriented Coping	-.31	-0.85	.3976
Positive Affect			
Avoidance-Oriented Coping	.55	0.83	.4099
Emotion-Oriented Coping	-.37	-0.60	.5477
Task-Oriented Coping	1.28	1.79	.0760
Negative Affect			
Avoidance-Oriented Coping	1.39*	2.13	.0349
Emotion-Oriented Coping	2.20***	3.68	.0003
Task-Oriented Coping	-.63	-0.91	.3645
Well-Being			
Avoidance-Oriented Coping	.67	0.77	.4402
Emotion-Oriented Coping	-.58	-0.72	.4701
Task-Oriented Coping	1.79	1.93	.0556

Note. $n = 149$. * $p < .05$. ** $p < .01$. *** $p < .001$. **** $p < .0001$.

Out of the coping strategy variables entered in the equation, Emotion-Oriented Coping emerged as a significant predictor of Anxiety, Depression, Hostility, and Negative Affect. Avoidance-Oriented Coping was found to be a significant predictor of Hostility, and Negative Affect, and Task-Oriented Coping was a significant predictor of Depression. In terms of the regression coefficients, the positive relationship of Emotion-Oriented Coping to Anxiety ($\beta = .53$), Depression ($\beta = .98$), Hostility ($\beta = .70$), and Negative Affect ($\beta = 2.20$) indicates that persons who use greater levels of emotion-oriented coping strategies are more likely to feel higher levels of negative affect such as anxiety, depression, and hostility. In addition, the positive relationship of Avoidance-Oriented Coping to Hostility ($\beta = .92$) and Negative Affect ($\beta = 1.39$) suggests that those who employ greater levels of avoidance-oriented coping strategies are more likely to feel higher levels of negative affect such as hostility. With regard to Task-Oriented Coping, the negative relationship between Task-Oriented Coping and Depression ($\beta = -.50$) shows that individuals who endorse higher levels of task-oriented coping strategies are more likely to feel low levels of depression.

Ethnic Identity and Coping Strategies as a Predictor of Academic Involvement. A series of simultaneous multiple regression were performed to test whether ethnic identity or coping strategies would significantly predict academic involvement variables such as GPA and average absence. In these analyses, each of GPA and average absence was used as the dependent variable and the ethnic identity variables (the MEIM scales) or the coping strategy variables (the CISS scales) were used as predictors. With regard to the relationship between ethnic identity and academic involvement, ethnic identity was found to be a significant predictor of GPA, but not average absence.

Summary statistics for these multiple regressions are presented in Table 11. The entire ethnic identity variables accounted for 10 % of the explained variance in GPA, which was statistically significant ($F(4, 132) = 3.45, p < .05$). Out of the ethnic identity variables entered in the equation, Other-Group Orientation was found to a significant predictor of GPA. The positive relationship between Other-Group Orientation and GPA ($\beta = .31$) indicates that persons who show higher levels of acceptance of other ethnic groups are more likely to have higher GPA. With regard to the relationship between coping strategies and academic involvement, coping strategies didn't significantly predict any of the academic involvement variables such as GPA and average absence. Therefore, on an univariate level, none of the coping strategies variables was found to be a significant predictor of GPA or average absence.

Table 11. Multiple Regression with Ethnic Identity as a Predictor of GPA

Dependent Variable and Predictors Entered	β	t	p -value
GPA			
Ethnic Identity Achievement	.01	0.05	.9611
Affirmation/Belonging	.21	1.32	.1887
Ethnic Behaviors	.06	0.47	.6363
Other-Group Orientation	.31*	2.14	.0340

Note. $n = 137$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

In addition, coping strategies could not mediate the relationship between ethnic identity and academic involvement because coping strategies didn't significantly predict

academic involvement. Therefore, it can be concluded that ethnic identity directly affected GPA without the mediating effects of coping strategies.

Table 12 contains the summary statistics of a hierarchical regression conducted to test whether ethnic identity would significantly predicted GPA after controlling for the sex-related variance in GPA. In the first step, the demographic variable of sex was entered into the regression equation. The reason for this is due to the findings that there were significant sex-related differences in GPA among African American high school students. Significant sex-related group differences in GPA were already discussed earlier in the MANOVA section. Therefore, the sex-related variance in GPA had to be first controlled by putting sex into regression analysis in the first step.

Table 12. Hierarchical Multiple Regression Predicting GPA after Controlling for Sex

Dependent Variable	Step 1 (Sex)		Step 2 (Ethnic Identity Variables)		Full Model (Sex, and Ethnic Identity Variables)	
	R^2	F	R^2 change	F change	$R^2_{\text{full model}}$	$F_{\text{full model}}$
GPA	.0673	9.74**	.0894	3.47**	.1566	4.87***

Note. $n = 137$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

The hierarchical regression shown in Table 12 was to predict the dependent variable of GPA, using the predictors of sex and ethnic identity. As already mentioned, the controlled variable of sex was entered into the equation in the first step. In step 2, the

block of the ethnic identity variables (the MEIM scales) was entered into regression analysis. It was found that sex, and ethnic identity all significantly predicted GPA. All sets of predictors together explained 16 % of the variance in GPA ($F(5, 131) = 4.87, p < .001$). When entered first, the controlled factor of sex significantly accounted for 7 % of the explained variance in GPA ($F(1, 135) = 9.74, p < .01$), confirming that there existed a significant amount of sex-related variance in GPA. In the second step, the ethnic identity variables set added a significant 9 % of the variance in GPA ($F(4, 132) = 3.47, p < .01$), indicating that ethnic identity was a significant predictor of GPA even after controlling for the sex-related variance in GPA.

The Relationship between Psychological Adjustment and Academic Involvement.

Multiple regression analyses were conducted in order to determine the relationship between psychological adjustment and academic involvement among African American urban high school students. Simultaneous multiple regressions were performed with each of the academic involvement variables (GPA and average absence) as the dependent variable, and the psychological adjustment variables (the MAACL-R6 scales) as predictors. With regard to predicting GPA, the five psychological adjustment scales of the MAACL-R6 (Anxiety, Depression, Hostility, Positive Affect, and Sensation Seeking) didn't explain a significant amount of the variance in GPA. However, the construct of psychological adjustment successfully predicted GPA, when the five psychological adjustment scales of the MAACL-R6 were reduced into the Negative Affect and Well-Being composite scores of the MAACL-R6, and these two composite scores were used as predictors of GPA.

Summary statistics of this analysis were presented in table 13. The full model accounted for 6 % of the explained variance in GPA and this amount was statistically significant ($F(2, 135) = 4.34, p < .05$). Out of the independent variables entered in the equation, Well-Being emerged as a significant predictor of GPA. Concerning the regression coefficients, the positive relationship between Well-Being and GPA ($\beta = .03$) indicates that persons who achieve higher levels of well-being are more likely to have higher GPA. The negative relationship found between Negative Affect and GPA ($\beta = -.03$) shows that negative affect adversely affects GPA, but it was not significant ($t = -1.85, p = .066$). With regard to average absence, psychological adjustment didn't significantly predict students' average absence.

Table 13. Multiple Regression with Psychological Adjustment as a Predictor of GPA

Dependent Variable and Predictors Entered	β	t	p -value
GPA			
Negative Affect (CS)	-.03	-1.85	.0660
Well-Being (CS)	.03*	2.26	.0252

Note. $n = 138$.

(CS) = (The Composite Score of the MAACL-R6).

* $p < .05$. ** $p < .01$. *** $p < .001$.

Hierarchical Regression Analyses for Finding a Mediator

The Potential Mediator of Coping Strategies. Hierarchical regressions are usually used to know whether the addition of new predictors may account for a significant amount of the variance in the dependent variable beyond the variance explained by predictors previously entered into the regression equation. In addition, hierarchical regressions can also be used to find that the effects of predictors on the dependent variable is mediated by the third variable. According to Baron and Kenny (1986), mediating effect is demonstrated when the following conditions are met: (1) the independent variable predicts both the dependent variable and the potential mediator; (2) the potential mediator predicts the dependent variable; and (3) the effects of the independent variable on the dependent variable is eliminated or substantially reduced to the non-significant level when both the independent variable and the mediator are entered into the regression equation, but the mediator is entered before the independent variable.

In this context, several hierarchical regressions were conducted to test the hypothesis of this study that the effects of ethnic identity on psychological adjustment would be mediated by coping strategies. According to Baron and Kenny's (1986) suggestions, the mediating effect of coping strategies would be demonstrated when the following conditions are met: (1) the independent variable of ethnic identity significantly predicts both the dependent variable of psychological adjustment and the potential mediator of coping strategies; (2) the potential mediator of coping strategies significantly predicts the dependent variable of psychological adjustment; and (3) the effects of ethnic identity on psychological adjustment is eliminated or substantially reduced to a non-significant level when both the independent variable of ethnic identity and the potential

mediator of coping strategies are entered into the regression equation but coping strategies are entered before ethnic identity.

As already shown in Table 9 and 10, the independent variable of ethnic identity and the potential mediator of coping strategies significantly predicted the psychological adjustment variables such as Depression, Positive Affect, and Well-Being. If coping strategies mediate the relationship between ethnic identity and psychological adjustment, the effects of ethnic identity on psychological adjustment should be significantly eliminated when the potential mediator of coping strategies is entered into the regression analysis before the independent variable of ethnic identity. Table 14 contains the summary statistics of hierarchical regressions conducted to test whether coping strategies would mediate the relationship between predictors of the ethnic identity variables and each of the dependent variables of Depression, Positive Affect and Well-Being.

Table 14. Hierarchical Regression Analysis of Coping Strategies as a Mediator

Dependent Variable	Step 1 (Sex)		Step 2 (Coping Strategy Variables)		Step 3 (Ethnic Identity Variables)	
	R^2	F	R^2 change	F change	R^2 change	F change
Depression	.0278	4.17*	.1372	7.83***	.0589	2.64*
Positive Affect	.0006	0.09	.0544	2.74*	.1966	9.13****
Well-Being	.0010	0.14	.0575	2.91*	.1660	7.44****

Note. $n = 148$.

* $p < .05$. ** $p < .01$. *** $p < .001$. **** $p < .0001$.

In the first step of every regression analysis, the demographic variable of sex was entered into the equation. The reason for this is due to the findings that there were significant sex-related differences in the psychological adjustment variables (the MAACL-R6 scales) among African American high school students. Therefore, the sex-related variance in the psychological adjustment variables had to be first controlled by putting sex into regression analysis in the first step. Significant sex-related group differences in the psychological adjustment variables were already discussed earlier in the MANOVA section. As shown in Table 14, the first hierarchical regression was to predict the dependent variable of Depression, using the predictors of sex, coping strategies, and ethnic identity. As already mentioned, the controlled variable of sex was entered into the equation in the first step. In step 2, the coping strategy variables set (the CISS scales) was entered into regression analysis, and the block of the ethnic identity variables (the MEIM scales) was entered in the last step.

It was found that sex, coping strategies and ethnic identity all significantly predicted Depression. All sets of predictors together explained 22 % of the variance in Depression ($F(8, 139) = 5.01, p < .0001$). When entered first, the controlled factor of sex significantly accounted for 2.8 % of the explained variance in Depression ($F(1, 146) = 4.17, p < .05$), suggesting that there existed a significant amount of sex-related variance explained in Depression. In the second step, the potential mediator of the coping strategy variables added a significant 13.7 % of the variance in Depression ($F(3, 144) = 7.83, p < .001$), indicating the second criteria set by Baron and Kenny (1986) was met that the potential mediator predicts the dependent variable. However, in the third step, the set of the ethnic identity variables accounted for a significant 5.9 % of the explained variance in

Depression ($F(4, 143) = 2.64, p < .05$), which suggested that the effects of the ethnic identity variables on Depression were not eliminated when the potential mediator of the coping strategy variable was entered into the regression equation before the ethnic identity variables set. Therefore, it can be concluded that coping strategies didn't mediate the relationship between ethnic identity and depression.

Next, Positive Affect was substituted as the dependent variable. All sets of predictors together explained 25 % of the variance in Positive Affect ($F(8, 139) = 5.84, p < .0001$). In the first step, the controlled variable of sex was entered into the equation and explained an insignificant 0.06 % of the variance in Positive Affect, indicating that contrary to the dependent variable of Depression, there didn't exist a significant amount of sex-related variance explained in Positive Affect. It is interesting to see that significant sex-related variance was found in Depression, but not in Positive Affect. In the second step, the potential mediator of the coping strategy variables added a significant 5 % of the variance in Positive Affect ($F(3, 144) = 2.74, p < .05$), indicating the second criteria set by Baron and Kenny (1986) was met that the potential mediator predicts the dependent variable. However, in the third step, the set of the ethnic identity variables accounted for a significant 20 % of the explained variance in Positive Affect ($F(4, 143) = 9.13, p < .0001$), which suggested that the effects of the ethnic identity variables on Positive Affect were not eliminated when the potential mediator of the coping strategy variables was entered into the regression equation before the ethnic identity variables set.

Therefore, it can be concluded that coping strategies didn't mediate the relationship between ethnic identity and positive affect. In the case of the dependent variable of Well-Being, the results were identical to the above case where the dependent

variable was Positive Affect. That is, after controlling for an insignificant 0.1 % of the sex-related variance and a significant 6 % of the coping strategy-related variance in Well-Being ($F(3, 144) = 2.91, p < .05$), ethnic identity variables still predicted Well-Being by explaining a significant 17 % of the variance in Well-Being ($F(4, 143) = 7.44, p < .0001$). Therefore, as in the case of positive affect, it can also be concluded that coping strategies didn't mediate the relationship between ethnic identity and well-being. In conclusion, coping strategies didn't mediate the relationship between the independent variable of ethnic identity and each of the dependent variables of Depression, Positive Affect, and Well-Being. In other words, ethnic identity directly affected psychological adjustment such as depression, positive affect, and well-being without the mediating effects of coping strategies.

Coping Strategies as a Mediator of Gender Effect. As discussed earlier in Table 14, it was found that coping strategies didn't mediate the relationship between ethnic identity and psychological adjustment. But, it was early to conclude that coping strategies didn't mediate any relationship. As discussed earlier in the MANOVA section, there were sex-related differences in coping strategies and negative affect. More specifically, African American female students used higher levels of emotion-and avoidance-oriented coping and felt higher levels of negative affect compared to males. Therefore, it became reasonable to hypothesize that the effects of sex (student gender) on negative affect would be mediated by coping strategies, especially, emotion-and avoidance-oriented coping. To test this hypothesis, a hierarchical regression was conducted with the dependent variable of Negative Affect (the composite score of the MAACL-R6), and the predictors of sex,

and the coping strategies variables (the CISS scales). Table 15 presents the summary statistics of this analysis.

In the first step, the potential mediator of the coping strategy variables set was entered into the equation. In step 2, the variable of sex (student gender) was entered into regression analysis. It was found that all sets of predictors together significantly explained 16 % of the variance in Negative Affect ($F(4, 144) = 7.07, p < .0001$). When entered first, the potential mediator of coping strategies significantly accounted for 15.6 % of the explained variance in Negative Affect ($F(3, 145) = 8.90, p < .0001$), suggesting that there was a significant amount of coping-related variance in Negative Affect. In the second step, the variable of sex just added an insignificant 0.86 % of the variance in Negative Affect ($F(1, 147) = 1.48, p = .226$), indicating the effects of sex (student gender) on Negative Affect were substantially eliminated when the potential mediator of coping strategies was entered into the regression analysis before the independent variable of sex. Therefore, it can be concluded that coping strategies mediated the relationship between sex and negative affect.

Table 15. Hierarchical Regression Analysis of Coping as a Mediator of Gender Effect

Dependent Variable	Step 1 (Coping Strategies)		Step 2 (Sex)		Full Model (Coping Strategies, and Sex)	
	R^2	F	R^2 change	F change	$R^2_{full\ model}$	$F_{full\ model}$
Negative Affect	.1555	8.90****	.0086	1.48	.1641	7.07****

Note. $n = 149$.

$p < .05$. ** $p < .01$. *** $p < .001$. **** $p < .0001$.

Out of the entire independent variables entered in the equation, Emotion-Oriented Coping emerged as a significant predictor of Negative Affect. Concerning the regression coefficients, the positive relationship between Emotion-Oriented Coping and Negative Affect ($\beta= 2.04$) indicates that persons who use higher levels of emotion-oriented coping strategies are more likely to feel greater levels of negative affect. The positive relationship was also found between Avoidance-Oriented Coping and Negative Affect ($\beta= 1.28$), but it was only marginally significant ($t = 1.95, p = .0527$).

The Potential Mediator of Ethnic Identity. Earlier, it was found that coping strategies didn't mediate the relationship between ethnic identity and psychological adjustment. Therefore, it became necessary to check if ethnic identity would mediate the relationship between coping strategies and psychological adjustment. When the order of entry of the two sets of predictors, coping strategies, and ethnic identity was reversed, it was possible to identify whether ethnic identity mediated the effects of coping strategies on psychological adjustment. Therefore, the potential mediator of ethnic identity was entered into the regression analysis before the independent variable of coping strategies to see if the effects of the coping strategy variables on psychological adjustment would be eliminated by the potential mediator of the ethnic identity variables.

As shown in Table 16, the first hierarchical regression was to predict the dependent variable of Depression, using the predictors of sex, ethnic identity, and coping strategies. In the first step, the controlled variable of sex was entered into the equation. In step 2, the block of the ethnic identity variables (the MEIM scales) was entered into regression analysis, and the coping strategy variables set (the CISS scales) was entered in the last step.

Table 16. Hierarchical Regression Analysis of Ethnic Identity as a Mediator

Dependent Variable	Step 1 (Sex)		Step 2 (Ethnic Identity Variables)		Step 3 (Coping Strategy Variables)	
	<i>R</i> ²	<i>F</i>	<i>R</i> ² change	<i>F</i> change	<i>R</i> ² change	<i>F</i> change
Depression	.0278	4.17*	.0762	3.02*	.1200	7.17***
Positive Affect	.0006	0.09	.2176	9.88****	.0334	2.07
Well-Being	.0010	0.14	.1878	8.22****	.0358	2.14

Note. *n* = 148.

* *p* < .05. ** *p* < .01. *** *p* < .001. **** *p* < .0001.

It was found that sex, ethnic identity and coping strategies all significantly predicted Depression. All sets of predictors together explained 22 % of the variance in Depression ($F(8, 139) = 5.01, p < .0001$). When entered first, the controlled factor of sex significantly accounted for 2.8 % of the explained variance in Depression ($F(1, 146) = 4.17, p < .05$), suggesting that there existed a significant amount of sex-related variance explained in Depression. In the second step, the potential mediator of the ethnic identity variables added a significant 7.6 % of the variance in Depression ($F(4, 143) = 3.02, p < .05$), indicating the second criteria set by Baron and Kenny (1986) was met that the potential mediator predicts the dependent variable. However, in the third step, the set of the coping strategy variables accounted for a significant 12 % of the explained variance in Depression ($F(3, 144) = 7.17, p < .001$), which suggested that the effects of the coping strategy variables on Depression were not eliminated when the potential mediator of the ethnic identity variables was entered into the regression equation before the coping

strategy variables set. Therefore, it can be concluded that ethnic identity didn't mediate the relationship between coping strategies and depression.

Next, Positive Affect was substituted as the dependent variable. All sets of predictors together explained 25 % of the variance in Positive Affect ($F(8, 139) = 5.84, p < .0001$). In the first step, the controlled variable of sex was entered into the equation and explained an insignificant 0.06 % of the variance in Positive Affect, indicating that contrary to the dependent variable of Depression, there didn't exist a significant amount of sex-related variance explained in Positive Affect. In the second step, the potential mediator of the ethnic identity variables added a significant 22 % of the variance in Positive Affect ($F(4, 143) = 9.88, p < .0001$), indicating the second criteria set by Baron and Kenny (1986) was met that the potential mediator predicts the dependent variable. Most importantly, in the third step, the set of the coping strategy variables accounted only for an insignificant 3 % of the explained variance in Positive Affect ($F(3, 144) = 2.07, p > .05$).

In other words, the effects of the coping strategy variables on Positive Affect were substantially eliminated when the potential mediator of the ethnic identity variables was entered into regression analysis before the coping strategy variables set. This result suggested that the third criteria set by Baron and Kenny (1986) was met that the effects of the independent variable on the dependent variable is eliminated or substantially reduced to the non-significant level when both the independent variable and the mediator are entered into the regression equation, but the mediator is entered before the independent variable. Therefore, it can be concluded that ethnic identity mediated the relationship between coping strategies and positive affect.

It is interesting to see that ethnic identity didn't mediate the relationship between coping strategies and depression, but it did mediate the relationship between coping strategies and positive affect. The most important reason why ethnic identity could mediate the relationship between coping strategies and positive affect is that ethnic identity was a much more powerful predictor of positive affect than coping strategies. Supporting evidence is that the ethnic identity variables accounted for most of the explained variance in Positive Affect (22 % out of the total 25 %), compared to 3 % of the variance explained by the coping strategy variables. Therefore, ethnic identity could play a role of mediator because ethnic identity was such a powerful predictor of positive affect and explained all or most of the association between coping strategies and positive affect.

Similarly, the most important reason why ethnic identity was not able to mediate the relationship between coping strategies and depression is that coping strategies, as compared to ethnic identity, were a much more powerful predictor of negative affect such as depression. Supporting evidence is that the coping strategy variables accounted for most of the explained variance in Depression (12 % out of the 22 % total), compared to 7.6 % of the variance explained by the ethnic identity variables. Therefore, ethnic identity could not play a role of mediator because coping strategies were such a powerful predictor of depression and explained most of the relationship between coping strategies and depression.

In the case of the dependent variable of Well-Being, the results were identical to the above case where the dependent variable was Positive Affect. That is, after controlling for an insignificant 0.1 % of the sex-related variance, the potential mediator of the ethnic identity variables accounted for a significant 19 % of the explained variance in Well-Being

($F(4, 143) = 8.22, p < .0001$), indicating that the potential mediator successfully predicted the dependent variable. Surprisingly, the set of the coping strategy variables, when entered last, accounted only for an insignificant 4 % of the explained variance in Well-Being ($F(3, 144) = 2.14, p > .05$). In other words, the direct effects of the coping strategy variables on Well-Being were substantially eliminated when the potential mediator of the ethnic identity variables was entered into regression analysis before the coping strategy variables set. Therefore, as in the case of positive affect, it can also be concluded that ethnic identity mediated the relationship between coping strategies and well-being.

The Potential Mediator of Psychological Adjustment. Hierarchical regression analyses were used to examine psychological adjustment as the potential mediator of the relationship between ethnic identity and academic involvement, especially GPA. Earlier, it was found that ethnic identity significantly predicted psychological adjustment and GPA. In addition, psychological adjustment also explained a significant amount of the variance in GPA. Therefore, there was a need to find the potential mediator of the relationship among ethnic identity, psychological adjustment, and academic involvement such as GPA. As can be seen in Table 17, a hierarchical regression was conducted to predict the dependent variable of GPA with sex, psychological adjustment, and ethnic identity as predictors.

This analysis showed that psychological adjustment mediated the relationship between ethnic identity and GPA because the effects of ethnic identity on GPA were considerably reduced by the mediator of psychological adjustment. In the first step, sex, the controlled variable was entered into the equation because, as already discussed in the MANOVA section, there was a significant amount of the sex-related variance in GPA. Therefore, the sex-related variance in GPA had to be controlled by putting sex into

regression analysis in the first step. In step 2, the block of the psychological adjustment variables (the Negative Affect and Well-Being composite scores of the MAACL-R6) was entered into regression analysis, and the ethnic identity variables (the MEIM scales) was entered in the last step.

It was found that all sets of predictors together explained 20 % of the variance in GPA ($F(7, 129) = 4.56, p < .001$). When entered first, the controlled factor of sex significantly accounted for 6.7 % of the explained variance in GPA ($F(1, 135) = 9.74, p < .01$), suggesting that there existed a significant amount of sex-related variance in GPA. In the second step, the potential mediator of the psychological adjustment variables added a significant 8.6 % of the variance in GPA ($F(2, 134) = 6.78, p < .01$), indicating the second criteria set by Baron and Kenny (1986) was met that the potential mediator significantly predicts the dependent variable.

Table 17. Hierarchical Regression Analysis of Psychological Adjustment as a Mediator

Dependent Variable	Step 1 (Sex)		Step 2 (Psychological Adjustment)		Step 3 (Ethnic Identity)	
	R^2	F	R^2 change	F change	R^2 change	F change
GPA	.0673	9.74**	.0862	6.78**	.0448	1.80

Note. $n = 137$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Most importantly, in the third step, the set of the ethnic identity variables accounted for 4.5 % of the variance in GPA, which was not significant ($F(4, 132) = 1.80, p = .1322$). This result also met the third criteria set by Baron and Kenny (1986). More specifically, the effects of the ethnic identity variables on GPA were substantially eliminated when the potential mediator of the psychological adjustment variables was entered into regression analysis before the ethnic identity variables set. Therefore, it can be concluded that psychological adjustment mediated the relationship between ethnic identity and academic involvement.

Factor Analyses

Factor Analysis of the Coping Inventory for Stressful Situations (CISS). A factor analysis was completed on all the items of the Coping Inventory for Stressful Situations (CISS). The results were calculated from a principal component factor analysis (Varimax rotation). The results of factor analysis showed that some items simultaneously had high loadings (.40 or greater) on two different component factors, but others did not had high factor loadings on any component factors. The eigenvalues and the rotated factor loadings associated with those problematic items for task-, emotion-, and avoidance-oriented coping factors can be found in table 18. The first component factor accounted for 28.7% of the variance, and appeared to measure problem-focused or task-oriented coping. The second component factor explained 10.5% of the variance, and assessed emotion-oriented coping. The third component factor measured avoidance-oriented coping, and accounted for 6.8% of the variance. This three-factor model accounted for the total 46% of the variance.

Considering that only items with factor loadings of .30 or greater should be examined (Tabachnik & Fidell, 1983), item #9 did not have a high factor loading on any of task-, emotion-, and avoidance-oriented coping factors. The task-oriented coping item #1, as compared to its factor loadings on emotion- and avoidance-coping factors, did not have a considerably higher factor loading on task-oriented coping factor. The same was true for the item #28 which was originally intended to measure emotion-oriented coping. Items #6, 10, 24, 34, and 39 simultaneously had high factor loadings on two different coping factors. The items #33 and 34 designed to assess emotion-oriented coping had the highest factor

loading on task-oriented coping factor. Finally, the items #35 and 44 for measuring avoidance-oriented coping had the highest factor loading on task-oriented coping factor.

Table 18. Factor Analysis of the Coping Inventory for Stressful Situations (CISS)

Coping Items	<u>Factor Loading</u>		
	Task	Emotion	Avoidance
1. Schedule my time better.	.40	.31	.32
6. Do what I think is best.	.36	-.04	.34
9. Window shop.	.06	.26	.10
10. Outline my priorities.	.33	.31	.28
24. Work to understand the situation.	.57	.43	.23
28. Wish that I could change what had happened or how I felt.	.31	.42	.15
33. Tell myself that it will never happen again.	.51	.35	.34
34. Focus on my general inadequacies.	.50	.41	.27
35. Talk to someone whose advice I value.	.57	.20	.14
39. Adjust my priorities.	.41	.52	.33
44. Take some time off and get away from the situation.	.41	.19	.16
<u>Eigenvalue</u>	13.8	5.03	3.25
<u>% of the Explained Variance</u>	28.7	10.5	6.8

All the items of the CISS mentioned above seemed to hurt the construct validity of the CISS in measuring the coping strategies used by African American adolescents. This finding has many implications for practice and research, which will be more specifically discussed in the following chapter.

CHAPTER 5

DISCUSSION

The overall purpose of this study was to examine the relationship among ethnic identity, coping strategies, academic involvement, and psychological adjustment in African American urban high school students. Especially, this study was designed to find a variable which mediated the relationship among the proposed variables. The original hypothesis of this study was that coping strategies would mediate the relationship of ethnic identity to the two outcome variables such as academic involvement and psychological adjustment. Only recently have empirical studies been undertaken to examine the possible relationship between ethnic identity and coping strategies, and the combined effects they may have on minority individuals' academic and psychological adjustment (Carter, 1991; Neville et al., 1997). The results of the present study not only confirmed a significant relationship among the proposed variables, but also contributed to adding new knowledge about the variables that mediated the relationship among the proposed variables. In the next section, the findings in this study will be discussed in more detail with implications and theoretical assertions. Finally, the limitations of the study and recommendations for future research will be outlined.

The Relationship between Ethnic Identity and Coping Strategies

One of the major hypotheses in this study was that coping strategies would mediate the relationship of ethnic identity to the outcome variables such as academic involvement and psychological adjustment among African American urban high school students. This hypothesis was generated on the basis of ethnic identity theory and research that have asserted that more advanced ethnic identity achievement predicts more effective coping strategies in dealing with ethnic issues and conflicts, and vice versa. (Cross, 1971; Berry et al., 1987; Phinney, 1989; Carter, 1991; Neville et al., 1997). Therefore, ethnic identity theories seem to assume that there is a unilateral relationship between ethnic identity and coping strategies by emphasizing ethnic identity as a major influence on coping with ethnic issues and conflicts. Consistent with theoretical assertions, it was found in this study that there was a close relationship between ethnic identity and coping strategies. However, the relationship between ethnic identity and coping strategies was found to be not unilateral from ethnic identity to coping strategies, but rather reciprocal. This finding was one of the most notable results in this study.

Multiple regression analyses showed that ethnic identity and coping strategies were significant predictors of each other. For example, in regression analyses with each of the coping strategy variables (the CISS scales) as the dependent variable and the ethnic identity variables (the MEIM scales) as predictors, Ethnic Identity Achievement was found to be a major predictor of Task-Oriented Coping. When the dependent variable and the predictor were reversed, Task-Oriented Coping emerged as a significant predictor of Ethnic Identity Achievement and Affirmation/Belonging. Therefore, it was concluded in

this study that ethnic identity and coping strategies had a reciprocal and bi-directional relationship by significantly predicting each other.

Besides the reciprocal nature of the relationship found between ethnic identity and coping strategies, the results of the present study also indicated the positive relationship between task-oriented coping and achieved ethnic identity. That is, individuals who use greater levels of task-oriented coping are more likely to have a higher sense of achieved ethnic identity. The reverse is also true due to the reciprocal relationship between ethnic identity and coping strategies. That is, persons who have a higher sense of achieved ethnic identity achievement are likely to use more task-oriented coping than avoidance- or emotion-oriented coping. The positive relationship found between task-oriented coping and achieved ethnic identity is supportive of ethnic identity models and theories which have consistently implied a reliable link between secure ethnic identity and effective coping strategies. For example, Phinney's (1989) ethnic identity development model holds that minority individuals finally come to achieve a secure ethnic identity as a result of active ethnic identity search and effective coping with ethnic issues and conflicts. Moreover, task-oriented coping, so-called "problem-focused coping" has been defined as more adaptive and effective compared to other types of coping activities such as avoidance- or emotion-oriented coping (Lazarus & Folkman, 1984; Compas et al., 1988; Bowman & Stern, 1995). Taken together, a conceptual link between ethnic identity and coping strategies was empirically confirmed among African American adolescents in this study. Furthermore, the nature of this relationship was found to be reciprocal.

Psychological Adjustment as a Mediator of the Relationship between Ethnic Identity and Academic Involvement

The relationship among ethnic identity, psychological adjustment, and academic involvement has been separately studied and very few studies have examined a whole picture of the complex interrelationships among them. For example, in terms of ethnic identity and psychological adjustment, a secure ethnic identity has been found to relate to positive psychological adjustment among African American students (e.g., Phinney, 1989, 1992). Regarding the relationship between ethnic identity and academic involvement, it has been suggested that noncognitive or psychosocial factors such as culturally friendly academic environment and coping with racism are as important or even more important to African American students' academic involvement than are the cognitive academic ability factors represented by the SAT scores (Tinto, 1975; Suen, 1983; Tracey & Sedlacek, 1984, 1985, 1987). Finally, concerning the relationship between psychological adjustment and academic involvement, it has been found that self-esteem, optimism, and resulting positive mood have a significant relationship to academic as well as psychological adjustment, and that such a relationship is largely mediated by the use of coping strategies (Taylor & Brown, 1988; Aspinwall & Taylor, 1992).

As mentioned earlier, this study addressed the need for getting a big picture of the interrelationship among ethnic identity, psychological adjustment, and academic involvement. This was done by finding a possible mediator. Consistent with previous studies, the results of this study indicated that ethnic identity, psychological adjustment, and academic involvement were all significantly related to one another. First of all, in regression analyses of the relationship between ethnic identity and psychological

adjustment, it was found that the entire ethnic identity variables (the MEIM scales) significantly accounted for 22 % of the explained variance in Positive Affect, 19% of the variance in Well-Being, and 8 % of the variance in Depression. That is, ethnic identity was found to be the strongest predictor of mental health such as positive affect and well-being among African American urban high school students. This finding is consistent with previous research efforts that minority adolescents who had a secure ethnic identity scored high on the psychological adjustment measures of self-esteem (Phinney, 1989, 1992).

On a univariate level, out of the ethnic identity variables, (the MEIM scales), Affirmation/Belonging and Other-Group Orientation had a significantly positive relationship to both positive affect and well-being. Taken together, individuals who show strong attachment to their own ethnic group, and also accept other ethnic groups are more likely to achieve high levels of mental health such as positive affect and well-being. Furthermore, special attention should be drawn to the finding that ethnic identity was a powerful predictor of positive psychological adjustment rather than psychopathology among African American urban adolescents. That is, ethnic identity significantly predicted positive affect and well-being much more than negative affect such as depression.

In terms of the relationship of ethnic identity and psychological adjustment to academic involvement, it was found that both ethnic identity and psychological adjustment significantly predicted GPA, but they failed to predict average class absence. Multiple regression analyses showed that the entire ethnic identity variables (the MEIM scales) accounted for 10 % of the explained variance in GPA, and that the whole psychological adjustment variables (the MAACL-R6 scales) explained a significant 6 % of the variance in GPA. On a univariate level, Other-Group Orientation and Well-Being had a significantly

positive relationship to GPA. It is surprising to find that Other-Group Orientation had a significantly positive relationship to GPA. The Other-Group Orientation scale of the Multigroup Ethnic Identity Measure (MEIM) assesses how much a respondent is open to other ethnic groups. A possible explanation for the positive relationship found between levels of acceptance of other ethnic groups and GPA is that data for this study were obtained from African American 9th graders in a urban high school where students are predominantly African Americans, but a majority of teachers are Caucasians. Therefore, African American students' acceptance of other ethnic groups such as Whites may play an important role in establishing an academically productive relationship with their White teachers and thus, increasing their academic involvement.

The finding of a significantly positive relationship between well-being and GPA also deserves attention. However, it is important to notice that a positive relationship between well-being and GPA didn't necessarily warrant a negative relationship between negative affect and GPA. Although negative affect had a negative regression coefficient with GPA, it was not statistically significant ($\beta = -.03$, $p = .066$). A possible explanation is that well-being and negative affect differently influenced GPA because of the independence of positive and negative affect. Studies of mood have generally found two independent factors: positive affect and negative affect (Watson & Clark, 1984). Positive affect has been found to be as predictive, or even more predictive, of subsequent behavior as is negative affect, and positive affect is defined as more than the absence of negative affect (Zuckerman, 1980). Additional evidence on the independence of positive and negative affect was also found in the intercorrelations among the psychological adjustment variables (the MAACL-R6 scales). It was found that Positive Affect and Well-Being were

not significantly correlated with Negative Affect including Anxiety, Depression, and Hostility in either positive or negative directions.

There is an increasing interest in the positive affects associated with approach rather than avoidance behavior, and mental health rather than psychopathology. For example, Taylor and Brown (1988) have suggested that high self-esteem, optimism, and resulting positive mood are all related to enhanced higher motivation, greater persistence in the face of obstacles, more effective task performance and eventually, greater likelihood of success. Consistent with the above, it was found in this study that well-being rather than negative affect was a significant predictor of GPA.

In terms of the combined effects of ethnic identity and psychological adjustment on GPA, it was found that psychological adjustment mediated the relationship between ethnic identity and GPA. Supporting evidence is that the direct effects of ethnic identity on GPA were substantially eliminated when the mediator of psychological adjustment was entered into regression analysis. The original hypothesis was that coping strategies would mediate the relationship between ethnic identity and academic involvement. However, the results of this study showed that psychological adjustment, but not coping strategies mediated the relationship between ethnic identity and academic involvement. One possible reason why coping strategies couldn't mediate the relationship between ethnic identity and academic involvement was that, unlike ethnic identity and psychological adjustment, coping strategies were found to be an insignificant predictor of the academic involvement variables such as GPA and average absence. This finding is contrary to Andelt's (1994) study in which coping strategies used by students accounted for 28 % of the explained variance in GPA, and thus, significantly predicted students' academic involvement.

Given that ethnic identity was a significant predictor of positive affect and consequential well-being rather than negative affect, and that positive affect and well-being had a stronger influence on GPA than negative affect, it can be suggested that positive affect and well-being played an important role in mediating the relationship between ethnic identity and GPA. Stated differently, the beneficial effects of a secure ethnic identity on GPA were significantly mediated by mental health variables such as positive affect and well-being.

Coping Strategies as a Mediator of the Relationship between Ethnic Identity and Psychological Adjustment

One of the major hypotheses in this study was that coping strategies would mediate the relationship between ethnic identity and psychological adjustment. There has been established a conceptual link among ethnic identity, coping strategies, and psychological adjustment (e.g., Phinney, 1989; Carter, 1991; Neville et al., 1997). The results of this study also supported a close link among those variables. For example, as mentioned earlier, there was a reciprocal relationship between ethnic identity and coping strategies. What is meant by “reciprocal” is that ethnic identity and coping strategies significantly predicted each other. The findings on the relationship between ethnic identity and psychological adjustment were also discussed in the previous section. In terms of the relationship between coping strategies and psychological adjustment, it was found through regression analyses that the entire coping strategy variables (the CISS scales) significantly accounted for 10 % of the explained variance in Anxiety, 16 % of the variance in Depression, 12 % of the variance in Hostility, 16 % of the variance in Negative Affect, 5 % of the variance in Positive Affect, and 6 % of the variance in Well-Being.

Based on these results, it can be suggested that coping strategies were a powerful predictor of negative affect rather than positive affect. More specifically, avoidance-or emotion-oriented coping significantly predicted negative affect much more than task-oriented coping predicted positive affect or well-being. This finding is the exact opposite of the case in which ethnic identity was a significant predictor of positive affect and well-being rather than negative affect. Taylor and Brown (1988) proposed a conceptual link among effective problem-focused coping strategies, positive mood, and psychological adjustment. However, the results of this study didn't seem to support it. In regression analyses, it was found that task-oriented coping didn't have a significantly positive relationship to either positive affect or well-being. Instead, a significantly positive relationship was found between ineffective avoidance- and emotion-oriented coping and negative affect.

In terms of the combined effects of ethnic identity and coping strategies on psychological adjustment, it was found that coping strategies didn't mediate the relationship between ethnic identity and psychological adjustment. Supporting evidence is that the direct effects of ethnic identity on psychological adjustment were not substantially eliminated when the hypothetical mediator of coping strategies was entered into regression analysis. Therefore, the hypothesis that coping strategies would mediate the relationship between ethnic identity and psychological adjustment was not supported in this study. That is, ethnic identity directly affected the psychological adjustment variables including well-being, positive affect, and negative affect (e.g., depression) without the mediating effect of coping strategies.

Ethnic Identity as a Mediator of the Relationship between Coping Strategies and Positive Psychological Adjustment

The results of this study showed that ethnic identity played a role as a mediator. This finding was as important as it was unexpected. More specifically, it was found that ethnic identity mediated the relationship between coping strategies and the mental health variables such as positive affect and well-being. However, ethnic identity didn't mediate the relationship between coping strategies and negative affect such as depression. The different mediating effects of ethnic identity were demonstrated depending on positive and negative affect, which may be due to the independence of positive and negative affect (Watson & Clark, 1984). First of all, the most important reason why ethnic identity could mediate the relationship between coping strategies and mental health was that ethnic identity was such a powerful predictor of positive affect and consequential well-being rather than negative affect and psychopathology. As compared to coping strategies, ethnic identity was a much more powerful predictor of mental health, and therefore, had a significantly stronger relationship to positive affect and well-being. Because of this strong relationship between ethnic identity and mental health, there was plenty of room for ethnic identity to mediate and explain most of the relationship between coping strategies and the mental health variables such as positive affect and well-being. Therefore, it can be suggested that the beneficial effects of effective coping strategies on mental health were significantly mediated by a secure and positive ethnic identity.

The exact opposite was true for the case where ethnic identity couldn't mediate the relationship between coping strategies and negative affect such as depression. As mentioned earlier, coping strategies were found to be a strong predictor of negative affect

rather than positive affect. As compared to ethnic identity, coping strategies were a much more powerful predictor of negative affect and therefore, had a significantly stronger relationship to depression. Because of this close relationship between coping strategies and negative affect, there seemed to be no room for ethnic identity to intervene and mediate the relationship between coping strategies and depression. Unlike the case of the positive mental health variables, coping strategies directly affected negative affect including anxiety, depression, and hostility without the mediating effects of ethnic identity. Therefore, it can be suggested that the direct effects of ineffective coping strategies such as avoidance-and emotion-oriented coping on negative affect were not mediated by an insecure ethnic identity.

Sex-Related Differences in GPA, Coping Strategies, and Negative Affect

Sex-related group differences were analyzed through multivariate analyses of variance (MANOVA). As a result, it was found that there were significant sex-related differences in academic involvement, coping strategies, and psychological adjustment among African American high school students. However, there were no gender differences in ethnic identity. In terms of academic involvement, African American female high school students had significantly higher GPA than males in this study. However, females and males didn't differ in average absence. There is no theoretical background for gender differences in GPA among African American high school students. Therefore, this finding may be specific to the high school where the data for this study were obtained.

Regarding coping strategies, female students indicated significantly more use of avoidance- and emotion-oriented coping than males. But, there were no gender differences in the use of task-oriented coping. Concerning psychological adjustment, female students,

when compared with males, reported significantly higher levels of negative affect. In contrast, there were no gender differences in positive affect and well-being. It is interesting to see that although female students, when compared with males, showed higher levels of negative affect, females and males didn't differ in positive affect and well-being. This result that significant gender differences were found only in negative affect, but not in positive affect and well-being can also evidence the independence of positive and negative affect.

The above-mentioned findings of this study build on a considerable body of empirical evidence that has suggested gender differences in depression and coping strategies. First, there is accumulating evidence on gender differences in adolescents' depressive symptoms. It has been suggested that depressive disorders and mood are greater for girls than for boys during adolescence. (e.g., Nolen-Hoeksema, 1987; Petersen et al., 1991; Nolen-Hoeksema & Girgus, 1994). Second, there is also considerable support for the hypothesis that the greater depression of women may be due partly to their different coping strategies. Gender differences in coping strategies have been addressed in the coping literature. The socialization theory has guided the gender-related research on coping. Specifically, it is suggested that women are socialized to express emotion, to employ emotion-oriented coping, and to seek the emotional support of others (Pearlin & Schooler, 1978; Rosario et al., 1988).

In this regard, several studies have indicated that women seem to be inclined to use more emotion-oriented coping and less problem-oriented coping than men (Folkman & Lazarus, 1980; Stone & Neals, 1984; Pearlin & Schooler, 1978; Brems & Johnson, 1989). As already discussed, in terms of the effectiveness of coping strategies, problem-focused,

or task-oriented coping has been related to positive psychological outcomes (Lazarus & Folkman, 1984; Compas et al., 1988; Bowman & Stern, 1995), whereas avoidance-oriented coping has been generally associated with negative affect and aversive mood states (Bowman & Stern, 1995). Regarding emotion-oriented coping, some studies have found that emotion-oriented coping is less adaptive than problem-oriented coping (e.g., Latack, 1986), whereas others have suggested for a functional role for certain types of emotion-oriented coping that include affective efforts to influence the appraisal of the stressfulness of a problem (e.g., Parkes, 1990; Strentz & Auerbach, 1988). However, there is a consensus that escape-avoidance types of emotion-oriented coping have been strongly associated with negative psychological outcomes (Collins et al, 1983; Aldwin & Revenson, 1987; Bowman & Stern, 1995).

Taken together, it can be assumed that adolescent females, when compared with males, experience higher levels of depression, and that the stronger relationship between adolescent females and aversive mood states is largely mediated by females' more use of ineffective coping strategies such as avoidance-or emotion-oriented coping. This theoretical assumption was empirically supported in this study. More specifically, it was found that females scored significantly higher than males on the Negative Affect scale (the composite score of the MAACL-R6), and that this effect of sex (student gender) on negative affect was largely mediated by coping strategies. The direct effects of sex on negative affect were substantially eliminated when the mediator of coping strategies was first entered into regression analysis. Therefore, it can be suggested that female students' higher levels of negative affect, when compared with males, were mediated by their significantly more use of avoidance-and emotion-oriented coping, whereas male students'

lower levels of negative affect were mediated by their less use of avoidance- and emotion-oriented coping than females.

Ethnic and Cultural Differences in Coping

Daly et al. (1995) pointed out African Americans' unique orientation to coping and resolving problems through interpersonal processes, and emphasized the importance of African American community in developing effective coping. African Americans' collective and interpersonal approach to coping was also reflected in this study's results. Factor analysis of the Coping Inventory for Stressful Situations (CISS) suggested that some items of the CISS did not measure what they were supposed to assess. For example, the items such as "talk to someone whose advice I value" and "take some time off and get away from the situation" were originally designed to assess avoidance-oriented coping, but the results of factor analysis showed that those items more represented task-oriented coping of African American adolescents. Talking to somebody for advice and taking some time off to get away from the situation may be regarded as avoidance behavior by a Western culture that values individualism and rationality. However, this study's results revealed that those behaviors could be an effective task-oriented coping of African American adolescents. Moreover, the item of "tell myself that it will never happen again" was originally intended to measure emotion-oriented coping, but it had the highest factor loading on task-oriented coping factor. Therefore, telling oneself that a bad event will never happen again could also be an effective coping behavior to African American adolescents. This finding reflects ethnic and cultural differences in coping behavior between African Americans and Whites, and those differences have to be carefully taken into account when African Americans' coping is assessed by the culturally blind measure

which was developed only using the White population. Considerable attention has to be given to the increased possibility to pathologize African Americans when such a culturally insensitive measure assesses African Americans' coping behavior.

Summary and Conclusions

The overall findings of this study demonstrated the close interrelationships among ethnic identity, coping strategies, academic involvement, and psychological adjustment in African American high school students. Especially, the importance of ethnic identity in understanding academic and psychological adjustment of African American adolescents was systematically highlighted by the following results: (1) ethnic identity was the strongest predictor of the mental health variables such as positive affect and well-being; (2) ethnic identity indirectly affected academic involvement through its effect on psychological adjustment; and (3) ethnic identity mediated the relationship between coping strategies and mental health. Most of the ethnic identity research has separately studied the relationship between ethnic identity and academic involvement (Fordham & Ogbu, 1986; Fordham, 1988; Swanson, 1994; Arroyo & Zigler, 1995), or the relationship between ethnic identity and psychological adjustment (e.g., Phinney, 1989, 1992). However, few studies have examined the comprehensive interrelationship among ethnic identity, psychological adjustment, and academic involvement. In this regard, the results of this study can contribute to creating a bigger framework to understand the total effects of ethnic identity on academic and psychological adjustment among African American high school students.

Furthermore, the results of this study supported the recent research efforts to

suggest a close link between ethnic identity and coping strategies by conceptualizing ethnic identity in a broader notion of coping strategies (e.g., Neville et al., 1997). In this study, a reciprocal relationship was found between ethnic identity and coping strategies, especially between ethnic identity achievement and task-oriented coping. Therefore, it can be suggested not only that persons with a secure ethnic identity are more likely to use effective coping strategies, but also that individuals who use effective coping strategies are more likely to achieve a secure ethnic identity. Another important finding was that the effects of ethnic identity or coping strategies on psychological adjustment were differently demonstrated on the basis of positive or negative affect. More specifically, coping strategies, when compared to ethnic identity, were found to be the stronger predictor of negative affect such as anxiety, depression, and hostility, whereas ethnic identity, when compared to coping strategies, was the more powerful predictor of the mental health variables such as positive affect and well-being. Supporting evidence is that coping strategies directly affected negative affect without the mediating effect of ethnic identity, whereas ethnic identity directly influenced positive affect and well-being without the mediating effect of coping strategies. This finding that ethnic identity and coping strategies differently predicted the positive and negative components of psychological adjustment deserves further research attention.

In addition, significant sex differences in coping strategies and negative affect were found in this study. As compared to males, African American female 9th graders used more emotion- and avoidance-oriented coping strategies, and showed higher levels of negative affect. This finding is consistent with the previous gender-related research on depression and coping strategies. In contrary, the results of this study also showed that

males and females didn't differ in ethnic identity development, mental health (e.g., positive affect and well-being), and the use of effective coping strategies (e.g., task-oriented coping). Therefore, the possibility exists that male and female students share the same level of psychological adjustment. More elaborated research attention should be paid to the possibility that sex is really a significant factor in explaining coping strategies and consequential psychological adjustment of African American high school students.

Finally, out of the ethnic identity variables (the MEIM scales), the Other-Group Orientation scale was found to be a powerful predictor of academic involvement and psychological adjustment among African American high school students. More specifically, other-group orientation had a significantly positive relationship to GPA, positive affect, and well-being. As mentioned before, this result probably suggests that the positive other-group orientation of African American students may play an important role in establishing an academically productive relationship with their White teachers and thus, increasing their academic involvement. Moreover, the positive relationship found between other-group orientation and mental health is a very meaningful result in light of the fact that the sample of this study was derived from African American high school students living in a racially homogeneous environment.

Implications of Findings

School counselors, teachers, and counselor educators are confused about how to begin conceptualizing and responding to the psychological needs of African American urban high adolescents. In terms of educational reform, Afrocentric education interventions have been strongly recommended, but they can not be successfully implemented without understanding the wide range of psychological needs of African

American students within a Black school and community in the urban environment. The purpose of this study was to address this issue by examining the relationships among ethnic identity, coping strategies, academic involvement, and psychological adjustment in 155 African American high school freshmen.

The results of this study indicated that ethnic identity plays an important role in promoting academic involvement, coping strategies, and psychological adjustment among African American urban adolescents. In terms of the relationship between ethnic identity and academic involvement, it was shown that ethnic identity has an indirect influence on GPA through its effect on psychological adjustment. Therefore, practical applications of this finding can be implemented when Afrocentric education interventions are designed to address the importance of positive ethnic identity in increasing psychological adjustment and academic involvement among African American high school students.

In addition, a positive and reciprocal relationship was found between secure ethnic identity and effective coping strategies. Furthermore, it was shown that ethnic identity and coping strategies may play a different role in enhancing psychological adjustment. More specifically, the development of secure ethnic identity contributed to psychological adjustment by increasing positive affect and well-being, whereas less use of ineffective coping strategies contributed to psychological adjustment by decreasing negative affect. With this in mind, educational programs and interventions for African American adolescents will have a greater impact if they have a dual emphasis on facilitating ethnic identity development and on enhancing the effectiveness of coping strategies.

Regarding sex-differences, the results of this study showed that African American female adolescents, when compared with males, tended to use more emotion-and

avoidance-oriented coping strategies and to exhibit higher levels of negative affect. Furthermore, it was found that the frequent use of emotion-and avoidance-oriented coping could exacerbate the perceived severity of life stress. In this sense, a decrease in the use of such coping strategies would be associated with a decrease in the degree of negative affect. Therefore, efforts to reduce the use of such less adaptive coping strategies may be important especially for African American female high school students. With this in mind, education programs and interventions for African American female adolescents will be likely to have a greater impact if they simultaneously focus on promoting the effectiveness of coping strategies and on enhancing the positive cognitive appraisal of life events to modify negative affect. In this context, school counselors, teachers, and counselor educators have to consider not only sex-differences but also ethnic and cultural differences in coping. As mentioned before, a coping behavior which is considered as ineffective by the Western culture can be effective for African Americans whose culture values collectivity more than individuality. This study's results also supported this point. For example, talking to somebody for advice or taking sometime off to get away from the situation can be an effective coping behavior for African American adolescents rather than for the Whites.

Finally, the results of this study revealed a positive relationship among African American students' other-group orientation, academic involvement, and psychological adjustment. More specifically, other-group orientation had a significantly positive relationship to GPA, positive affect, and well-being. If African American individuals operating in a racially homogeneous environment have high levels of acceptance of other ethnic groups, it is very likely that those people have achieved the advanced levels of

psychological flexibility and maturity. In this context, a positive relationship found between other-group orientation and positive outcomes may imply that positive attitudes toward one's own ethnic group and those toward other ethnic groups are not mutually exclusive, but rather complimentary. It also suggests that Afrocentric education interventions should simultaneously deal with two important issues: (1) how much African American students feel satisfied with their ethnic group membership; and (2) how much they acknowledge and accept other ethnic groups. Therefore, education programs and interventions designed to facilitate ethnic identity development among African American students will have a much greater impact if they simultaneously have a dual emphasis on increasing the positive attitudes of African American students toward their own ethnic group and on enhancing those of African American students toward other ethnic groups.

Limitations of the Present Study

The first limitation of this study relates to the issue of internal validity. As with most of social science research, this study was based on the self-reported questionnaires. The sampling procedure employed in this study was not random, but rather convenient. The variables examined in this study were not systematically manipulated nor controlled. Therefore, as with all nonexperimental correlational studies, the results of this study can't make any arguments about the causal relationships among the proposed variables.

A second potentially limiting factor is related to the assessment procedure of the proposed variables. Since all the data for this study were obtained from African American adolescent high school students, the nature of the proposed variables was developmentally oriented and changing over time. This issue raises the methodological question of how the proposed variables evolve over time and of how they can be best measured. The present

study employed a static measure to examine the proposed variables at a given point in time, and therefore, is unable to address the developmental issues of the proposed variables among the adolescent population. In order to more accurately address the developmental processes of the proposed variables, a longitudinal approach is recommended for the future research. A longitudinal approach can circumvent the skewed representation of the developmentally-oriented constructs that may result from a static one-time assessment of those constructs. In addition, a longitudinal approach may better describe the evolving processes of those developmentally-oriented constructs.

Another limitation of this study concerns the issue of external validity. As already mentioned, the sample of this study was derived from an extremely homogenous population of African American high school 9th graders in an urban, predominantly African American, and economically disadvantaged setting. Therefore, this raises the question of how much the results of this study can be generalized to other African American adolescents living in a different racial and economic environment. In order to increase the external validity and the generalizability of the results, the use of more random and diverse sampling procedures must be considered for future research.

A final limitation of the study concerns the failure of this study to consider the influence of the demographic factors (e.g., family socio-economic status) on the proposed variables. The demographic factors involve parents' educational level, occupations, marital status, and family socio-economic status. Although students were asked to answer the demographic questions in this study, many of them didn't answer those questions. For example, many students didn't know about their parents' educational level or their family socio-economic status. The failure of this study to consider the potential influence of the

demographic variables is due to the lack of students' responses to the self-reported demographic questions. Therefore, a more accurate and objective assessment of the demographic variables is needed to better understand or control for the potential influence of those extraneous variables.

Recommendations for Future Research

Recommendations for future research can be made on the basis of the strengths and limitations of this study. Major strengths of this study lie in the appropriateness and effectiveness of the measures used in this study. The measurement of ethnic or racial identity development for the African American adolescent as well as adult population usually brings diverse issues and problems. This holds true especially for the adolescent population. For example, in her doctoral dissertation, Peeke (1996) found that there were a lot of problems associated with using the measure of the Racial Identity Attitude Scale (RIAS-B: Helms, 1990) on African American high school students. For example, her data gathered from the administration of the RIAS-B demonstrated that little variation existed in students' racial identity attitudes. More specifically, the vast majority of the high school students sampled rated themselves as holding the highest level of racial identity. The lack of the variance in the major construct of racial identity automatically led to the lack of significant results found in her study. The RIAS-B versions were originally developed using African American college and university students attending predominantly White universities. Therefore, it can raise the question as to whether or not the RIAS-B is valid with African American adolescents, especially those living in a racially homogenous environment.

In addition, Peeke (1996) reported that a number of students prematurely dropped from her study in reaction to the anger and distress produced by the content of the items on the RIAS-B. Therefore, the negative reactions produced by the administration of the RIAS-B adversely affected the validity of using the RIAS-B with the adolescent population. Because of the above-mentioned issues and concerns, this study used the Multigroup Ethnic Identity Measure (MEIM: Phinney, 1992) to assess the ethnic identity of African American adolescent students attending a predominantly Black high school. The MEIM was developed to assess ethnic identity attitudes among diverse ethnic minority groups. Regarding the assessment concerns about using the MEIM, it was shown in this study that the administration of the MEIM didn't produce any anger nor distress for African American adolescent students. Regarding the resistance to the assessment procedure, no student dropped prematurely from this study in negative reaction to the MEIM.

Given the fact that the significant results on ethnic identity and its relationship to other variables were found in this study, it can be suggested that the use of the MEIM was appropriate for 155 African American high school students sampled in this study. Therefore, the MEIM rather than the RIAS-B is strongly recommended for the future research assessing ethnic or racial identity development of African American adolescents, especially those operating in a racially homogenous environment. All the measures used in this study were carefully selected because of the very limited reading skills of African American 9th grade participants in this study. Especially, the careful consideration of participants' reading ability in selecting the instruments significantly improved the validity of this study. Furthermore, as this study's results showed the ethnic and cultural

differences in coping, careful attention should be paid to the increased possibility that African Americans may be pathologized when their coping behavior is assessed by the culturally insensitive measures which were originally developed using the White population. Therefore, selecting the measures appropriate for research participants' demographics (e.g., age, sex, race, and reading ability) is strongly recommended because it is the first step to enhance the overall validity of the study.

The sample of this study was derived from a racially homogenous population of African American high school 9th graders in an urban and economically disadvantaged setting. For the future research, there is a need for using a diverse sample of African American high school and college students who attend both predominantly White and predominantly Black academic institutions. In addition, there is also a need for using a diverse sample in terms of socioeconomic status. As mentioned earlier, the sample of this study was derived from African American high school 9th graders living in an urban, predominantly African American, and economically disadvantaged environment. Therefore, it is possible that the lack of this study in using a diverse sample can negatively affect the generalizability of this study's findings. In order to increase the external validity and the generalizability of the study, the use of more random and diverse sampling procedure should be considered for the future study.

In this study, the significant influence of sex (student gender) on some of the proposed variables was found among African American high school 9th graders. However, as already discussed, this study failed to consider the potential influence of the demographic variables other than sex on the proposed variables. A more complete understanding of the sample demographics may make it possible to examine the influence

of extraneous variables such as parents' education, occupations, marital status, and family socio-economic status. Part of the reason for the failure of this study to consider the potential influence of the demographic variables is due to the lack of students' responses to the self-reported demographic questions. Therefore, a more objective assessment of the demographic variables is needed for the future study. In this sense, it is recommended that researchers should try to find the information on subjects' demographics from objective and accurate sources other than self-reported questions.

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APPENDICES

APPENDIX A**Parental/Guardian Consent Form For Student Participation in Research Project**

One of the major goals of Northwestern High School is to improve academic and psychological adjustment of students. The purpose of this study is to collect data on students' personal attitudes and opinions of their experiences. Results will be used to assist students in their efforts to academically and psychologically adjust in school. Results will also assist school staff in their counseling and instruction of students. Your consent will help Northwestern High School derive the benefits of this research project.

By giving permission for my child to participate in the study, I understand the following:

1. I consent to have my child discuss his or her attitudes, beliefs and opinions.
2. The data collected may be used for articles and presentations to help educators.
3. The data collected will be confidential, and in written presentations my child's identity will not be revealed.
4. My child may withdraw from this study at any time without penalty.

I give my child permission to participate in this research project.

Child's name: _____

Signature of parent or guardian: _____

Date: _____

 Hanik Jo, M.A.
 Principle Investigator
 (517) 355-1034

 Robbie Steward, Ph.D.
 Project Supervisor
 (517) 355-8502

APPENDIX B

Consent Form for Participation in Research Project

The College of Education at Michigan State University and Northwestern High School support the practice of protection for human subjects participating in research. The following information is provided so that you may decide whether you wish to participate in the present study.

This study is concerned with the identification and collection of students' personal attitudes, beliefs, and opinions of their experiences. Results will be used to assist freshmen in their efforts to academically and psychologically adjust in high school. Results will also assist school staff in their counseling and instruction of students.

Your participation is voluntary. Even if you agree to participate, you are free to withdraw at any time. You are welcome to ask questions about the study. All the results will be kept strictly confidential and will be destroyed upon completion of the study. Your name will NOT be associated with any research findings. The instruments will take about 40 minutes to complete. Michigan State University, Northwestern High School and myself greatly appreciate your cooperation. Thank you.

Signature of participant

Date

Print name here

Principle Investigator:
Hanik Jo, M.A.
Counseling Doctoral Student
Michigan State University

Project Supervisor:
Robbie Steward, Ph.D.
Associate Professor,
Michigan State University

APPENDIX C**Demographic Information**

Your Name: _____ (please print)

Sex (check one): Male _____ Female _____

Your mother's educational level (elementary school, middle school, high school, some college, graduate school, etc.): _____

Your father's educational level (elementary school, middle school, high school, some college, graduate school, etc.): _____

Your family's socioeconomic status (check one): Lower Working Class _____

Working Class _____ Lower Middle Class _____ Middle Class _____

Upper Middle Class _____ Upper Class _____

APPENDIX D

Multigroup Ethnic Identity Measure

Every person is born into an ethnic group, or sometimes two groups. But, people differ on how important their **ethnicity** is to them, how they feel about it, and how much their behavior is affected by it. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

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

4: Strongly agree	3: Somewhat agree	2: Somewhat disagree	1: Strongly disagree
------------------------------	------------------------------	---------------------------------	---------------------------------

- | | | | | |
|---|---|---|---|---|
| 1. I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs. | 4 | 3 | 2 | 1 |
| 2. I am active in organizations or social groups that include mostly members of my own ethnic group. | 4 | 3 | 2 | 1 |
| 3. I have a clear sense of my ethnic background and what it means to me. | 4 | 3 | 2 | 1 |
| 4. I like meeting and getting to know people from ethnic groups other than my own. | 4 | 3 | 2 | 1 |
| 5. I think a lot about how my life will be affected by my ethnic group memberships. | 4 | 3 | 2 | 1 |
| 6. I am happy that I am a member of the group I belong to. | 4 | 3 | 2 | 1 |
| 7. I sometimes feel it would be better if different ethnic groups didn't try to mix together. | 4 | 3 | 2 | 1 |

Sample items from the **Multigroup Ethnic Identity Measure** by J. S. Phinney. Copyright 1992 by J. S. Phinney. Published in *The multiple ethnic identity measure: A new scale for use with diverse groups*. Journal of Adolescent Research, *7*, 156-176.

APPENDIX E**Coping Inventory for Stressful Situations - Adolescent**

1. Schedule my time better.
2. Focus on the problem and see how I can solve it.
3. Think about the good times I've had.
4. Try to be with other people.
5. Blame myself for putting things off.
6. Do what I think is best.
7. Become preoccupied with aches and pains.
8. Blame myself for having gotten into this situation.
9. Window shop.
10. Outline my priorities.
11. Try to go to sleep.

Sample items from the **Coping Inventory for Stressful Situations** by Endler and Parker.
Copyright 1990 by Endler and Parker. Published in Coping Inventory for Stressful Situations (CISS): Manual. Toronto, Ontario: Multi-Health Systems Inc.

APPENDIX F**Multiple Affect Adjective Check List**

Please check every word that describes how you feel now, today. Work rapidly.

- | | | |
|-----------------------|------------------------|---------------------|
| 1. _____ Active | 21. _____ Friendly | 41. _____ Peaceful |
| 2. _____ Adventurous | 22. _____ Frightened | 42. _____ Pleased |
| 3. _____ Affectionate | 23. _____ Furious | 43. _____ Polite |
| 4. _____ Afraid | 24. _____ Glad | 44. _____ Rejected |
| 5. _____ Alone | 25. _____ Good | 45. _____ Sad |
| 6. _____ Angry | 26. _____ Good-natured | 46. _____ Satisfied |
| 7. _____ Annoyed | 27. _____ Happy | 47. _____ Secure |

Sample items from the **Multiple Affect Adjective Check List-R6** by Lubin et al.
Copyright 1995 by Lubin et al. Published in *A grade 6 reading level key for the Multiple Affect Adjective Check List-Revised*. Perceptual and Motor Skills, 81, 883-889.

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