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**RACIAL IDENTITY AND PSYCHOLOGICAL WELL-BEING AMONG AFRICAN
AMERICAN FRESHMEN AT A PREDOMINANTLY WHITE UNIVERSITY**

By

Mercedes E. Carswell

A THESIS

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ABSTRACT

RACIAL IDENTITY AND PSYCHOLOGICAL WELL-BEING AMONG AFRICAN AMERICAN FRESHMEN AT A PREDOMINANTLY WHITE UNIVERSITY

By

Mercedes E. Carswell

The present study examined racial identity and psychological distress (i.e. depression and anxiety) among African American freshmen at a predominantly White university.

Participants were 98 African American undergraduate freshmen (ages 17 – 19) at a Midwestern university who completed measures at the beginning of and after six weeks into their first semester. Measures included the Racial Identity Attitudes Scale, STAI, the BDI-II, and a self-report estimate of their high school racial composition. Although no main effects for Internalization attitudes, Immersion attitudes, or high school racial composition were found, results indicated two significant interaction effects on depression. Among students with relatively stronger Immersion attitudes, those with weaker Internalization attitudes showed the greatest increase in depressive symptoms and those with stronger Internalization attitudes showed the least. Among students with weaker Immersion attitudes, the risk for increased levels of depression was also greater among those lower Internalization attitudes. [Beta = .21, $t = 2.57$, $p < .05$]. Additionally, among participants who had attended a predominantly Black high school, those with relatively strong Immersion attitudes experienced a greater increase in depressive symptoms than those with relatively weak Immersion attitudes. Students who attended predominantly White high schools showed relatively little change in levels of depression, regardless of their Immersion attitude strength [Beta = -.16, $t = -2.05$, $p < .05$].

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INTRODUCTION

The freshman experience can be distressing without factoring in race, with a substantial number of freshmen experiencing depression (Kashani & Priesmeyer, 1983) and low self-esteem (Marron & Kayson, 1984). Race is likely to complicate the problem. Research suggests that during high school, minority students experience greater psychological well-being when attending a school in which they are in the racial majority rather than a distinct minority (Gray-Little & Carels, 1997, Hudley, 1997). The pattern often continues into college. D'Augelli and Hershberger (1993) found that the African American students in a predominantly White university reported lower energy levels, life satisfaction and overall well-being than White students. Further, James (1998) found that around 25% of African American students surveyed in his study showed a decline in self-concept and self-image when attending a predominantly Caucasian university.

Though not specifically mentioned, racial identity is likely to contribute to African American students' psychological well-being as well. Adolescents who are not a part of the White majority generally find identity development more complex with efforts to integrate ethnicity into their self-concept as an added complication (Steinberg, 1999). African Americans must decide if and to what degree their race is a defining factor in their overall experience of self. Many researchers have observed that racial minority teenagers find their search for an integrated, positive sense of self significantly more difficult than their White peers (for a recent review see Steinberg, 1999). Moreover, studies have found a relationship between difficulties consolidating a positive racial identity and both anxiety (Carter, 1991; Parham & Helms, 1985; Taub & McEwen, 1992), and depression (Chamber et al., 1998; Munford, 1994; Siegel, Yancy &

McCarthy, 2000). In addition, racial identity problems may operate as a risk factor that increases the likelihood that minority students entering a mostly Caucasian college environment will succumb to increases in psychological distress.

Conceptualizing Racial Identity

Just how racial identity is likely to influence psychological well-being among African American freshmen at White universities is difficult to articulate without a clear definition of the racial identity concept. Racial identity researchers have used the term in different ways, with a major debate surrounding whether to conceptualize and measure African American racial identity as a categorical construct (as in Cross' Nigrescence model) or dimensional construct (as in Seller' Multidimensional Model of Racial Identity) construct.

Nigrescence Theory.

The development of a racial identity for African-Americans has been modeled and theorized about extensively over the last 40 years. Arguably the most well-known and widely used model of Black identity development is the Cross model of Nigrescence. According to this model, a Black person matures through five stages of identity: Pre-encounter, Encounter, Immersion/Emersion, Internalization, and Internalization-Commitment (Cross, 1991), though only the first four are commonly used in research.

During the Pre-encounter stage, the Black individual incorporates a pro-White/Anti-Black dichotomous view towards life. All materials and representations of "Blackness" are devalued and a "White" frame of reference is adopted. Cross (1991) also identifies a subgroup of Pre-encounter Blacks who do not necessarily have anti-Black views, but instead do not feel that race is a significant element of their self-concept. The

second stage, Encounter, results from a distinct event in which the individual's frame of reference is challenged. The "White" norm is no longer adequate and previously held conceptions associated with the Pre-encounter stage are discarded. The sense of self is fragmented and the individual begins to build a new identity. Immersion-Emersion follows as individuals explore their "Blackness" and attempts are made to construct a new frame of reference. African Americans in this stage may become anxious because of a lack of identity stability, as they attempt to organize their new identity (Parham, 1989). The individual may live in complete contrast to the former Pre-encounter stage, now devaluing "Whiteness." The attitudes may manifest themselves in racial exclusivity in all social interactions and persistent dismissal of anything deemed "not Black enough." Anti-White feelings are often present. In the final stage, Internalization, the positive "Blackness" sought out and sculpted in the Immersion-Emersion stage is internalized for the first time. Security is the key concept in this stage in that the individual is finally secure with his or her "Blackness." Security allows for reconnection with other racial groups, including Whites. There is less of an idealization of "Blackness," and in its place, a full appreciation of what it means to be Black. The final stage, Internalization-Commitment, is quite similar to Internalization. The distinction is in the continuing concern for and active involvement in Black issues (Cross, 1991). Blacks in the Internalization-Commitment stage maintain their newfound security and invest their time and efforts towards educating and helping other Blacks.

In an attempt to create a measure that would reflect the stages of Cross' developmental theory, Helms and Parham (1985) constructed the Racial Identity Attitudes Scale (RIAS). Using four subscales to reflect Cross' first four stages, they

developed items representing attitudes hypothesized to be found in the corresponding stages. Helms and Parham (1996) report the scale has internal consistency reliabilities of .76 (Pre-encounter), .51 (Encounter), .69 (Immersion/Emersion), and .80 (Internalization), based on their work with African American university students. The RIAS also shows concurrent validity, in that the scale is positively associated with a scale of ethnic identity (Lemon & Waehler, 1996).

Though widely used, some researchers and theorists have been critical of the RIAS. The Pre-encounter scale has displayed a significant negative correlation with the Internalization scale (range = $-.28$ to $-.48$), which implies that the two scales, to some extent, are measuring opposite poles of the same construct (Lemon & Waehler, 1996; Munford, 1994; Yancio, Swanson, & Tokar, 1994). In examining the distribution of RIAS scale scores, Yancio, Swanson, and Tokar (1994) found that Pre-encounter scores tended to be positively skewed with most people choosing not to endorse Pre-encounter statements. This may be a result of social desirability or an individual taking offense to some Pre-encounter items (e.g. "I believe that Black people came from a strange, dark, and uncivilized continent").

Racial identity researchers also question whether the RIAS can actually measure Encounter attitudes given the stage's inherently transitory nature. Cross (1990) theorized the Encounter stage develops from an encounter event and then quickly leads into the Immersion/Emersion stage. Such a fleeting period would be difficult to capture. Additionally, past research has found little statistical support for the Encounter dimension when using the RIAS (Ponterotto & Wise, 1987; Yancio, Swanson, & Tokar, 1994). The RIAS has also been criticized because, consistent with the theory on which it is based, the

scores are interpreted categorically. Categorical scoring does not allow for individuals to have equally strong attitudes associated with two or more stages. However, the stages often share characteristics. For example, strong Internalization and Immersion attitudes both imply that race is central to the individuals' self-concept and suggest active involvement in black causes. In addition, the RIAS assumes that Internalization is the ideal and does not allow for values associated with other stages to be considered beneficial (Sellers, Chavous, & Cooke, 1998). For instance, because the Internalization stage is considered the ideal or "highest" identity status, activist characteristics associated with the Immersion/Emersion stage are seen as developmentally lower or inferior.

Multidimensional Model of Racial Identity.

Aware of the limitations of the Cross model of Nigrescence and its accompanying instrumentation, the RIAS, Sellers, Smith, Shelton, Rowley, and Chavous (1998) developed a model of racial identity that considers processes common to all minority identities while attending to the distinctive experience of being African American in America and the identity formation process that is exclusive to that minority group. This Multidimensional Model of Racial Identity (MMRI, Sellers et. al, 1998) consists of four components: salience, centrality, regard, and ideology. For the purposes of this study, the notion of centrality is most pertinent because it helps to bridge the racial identity work of Cross and that of other identity theorists who conceptualized ego identity development as a universal process. Centrality is the degree to which race is significant in an African American individual's general self-concept. The concept of identity centrality is inherent in all developmental models. Identity development involves designating greater or lesser importance to beliefs, values and behavior patterns experienced as self-defining.

However, the centrality construct does not capture the possibility of varying levels of exploration and consolidation emphasized in the general ego identity development literature, and a major aspect of Cross' theory as well.

Ego Identity Theory.

Erikson's (1968) well-known ego identity development theory, articulating identity development as a universal process, is based on two defining features; the amount of effort spent searching for an identity and the extent to which the individual is dedicated or committed to the selected identity. An achieved identity, presumably the ideal, develops from a period of exploration followed by commitment to a particular identity. Using Erikson's work, Marcia (1966) developed an identity model composed of four statuses based on the extent to which the individuals have been involved in searching for a new identity and the degree of their commitment to the present identity. Individuals in the Moratorium stage are not yet committed to an identity, but rather are in crisis, exploring new identity options. Foreclosure occurs when the individual has settled on an identity without exploration, usually as the result of identification with significant others. Identity Diffusion refers to the experience of individuals who are indifferent to identity issues, neither exploring nor committing themselves to a coherent identity. Identity Achievement is reached after a period of exploration followed by commitment to an identity.

More recently, theorists have included the notion of "regression" (falling back into an earlier developmental stage) and "progression" (bypassing an identity status) in their conceptualizations of identity development. For example, life events may force individuals in Achievement to reassess how they construe their identity resulting in a

cycling process to Moratorium (or even Diffusion), then back towards a new version of Achievement. Researchers have found that some adolescents cycle before and after reaching Achievement (Adams & Fitch, 1982; Meeus, Iedema, Helen, & Volleberg, 1999). As Erickson (1968) theorized, identity formation seems to be a life long process. Identity may change continuously, but at a slower rate after adolescence (Honest & Yardly, 1987).

Racial Identity Revisited.

Major racial identity work has also taken place under the rubric of ethnic identity. Phinney (1996) saw race as one aspect ethnicity, a construct based on physical appearance and societal beliefs. She conceptualized ethnicity as a categorization of individuals on the basis of race and culture, which could be associated with country of origin. In her work, Marcia's ego identity stages are reformulated to describe ethnic identity development. Phinney (1989) argues that minority individuals experiencing identity Diffusion have made little attempt to explore their ethnic identity and have no clear grasp of ethnic identity issues. Alternatively, those in identity Foreclosure are clear about their own ethnicity, but have not yet really explored identity alternatives. In the Foreclosure status, feelings about ethnicity can be positive or negative depending on socialization (i.e. unconditionally accepting parental views). In the Moratorium phase, there is evidence of ethnic identity exploration, but individuals are still somewhat confused about the meaning of their own ethnicity and its importance in their overall experience of self. Achievement occurs when minorities have explored their various identity options and have come to own, appreciate and accept their ethnicity. Using Marcia's model, while focusing on ethnicity, Phinney examined the ethnic identities of

91 American-born high school students. Black, Hispanic, Asian, and White students participate in the study. Based on her results, Phinney proposed a three-stage model of ethnic identity. The Foreclosure and Diffusion identity statuses could not be reliably distinguished in the study and therefore make up the first stage characterized by a lack of ethnic identity exploration. The second stage, Moratorium, involves exploration of one's ethnicity, but with little or no commitment. In the final stage, an individual is in an Achieved ethnic identity state that, like the Achieved states in other theories, results from a period of exploration and a firm commitment to the identity. Phinney (1992) created a 14-item scale to assess the theorized identity statuses. However, with items such as "I participate in cultural practices of my own group, such as special food, much, or customs" and "I have spent time trying to find out more about my own ethnic group, such as its history, traditions and customs," the scale seems too general to accurately reflect the totality of experiences and attitudes associated with African American identity.

It is conceptually easier to translate Cross' model as compared to the MMRI model into a general theory of identity that emphasizes exploration and commitment. The Pre-encounter stage equates well with the Identity Diffusion/Foreclosure stage, in which there is a lack of exploration and identity is based on prior socialization. Immersion-Emersion shares aspects with the Moratorium stage, most importantly the notion of exploration. African Americans in Immersion/Emersion are actively searching for a sense of what it means to be Black and have not consolidated their racial identity. The Internalization stage is fundamentally the same as the Achievement stage; race has been explored and secured into the individual's overall identity structure. The Immersion-Emersion stage depicts the experience of searching and experience of change in identity

whereas the Internalization stage describes the “habituation and internalization of the new identity” (Cross, 1991, p. 190). Only the Encounter stage does not fit into the transformation; the Encounter stage represents an immediate crisis (which may precipitate regression as well as progression) in contrast to the general feeling of indifference found in Diffusion. To summarize, the Immersion-Emersion and Internalization subscales of the Racial Identity Attitudes Scale can be viewed as dimensional measures of exploration with and without and commitment (respectively). The Cross model also allows for cycling among stages across the lifespan, as in the ego identity literature, with an Encounter experience as the catalysis for a shift in racial identity (Parham, 1989). However the cycling theory in racial identity still awaits empirical validation.

The MMRI is less adaptable than the RIAS given that, individuals can score high on a centrality measures, but engage in varying degrees of exploration and consolidation. The meaning of centrality for individual functioning is likely to vary as a function of whether it is experienced in the context of exploration or as the result of exploration. For example, African Americans with strong Immersion attitudes and high centrality may limit their social networks to only other Blacks, whereas African Americans with strong Internalization attitudes and high centrality will likely associate with people of different ethnicities. Additionally, scoring high on either scale appears indicative of having high racial centrality. Although the MMRI allows for greater complexity in defining Black racial identity, it may be bypassing the earlier theoretical contributions, losing essential distinctions associated with Cross’ model and general ego identity theory.

Together, the Immersion/Emersion and Internalization concepts may capture the exploration and commitment ideas essential to the identity construct and articulated by Phinney (1989) and other identity theorists (Erikson, 1968; Marcia, 1966). Individuals low on both measures presumably have not explored identity issues (i.e. they are in identity diffusion or foreclosure) and are in the equivalent of Phinney's first stage of ethnic identity development. African Americans with high scores on the Immersion measure and low scores on Internalization can be viewed as in Moratorium; immersing themselves in a Black identity, but not having reached an understanding and consolidation of aspects of the self found in the Achieved status because they are unwilling (and perhaps too insecure) to explore the relation of their Blackness to other identities based in the larger society. Alternatively, high scores on the Internalization measure, when combined with low scores on Immersion, may be indicative of an Achieved identity, what Phinney (1989) conceptualizes as the third and final identity status. It may appear that high scores on both scales should be associated with the achieved state. However, it seems unlikely that an individual would score high on Immersion and Internalization based on the developmental nature of the Achieved state. Marcia's (1966) theory, on which Phinney's work is based, assumes that an individual has, for the most part, completed the exploration period before entering identity Achievement; although more minor reorganizations are likely to occur over the lifespan (i.e. spouse identity, parental identity, occupational identity).

Identity and Psychological Well-being

Studies relating identity to psychological well-being include several focusing on identity in general and a smaller number focusing on ethnic identity in particular. In

terms of general identity research, Cross and Allen (1970) completed one of the earliest studies examining identity status and mood. Using the Zuckerman Mood Affect Adjective Checklist, they tested 81 male undergraduates and found no difference among the identity status groups in undergraduates' depression and anxiety scores. However, the racial and gender homogeneity of the sample (i.e. White males) limit generalizability of these results to the current study.

While Cross and Allen did not find differences in mental health among identity statuses, other research in ego identity work has linked identity statuses to psychological well-being. In a study completed during the same time period, Marcia and Friedman (1970) examined the ego identity status and anxiety level of 49 college women. The results showed that college women in the foreclosure identity status obtained the lowest Welsh Anxiety Scale scores, whereas women in identity diffusion attained the highest anxiety scores. However, like the Cross and Allen (1970) study, the homogeneity (i.e. White females) of the sample limits the generalizability to the present research. Further, these results are dated and obviously require future replication. In a later review of ego identity studies concerning psychological well-being, Waterman (1992) noted that across studies, moratorium individuals reported the highest levels of anxiety, whereas individuals in the more committed statuses (foreclosure and achievement) reported the least. The results imply that higher levels of commitment to an identity are associated with lower anxiety whereas high levels of exploration are associated with high anxiety.

A similar pattern has been discovered with depression. Meeus (1996) drew 2557 Dutch adolescents, 648 of which were between the ages of 18 and 20, from a national sample to investigate developmental identity and psychological well-being. Meeus found

that Moratorium adolescents were more depressed than adolescents in the remaining three statuses. An achieved identity was associated with the least amount of depression and highest level of general well-being. Further, diffusion and moratorium identities were related to lower general well-being than the identity statuses high in commitment. The cultural differences between Dutch and American adolescents limit the applicability of results. Yet the pattern of higher identity commitment and lower exploration relating to lower psychological distress is in accord with studies done with American adolescents.

In the general identity literature, the common thread is for greater identity exploration/moratorium to be associated with higher levels of psychological distress whereas higher identity commitment/achievement is associated with highest levels of psychological well-being. If this pattern holds for ethnic identity status as well, high Immersion attitudes should be related to high levels of anxiety and depression, whereas high Internalization attitudes should be associated with low levels of anxiety and depression. Some findings show this pattern. For example, Parham and Helms (1985) examined the relationship between racial identity attitudes and affect states in Black college students. The researchers gave 116 African American students from four predominantly White universities the Racial Identity Attitudes Scale to assess their racial identity status. The Symptom-90 Checklist (SCL-90), a measure of psychological symptoms, was given to assess the students' affective state. Using multiple regression analyses, the researchers found that higher Immersion attitudes were associated with higher scores of anxiety. The Immersion – high anxiety relationship was not among Parham and Helms' initial hypotheses and they did not offer any possible explanations for the connection. Yet, borrowing from the ego identity theorist, the lack of commitment

and high level of exploration associated with high Immersion scores could contribute to the increase in anxiety (Waterman, 1992).

Higher Internalization attitudes are theorized to be related to greater psychological well-being (Cross, 1991; Helms, 1990). One study that supports this premise examined the relationship between depression and racial identity. Munford (1994) gave 146 African American university students the RIAS, to evaluate racial identity, and the Beck Depression Inventory, a highly-regarded measure of depression. Regression analyses of the results demonstrated that racial identity attitudes were a significant predictor of depression. Although the associations were not extremely strong, Internalization scores were negatively correlated with depression scores ($r = -.23$) whereas Immersion scores were positively correlated with depression ($r = .14$).

Other researchers have not been able to relate psychological well-being to racial identity. Saylor and Aries (1999) found that first year minority college students with strong ethnic identity did not differ in levels of psychological well-being from those students with weaker ethnic identities. However, the sample in the study consisted of six ethnic minority groups and the number of African American participants was too small to make a separate analysis. In a study with similar non-significant results, Pyant and Yancio (1991) found that there was no association between depression or well-being of African American college students and their Immersion and Internalization scores on the RIAS. However, all of the participants were drawn from students at a predominantly Black university. Phinney (1990) noted that in racially homogenous environments, racial identity is likely to be less relevant to the self-concept of an individual of that race. Although not specifically stated, racial identity may be less relevant to psychological

well-being. If racial identity is more or less irrelevant at a predominantly Black university, it should not influence the psychological well-being of the students that attend the university. There is some support for this belief. As noted earlier, research suggests that during high school, minority students experience greater psychological well-being when attending a school in which they are in the racial majority rather than a distinct minority (Gray-Little & Carels, 1997, Hudley, 1997). However, in a more heterogeneous environment, racial identity should matter, and perhaps even more so in a predominantly White environment. Consequently, racial identity should bear some influence on psychological well-being in the proposed study.

Prior Interracial Experience

More generally, the lack of consistently strong, direct relationships across studies between racial identity and psychological well-being in African American college students, even at predominantly White institutions, suggest that other moderational factors may be involved. Previous interracial experience in an academic setting may be one such factor moderating the relationship between racial identity and psychological distress. For example, Graham, Baker, and Wapner (1985) examined whether the racial composition of an African American freshman's former high school also contributed their experience of psychological well-being during their first semester at a predominantly White university. The researchers assessed college adjustment in 42 Black freshmen on a predominantly White campus at three points during the Fall and Winter academic semesters. Using ANOVA for repeated measures to analyze their results, the researchers found that African American students from predominantly White high schools adjusted better emotionally to the predominantly White college than those who

had attended integrated high schools. African American students who attended predominantly African American high schools adjusted most poorly. However, D'Augelli and Hershberger (1993) did not find an association between high school racial composition and well-being. While examining the social networks of African American students at predominantly White colleges, the researchers noticed that the African American students reported lower total well-being, measured by the General Well-being Schedule, than the White students. In an attempt to clarify the discrepancy, the authors compared African American students' high school racial composition and well-being scores. Graham, Baker, and Wapner's study (1985) would suggest that the percentage of Blacks at the students' former high school would be a factor. However, D'Augelli and Hershberger found no significant differences between the well-being scores of African American students who attended predominantly White high schools and those who attended predominantly African American high schools. Yet, the analysis did not take the students' levels of racial identity into account. In addition, the extent to which African American students identify with their race may interact with their high school composition to influence their level of well-being. Certain patterns of racial identity attitudes could be an individual difference among African American students that determines that relationship between high school racial composition and psychological well-being. The psychological implications of identity exploration may intensify in a racial environment inconsistent with past experiences. African American students may be driven to greater Immersion attitudes at a predominantly White university if they attended a predominantly Black high school, leading to significant changes in psychological distress.

Summary and Hypothesis

Summary

The present study examined the predictors of psychological distress, specifically depression and anxiety, for incoming African American students at a predominantly White university. An integrative model of Black racial identity that consolidated the work of Cross and Phinney, by using Immersion and Internalization attitudes as dimensions of exploration/moratorium and internalization/achievement respectively, was used to assess the influence of racial identity on psychological well-being. Additional analyses were completed to determine if the percentage of Blacks at the students' former high school interacted with their racial identity patterns in explaining change in anxiety and depression.

As noted earlier, African American students frequently experience considerable difficulties consolidating race into their global identity (Steinberg, 1999) which is associated with increased psychological distress (Carter, 1991; Chamber et al., 1998; Munford, 1994; Parham & Helms, 1985; Siegel, Yancy & McCarthy, 2000; Taub & McEwen, 1992). These findings suggest that during a period of racial identity exploration (stronger Immersion attitudes), African American students may be more vulnerable to psychological distress. A predominantly White campus may pose an additional threat to their identity formulation, amplifying their risk for change in distress; especially for African American students without prior interracial experiences. Students who are already actively exploring their racial identity and who have also attended predominantly Black high schools are now forced to deal with the "race card" on a daily basis. They are no longer just "students" as they were in high school, they are "Black students" and must

reorganize their racial identity accordingly. The added complication of a new racial environment could increase the risk for change in psychological distress. However, stronger Internalization attitudes, indicative of a stronger appreciation of self and commitment to racial identity, may protect African American students; diminishing these risk factors (i.e. Immersion attitudes and racial high school composition) through a confident sense of self. While these students still may be concerned about what the environment means “to them,” stronger Internalization attitudes allow students to be less concerned with what being African American on a predominantly White campus means “about them,” thereby decreasing the risk of change in identity related psychological distress.

In this study, Internalization attitudes, Immersion attitudes, and high school racial composition were expected to interact in predicting change in the level of psychological distress during the first six weeks of the students’ first semester. Higher Internalization attitudes were expected to serve as a protective factor, given the implications of the attitudes for inner security with race and self-concept. Regardless of context, the internalized/achieved students were expected to show consistently low levels of psychological distress between time periods. In accord with higher levels of anxiety and depression related to a Moratorium identity status, higher Immersion attitudes were expected to be a risk factor for anxiety and depression. However, Internalization attitudes and high school racial composition were expected to moderate the relationship between Immersion attitudes and changes in psychological distress; with distress evident when Internalization attitudes are relatively weak and even more so when the students’ former high school was also predominantly Black.

Hypotheses

Hypothesis 1. Internalization attitudes will be directly related to change in psychological distress. African American students with high Internalization scores will experience significantly smaller increases in psychological distress between Time 1 and Time 2 than those reporting weaker Internalization attitudes, regardless of the level of Immersion and/or the percentage of Blacks at their high school.

Hypothesis 2. The change in psychological distress between time points will be highest when individuals' scores on Internalization dimension are relatively low, Immersion scores are relatively high (i.e. the individual is in moratorium) and these same individuals come from a predominantly Black high school.

METHOD

Participants

Initially, 149 African American undergraduate freshmen at Michigan State University, entering the University during the Fall semester of 2002, completed part of or the entire study questionnaire during the first data wave. Participants missing more than 10% of the data ($N = 8$, 5%) or failing to complete a questionnaire during the second data wave ($N = 43$, 28%) were removed from further analysis. The final sample of 98 participants (65% retention rate) included 25 men and 73 women. Participants were drawn from the Michigan State University Maximizing Academic Growth in College (MAGIC, $N = 27$) program targeting entering minority students, the College Achievement Admissions Program (CAAP, $N = 17$), a program directed toward first generation and low-income students, and from the introductory psychology subject pool ($N = 9$). Participants were also recruited in the MSU residence halls through posted fliers and information handed out by research assistance on site ($N = 45$). The mean age of the participants was 17.91 ($SD = .38$), while the mean high school GPA was 3.30 ($SD = .38$).

Procedure

This study included data from the first two waves of a larger study over five time points, that examined the psychological well-being and college adjustment of African American freshmen at a predominantly White college during their first year. Participants drawn from the MAGIC and CAAP programs listened to a brief presentation about the study and received a flier with a tear-off section to provide contact information if they are interested in participating. Students indicating interest were contacted and scheduled for a testing session. Participants recruited from the department subject pool signed-up for the

study using the departmental subject pool web-site after reading a short description on the study. Participants drawn from the residence halls were invited to attend a scheduled testing session, by means of direct contact with a research assistant or an informational flier posted in the vicinity. At Time 2, all participants received a questionnaire packet by mail three months after the initial testing date and were asked to complete it and/or return it during one of the scheduled pick-up sessions on-campus the following week. At each time point, students participating through the subject pool received course credit and those recruited in other ways received \$5 for completing the surveys. As further compensation, the names of all participants, regardless of the recruitment site, who completed questionnaire packets at a specified number of data points (inclusive of Time 1 and Time 2) were entered into a drawing for a \$25 cash award.

Testing sessions for the present study took place a) during the first two weeks of the Fall 2002 semester and b) at the end of the 6th week of classes. Participants attended one of six 2-hour group-testing blocks were scheduled for each data point. Participants unable to take part in the group sessions were contacted in order to set up alternative testing times. At the beginning of the first test administration, participants were asked to sign two copies of the consent form (one copy to turn in and one to keep for personal records) before receiving their first questionnaire packet. All questionnaire packets contained the Racial Identity Attitudes Scale Immersion/Emersion and Internalization subscales (Appendix A), Beck Depression Inventory-II, and State-Trait Anxiety Inventory. Participants were also asked to fill out a demographic questionnaire (Appendix B) during the first testing session. Instruments were counterbalanced to account for order effects.

Measures

Black Racial Identity

The Racial Identity Attitudes Scale – long form (RIAS). Two subscales for the RIAS (Helms & Parham, 1985) were used to assess the levels of Immersion/Emersion and Internalization. The RIAS is a self-report measure that consists of 50 items and uses a 5-point Likert scale (“strongly agree to “strongly disagree”). The Immersion/Emersion subscale contains 9 items, such as “I feel unable to involve myself in White experiences and am increasing my involvement in Black experiences” and “The most important thing about me is that I am Black.” The Internalization subscale is made up of 12 items which include “People, regardless of their race, have strength and limitations” and “I know through experience what being Black means.” The scores for each item in a particular subscale are summed and then divided by the number of items in the subscale. Omitted items are scored as the rounded average of the other items in the subscale. In one interpretation, racial identity is defined by the attitude subscale with the highest mean score. This assumes that a racial identity attitude is synonymous with its corresponding racial identity stage. As an alternative, Helms and Parham (1985) encourage researchers to interpret the results for all four subscales rather than assigning individuals to a single group based on their highest mean score. Helms and Parham (1996) report internal reliability estimates, based on a study of university students, as follows: Pre-encounter = .76; Encounter = .51; Immersion/Emersion = .67; Internalization = .80. However, due to prior criticisms surrounding the validity of the RIAS (Lemon & Waehler, 1996; Munford, 1994; Yancio, Swanson, & Tokar, 1994), a content analysis and confirmatory factor

analysis (CFA) were employed, to confirm the underlying structure of the Immersion and Internalization scales.

Psychological Distress

Anxiety and depression, found to be relatively prevalent among college students (Whatley & Clopton, 1992). It is well-known that anxiety is often comorbid with depression. In an extensive review of this comorbidity, Brady and Kendell (1992) found comorbidity estimates among ranging from 15.9 to 61.9%. Though they are comorbid, anxiety and depression are conceptually distinct. Although both are saturated with high negative affectivity (negative emotional feelings), low positive affectivity (positive affective states) is unique to depression (Watson, 1984; Watson, Clark, & Carey, 1988). Therefore, depression and anxiety were analyzed as separate dependent variables.

Beck Depression Inventory – II (BDI-II). The BDI -II (Beck, Steer & Brown, 1996) is made up of 21 items regarding symptoms considered consistent with unipolar depression. Each symptom is rated on a 4-point scale, 0 – 3, in terms of severity. A total score is calculated by summing the ratings of all 21 items with a maximum score of 63. If an individual chooses more than one answer, the response with the highest rating is used in the computation. Scores from 0 – 13 represent minimal depression, 14 – 19 are indicative of mild depression and 20 – 28 are associated with moderate depression. Severe depression is indicated by scores of 29 and above. The BDI-II is considered an improvement over the previous version of the scale due to changes in content and sensitivity (Beck, Steer & Brown, 1996; Steer & Clark, 1997). The scale assesses symptomatology over two weeks to correspond with DSM-IV guidelines. In addition, Beck and colleagues (1996) report that the scale's reliability (Coefficient $\alpha = .92$) is

higher than that of the original BDI (Coefficient $\alpha = .86$). No studies validating the BDI-II in African American samples were identified by the author, but a few studies of scale properties when using college students. The BDI-II has shown strong internal consistency (range = .89 - .92) with undergraduate samples and is considered a strong measure of depression for college students (Beck, Steer & Brown, 1996; Dozois, Dobson, & Ahnberg, 1998; Steer & Clark, 1997; Whisman, Perez, & Ramel, 2000).

State-Trait Anxiety Inventory (STAI). The STAI (Spielberger, Gorsuch, & Lushene, 1970) is a self-report measure that consists of two scales differentiating between state (fluctuating contextual condition) and trait (personality characteristic) anxiety and will be used to assess students' anxiety in the study. Each item is answered using a 4-point Likert scale, from 1 (not at all) to 4 (very much so). The State anxiety scale contains 20 items, such as "I feel calm" and "I am jittery," that assess how an individual at a particular moment. The Trait anxiety scale includes 20 items, such as "I feel like a failure" and "I am a steady person," that measure how the same individual normally feels. Scores for both scales can range from 20 (indicating low anxiety) to 80 (indicating maximum anxiety). Only the trait anxiety scale was used in the present study because the experience of distress was expected to be relatively stable, not just situational. In this study, the predominantly White university context was viewed as a constant, not situational, factor in the freshmen's lives.

The STAI has been validated using university students and has been used extensively with that population (Spielberger, 1983). The STAI shows strong reliability, with alpha coefficients from .91 to .93 for the State anxiety scale and .90 to .91 for the Trait anxiety scale (Spielberger, 1983); and concurrent validity with other measures of anxiety. Less

work has been done examining the psychometric properties of the STAI with African Americans. Brown and Duren (1988) tested the construct validity of the STAI with Black members of the Pentecostal Church of God. The STAI differentiated well between state and trait anxiety in this population. In a later and more encompassing study, Novy and colleagues (1993) found that the STAI reliably assessed state and trait anxiety in literate Whites, Black and Latinos. Therefore, it was feasible that the STAI provided a reliable and valid measure of trait anxiety in for the study.

Demographic Information.

A demographic questionnaire was administered to attain participants' age, sex, high school racial composition, and parental total household income. Participants were also asked to indicate their high school GPA.

RESULTS

Preliminary Analyses

Measurement Models for the Immersion and Internalization scales.

A content analysis of items in the RIAS Immersion and Internalization subscales originally identified by Helms and Parham (1996) (Appendix A) led to the elimination of four Immersion items and seven Internalization items that did not reflect the constructs as defined in the study. Three of the original nine items in the Immersion scale (items 6, 22 and 25) reflected disdain for the White race, not an exploration of Black identity, and were deleted; as was one item measuring the extent to which individual respondents are vocal about their general, rather than their racial beliefs (item 18). Of the twelve Internalization items in the original scale, three items (items 17, 26, and 27) seemed related to an individual's level of tolerance, not necessarily associated with acceptance of self, while three additional items appeared to measure an appreciation for Blackness likely to be equally characteristic in individuals with Immersion and Internalization attitudes (items 4, 7 and 20). Examination of frequency distributions led to the elimination of another Internalization item (item 7) that had minimum variability (80% of the respondents had extreme scores). Final items retained for further analysis are shown in Table 1.

A confirmatory factor analysis (CFA) using AMOS confirmed the underlying structure of the final 5-item Immersion and 5-item Internalization scales. Data from participants who responded to all 21 items of the RIAS (n=132 or 89% of the sample) were used for these analyses. Model fit was evaluated employing the Chi-square goodness of fit test, the Tucker-Lewis Index (TLI), Comparative Fit Index (CFI),

Table 1

Racial Identity Attitudes Scale Items

Latent Construct	Scale Item	Path Coefficients
Immersion	3. I am increasing my involvement in Black activities because I don't feel comfortable in White environments.	.70 (.49)
	13. I believe that the world should be interpreted from a Black or Afrocentric perspective.	.64 (.64)
	14. I am changing my style of life to fit my beliefs about Black people.	.71 (.70)
	19. I limit myself to Black activities as much as I can.	.36 (.34)
	23. The most important thing about me is that I am Black.	.52 (.51)
Internalization	1. I believe being Black is a positive experience.	.67 (.67)
	2. I know through experience what being Black in America means.	.76 (.75)
	24. Being black just feels natural to me.	.56 (.57)
	29. I am satisfied with myself.	.59 (.58)
	30. I have a positive attitude about myself because I am Black.	.72 (.74)

Note. () – coefficients derived when both constructs were run simultaneously

Cronbach's alphas for final Immersion and Internalization scales were $\alpha = .70$ and $.79$ respectively.

Immersion and Internalization unit weight scale, $r^2 = .24$, $\rho = .81$

Goodness of Fit Index (GFI) and the Root Mean Square Error of Approximation (RMSEA), as well as cut-off values recommended by Hu and Bentler (1998, 1999) and Jöreskog and Sörbom, (1993). Statistics for the 5-item Immersion scale indicated adequate fit between the predicted and observed measurement models (χ^2 (df 5, $N = 132$) = 3.56, $p = .62$]; RMSEA = .00, TLI = 1.04, CFI = 1.00, GFI = .99). Similarly, fit statistics for the 5-item Internalization scale were adequate (χ^2 (df 5, $N = 132$) = 7.47, $p = .19$]; RMSEA = .06, TLI = .97, CFI = .99, GFI = .98).

Differences in the Chi-squares of a model using the original Helm's items and a model using the final five items were computed for each construct. For the Immersion scale, the difference in the Chi-squares [$\chi^2 = (42.45(df = 27)$ vs. $3.56(df = 5)$] was statistically significant, thereby favoring the use of the 5-item rather than the original 9-item scale as a measure of the Immersion construct. Likewise, a comparison of the original 12-item Internalization model against the 5-item model of the same construct resulted in a significant Chi-square difference [$\chi^2 (189.75[df = 49]$ vs. $7.47[df = 5]$], favoring the use of the 5-item scale as a measure of the Internalization construct.

A final CFA confirmed the relative distinctiveness between the Immersion and Internalization constructs as measured by their respective final 5-item scales. In the model, Immersion and Internalization were allowed to covary ($\rho = .81$), given that both share a high valuation of "Blackness" (Figure 1). Regression weights derived from the analysis are shown in parenthesis in Table 1. Consistently good fit results across the various indicators led to the measurement model being judged as a good fitting model of

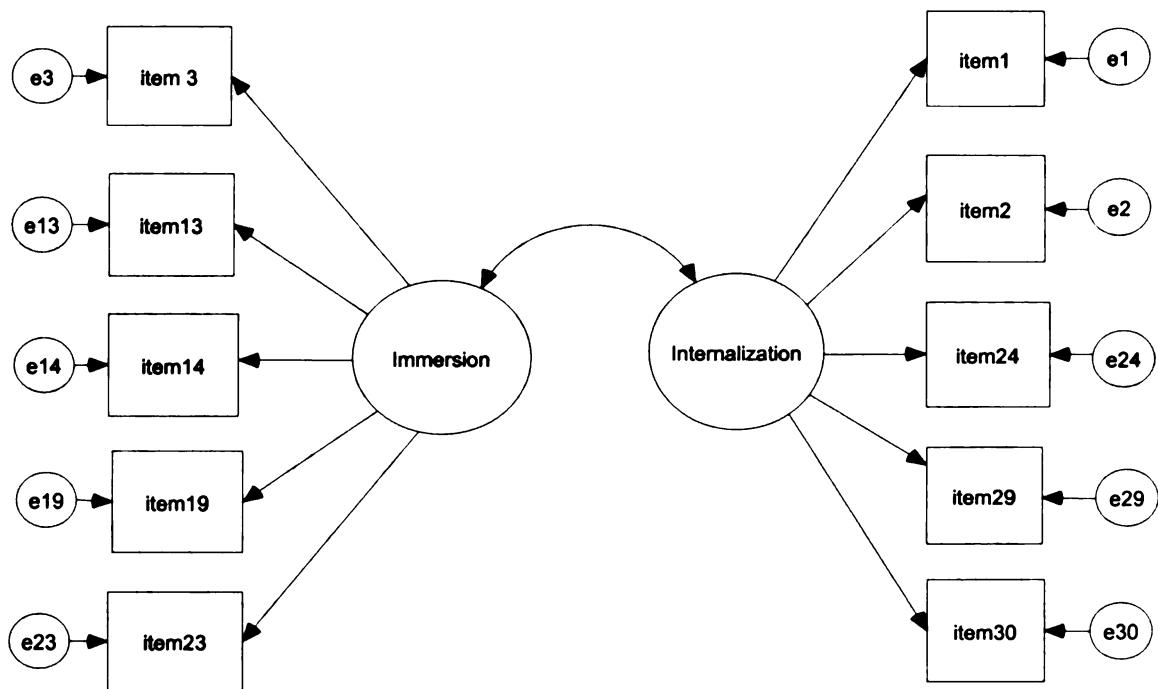


Figure 1. Measurement Model of Immersion and Internalization Scales

the data [χ^2 (df 34, $N = 132$) = 45.01, $p = .10$]; RMSEA = .05, TLI = .95, CFI = .96, GFI = .94. The correlation between the unit-weight scales was .24. Scale reliabilities for the resulting Immersion and Internalization scales were acceptable (Coefficient $\alpha = .70$ and .79 respectively).

Descriptive statistics.

Means and standard deviations for the variables in this study are presented in Table 2 and correlations among these variables in Table 3. A small number of participants had missing data on the BDI and/or STAI. A total of 24 participants were missing one or two on BDI or STAI at one of the two time points. Mean substitution was used to replace missing items for these participants. For this sample Cronbach's alphas for the BDI and the STAI-Trait were .87 and .88, respectively.

A comparison of means for the normative college samples for the BDI ($M = 7.65$, $SD = 5.9$) and the STAI ($M = 38.30$ $SD = 9.18$) with those for this sample showed that participants in this study generally experienced non-clinical levels of depression (at Time 1 and Time 2, M 's = 7.81 and 8.75 respectively) and average levels of anxiety, (M 's = 37.69 at Time 1 and 37.95 at Time 2). Before coming to the predominantly White university, most students in the study had attended a high school with a higher percentage of African American students than students of other races ($M = .63$).

T-tests comparing scores on each of the variables showed a significance difference in the Immersion scores of males ($M = 2.60$, $SD = .96$) and females ($M = 2.14$, $SD = .62$); $t(31.20) = 2.22$, $p = .03$; eta squared = .05). Male participants had somewhat stronger Immersion attitudes than female participants. Additionally, there was a significant sex difference in depression scores at Time 1. Male participants initially

Table 2

Properties of Study Measures: Means and Standard Deviations

Measure	Mean	SD
RIAS – Immersion	2.26	.75
RIAS – Internalization	4.26	.59
High School Racial Comp.	.63	.35
BDI – II (Time 1)	7.81	6.24
BDI – II (Time 2)	8.75	8.27
STAI – Trait (Time 1)	37.69	8.96
STAI – Trait (Time 1)	37.95	9.84

Table 3

Intercorrelations Among Study Variables

Variable	1	2	3	4	5	6	7
Participants (n = 98)							
1. Immersion	–	.138	.042	.024	-.105	.272 ^a	.077
2. Internalization		–	-.111	-.314 ^a	-.320 ^a	-.273 ^a	-.301 ^a
3. High School			–	.118	.130	.060	.175
4. Depression Time 1				–	.590 ^a	.594 ^a	.459 ^a
5. Depression Time 2					–	.507 ^a	.669 ^a
6. Anxiety Time 1						–	.619 ^a
7. Anxiety Time 2							–

^ap < .01

expressed fewer depressive symptoms than female participants (M 's = 5.46 (SD = 6.69) vs. 8.61, (SD = 5.91); $t(96) = -2.22$, $p = .03$; eta squared = .03). T-test analyses showed no significant sex differences in depression at Time 2, anxiety at Time 1 and Time 2, Internalization attitudes, or high school racial composition (Table 4).

As can be seen in Table 3, correlations among the variables in this study were relatively low, minimizing concerns of multicollinearity. Skewness among variables ranged from -0.57 to 1.94, while kurtosis ranged from -1.35 to 4.59 in the sample. Depression accounted for the higher instances of skewness and kurtosis (1.94 and 4.59 respectively at Time 2) consistent with the low prevalence of depression among African Americans in the general population (Brown, Ahmed, Gary & Milburn, 1995). Skewness and kurtosis values for the remaining variables generally did not significantly deviate from a normal distribution (West, Finch & Curran, 1995).

Tests of the research predictions

A hierarchical multiple regression analysis was employed to test the predicted relationships among racial identity, high school racial composition and “changes” in students’ psychological distress (i.e., trait anxiety and depression) over the first six weeks at a predominantly White university. Separate analyses regressed changes in anxiety and depression on other variables in the model. Change was measured by residual scores derived by regressing Time 2 anxiety or depression on Time 1 scores for the same construct. Variables were standardized with interactions computed as cross-products. Time 1 psychological distress scores were entered in on the first step. Main effects were entered in the second block. Three 2-way interactions (the cross-products of Internalization and Immersion, Immersion and high school racial composition, and

Table 4

Comparison of Means on Immersion and Internalization: T-test

	Means (SD)		df	t
	Males	Females		
Immersion	2.60 (.96)	2.14 (.62)	96	2.72 ^a
Internalization	4.35 (.61)	4.22 (.58)	96	.93
High School	.73 (.32)	.60 (.36)	96	1.60
Depression Time 1	5.46 (6.69)	8.61 (5.91)	96	-2.22 ^a
Depression Time 2	6.08 (4.86)	9.66 (9.00)	96	-1.89
Anxiety Time 1	37.53 (10.06)	37.74 (8.62)	96	-.11
Anxiety Time 2	36.12 (9.74)	38.58 (9.86)	96	1.60

^a $p < .05$

Internalization and high school racial composition) were entered in on the third step. The 3-way interaction was entered on the fourth step.

Hypothesis 1. Internalization attitudes were hypothesized to be a negatively related to changes in levels of psychological distress between Time 1 and Time 2. Although Internalization attitudes were significantly negatively correlated with depression and anxiety at Time 1 and Time 2 (see Table 3), results did not detect any main effects for Internalization, either for changes in depression [$\text{Beta} = -.13$, $t = -1.47$, $p = .15$] or changes in anxiety [$\text{Beta} = -.11$, $t = -1.33$, $p = .19$] between the two time points. Hence African American freshmen who reported stronger levels of Internalization attitudes at Time 1 did not experience lower levels of psychological distress, when controlling for initial distress, compared with African American freshmen reporting lower Internalization attitudes.

Hypothesis 2. Changes in depressive and anxiety symptoms were hypothesized to be most evident among participants with low Internalization attitudes and high Immersion attitudes coming from predominantly Black high schools. However, there were no significant three-way interaction effects for either depression [$F(8, 89) = 9.83$; $p = .20$] or anxiety [$F(8, 89) = 9.35$; $p = .29$]. Alternatively, two significant two-way interactions were found for depression. An interaction between Immersion and Internalization attitudes [$\text{Beta} = .21$, $t = 2.57$, $p < .05$] was associated with changes in depression scores. Among students with relatively stronger Immersion attitudes, those with weaker Internalization attitudes showed the greatest increase in depressive symptoms and those with stronger Internalization attitudes showed the least. Among students with weaker Immersion attitudes, the risk for increased levels of depression was

also greater among those lower Internalization attitudes. This relationship was less strong than for those with stronger Immersion attitudes (Figure 2).

A significant interaction between Immersion attitudes and high school racial composition was also associated with changes in levels of depression between Time 1 and Time 2 [Beta = $-.16$, $t = -2.05$, $p < .05$]. Among participants who had attended a predominantly Black high school, those with relatively strong Immersion attitudes experienced a greater increase in depressive symptoms than those with relatively weak Immersion attitudes (Figure 3). Students who attended predominantly White high schools showed relatively little change in levels of depression, regardless of their Immersion attitude strength. Additionally, while no significant two-way interaction was found when regressing the predictors on anxiety, there was a trend for the same Immersion/Internalization interaction for anxiety that was found for depression [Beta = $.15$, $t = 1.82$, $p = .07$]. Statistics from the regression analyses can be found in Table 5 and Table 6.

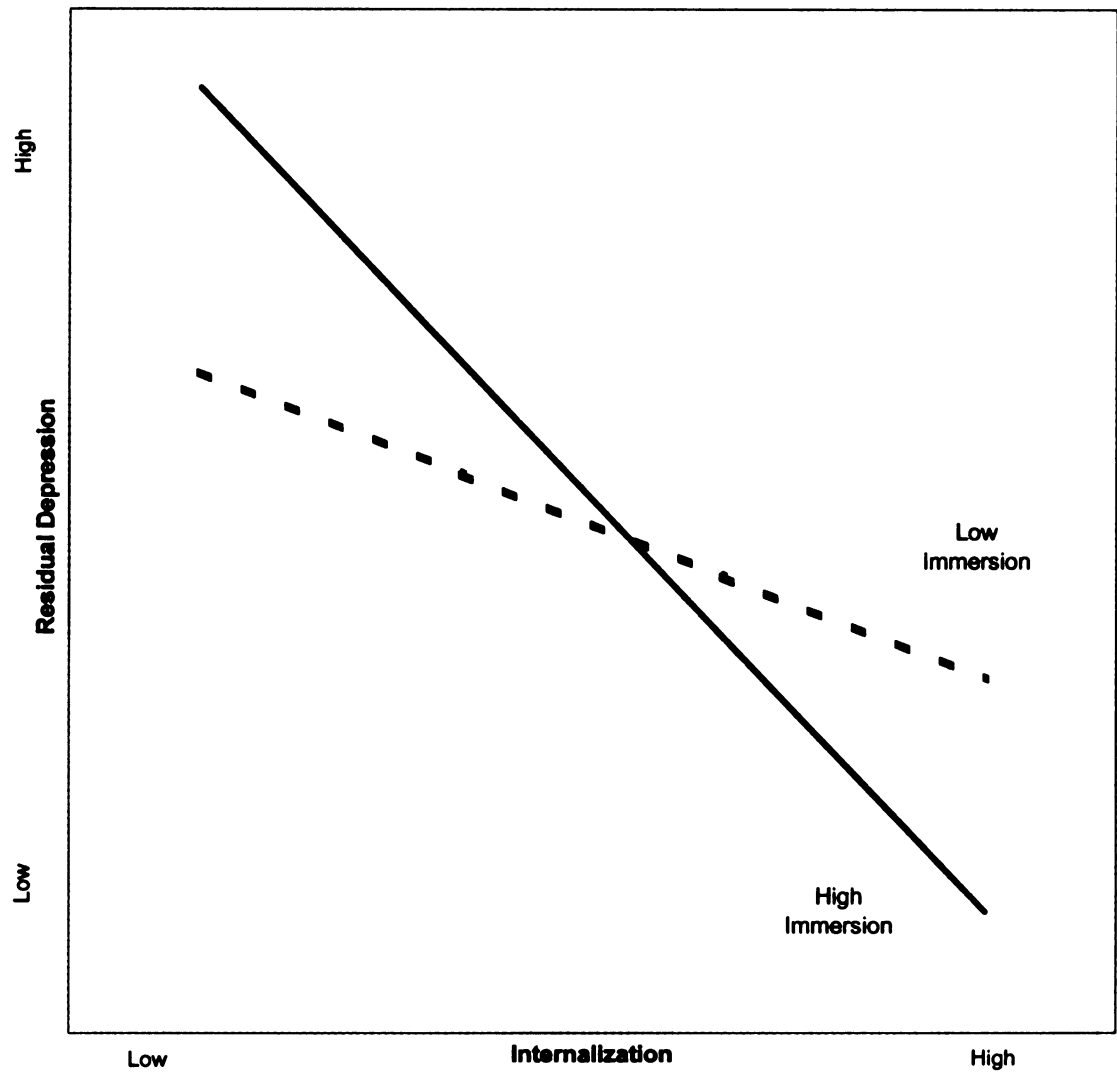


Figure 2. Immersion and Internalization Interaction on Residual Depression

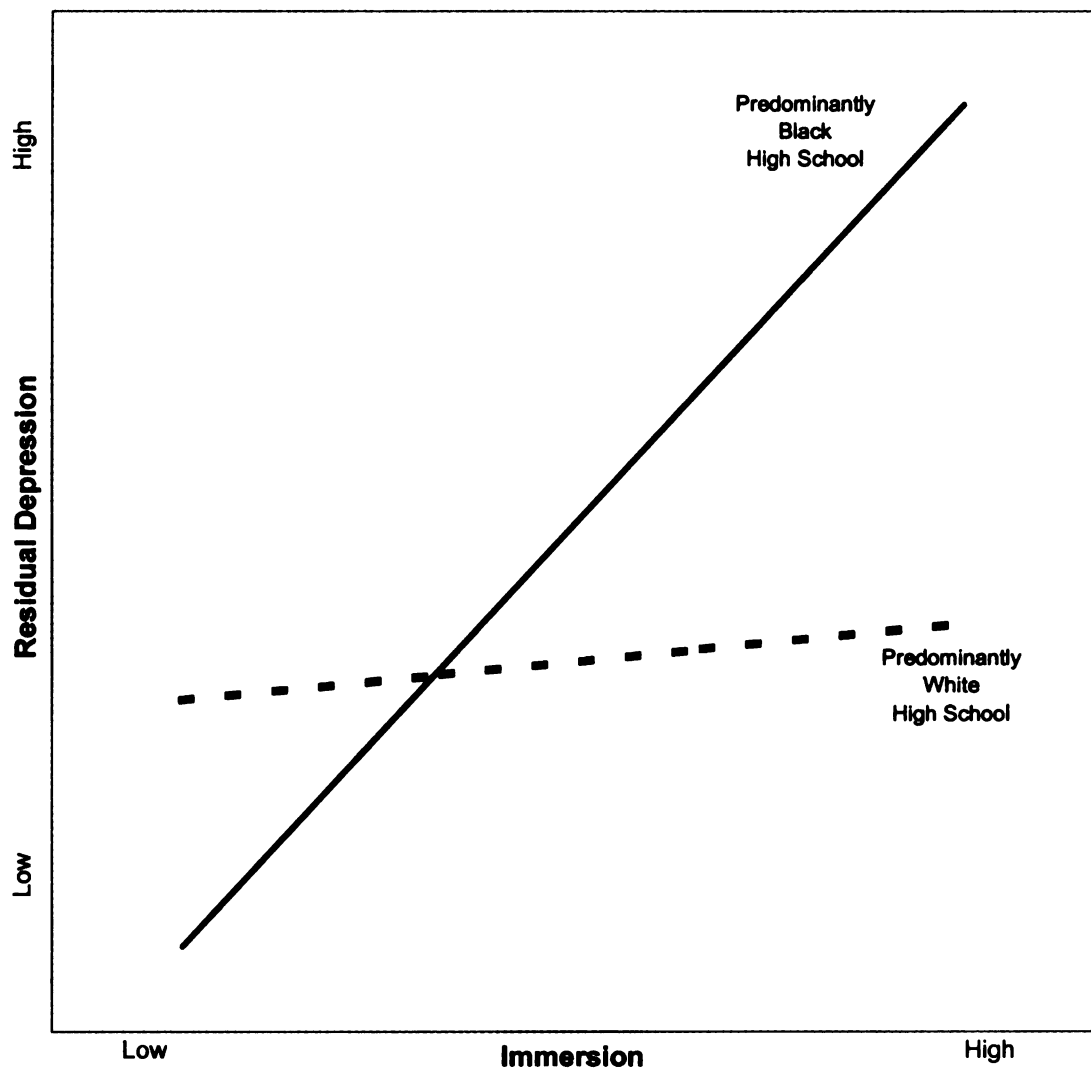


Figure 3. Immersion and High School Racial Composition Interaction on Residual Depression

Table 5

Hierarchical Regression Analysis for Predictors of Time 2 Anxiety
(N = 98)

Predictors	B	β/\ln	t-test	ΔR^2
Step 1				
Anxiety Time 1	.64	.62	7.73 ^c	.38 ^a
Step 2				
Immersion	-.08	-.08	-.91	
Internalization	-.14	-.11	-1.33	
HS Racial Composition	.13	.13	1.63	.04
Step 3				
Immersion x Internalization	.18	.15	1.17 ^b	
Immersion x High School	-.09	-.09	1.82	
Internalization x High School	.02	.02	-1.08	.03
Step 4				
3-way Interaction	-.10	-.09	-1.08	.01

^a $p < .05$, ^b $p = .07$

Table 6

**Hierarchical Regression Analysis for Predictors of Time 2 Depression
(N = 98)**

Predictors	B	β/\ln	t-test	ΔR^2
Step 1				
Depression Time 1	.63	.55	6.31 ^a	.35
Step 2				
Immersion	-.15	-.15	-1.76	
Internalization	-.16	-.13	-1.52	
HS Racial Composition	.02	.02	.26	.03
Step 3				
Immersion x Internalization	.25	.21	2.57 ^a	
Immersion x High School	-.18	-.16	-2.05 ^a	
Internalization x High School	-.13	-.11	-1.36	.08
Step 4				
3-way Interaction	.12	.11	1.31	.01

^a $p < .05$

DISCUSSION

This study was conducted in order to evaluate the predictive nature of racial identity for increased psychological distress, operationalized as increased anxiety and depression, among African American freshmen at a predominantly White university. Black racial identity was conceptualized by an innovative approach that consolidated the work of Cross (1991) and Phinney (1990); using varying magnitudes of Immersion and Internalization attitudes as dimensions of racial identity. African Americans with high scores on the Immersion measure were regarded as being in an exploration/moratorium phase whereas high scores on the Internalization measure were thought to be indicative of internalization/achievement. Strong Internalization attitudes were hypothesized to serve as a protective factor; African American students with high Internalization scores were expected to experience less dramatic increases in psychological distress over the first six weeks of the first semester than students with weaker Internalization attitudes, regardless of Immersion attitude strength or high school racial composition. Further, Internalization scores, Immersion scores, and high school racial composition were hypothesized to interact in predicting psychological distress. Strong Immersion attitudes and a predominantly Black high school racial composition were expected to be risk factors for changes in psychological distress and Internalization attitudes was expected to moderate these relationships. Psychological distress was hypothesized to be highest when the student's Internalization attitudes were relatively low, Immersion attitudes were high (identity exploration/moratorium) and the student had attended a predominantly Black high school.

Contrary to the first hypothesis, strong Internalization attitudes were not directly related to changes in psychological distress. Although correlations at each of the two time points were in the expected direction (i.e. negative), African American students who held strong Internalization attitudes were no more likely to report an increase in anxiety or depression than students with relatively weaker Internalization beliefs. Prior research using cross sectional data are not entirely consistent about the relationship between Internalization beliefs and psychological distress, with Cross (1991), Helms (1990) and Munford (1994) showing the expected negative relationship and Pyant and Yancio (1991), as well as Saylor and Aries (1999) finding no relationship. Failure in this study to link Internalization to changes in psychological distress may be a due to negative skew in Internalization scores. It is also conceivable that in a self-selection bias, students with stronger Internalization beliefs are more likely to attend a predominantly White university, diminishing variability. African American students with significantly strong Immersion attitudes may be less likely to consider attending a predominantly White university, favoring the “comfort” of Historically Black Colleges and Universities instead.

Study results partially supported the second hypothesis proposing a three-way interaction. While no three-way interaction effects were discovered, findings supported the notion of a relationship between an exploration/moratorium Black identity and depression, consistent with research in the general identity literature (Meeus, 1996; Waterman, 1992). Results identified two separate two-way interactions: one between Internalization and Immersion and another between high school racial composition and Immersion. Students with relatively strong Immersion attitudes and relatively weak

Internalization attitudes experienced a greater increase in depressive symptoms than those with both strong Immersion and strong Internalization attitudes. Only six weeks into their first semester, participants in an exploration/moratorium phase experienced a significant increase in depression. Desiring an opportunity for self-reflection and introspection around race, individuals with exploration/moratorium characteristics may have found themselves frustrated in a predominantly White campus. Additionally, students with relatively weaker Immersion attitudes and relatively higher Internalization did not experience a sizable increase in depressive symptom in comparison to participants with both relatively weak Immersion and Internalization attitudes. Notably, students with a High Immersion/Low Internalization pattern of identity experienced a greater increase in depressive symptoms than students with both relatively strong Immersion and Internalization attitudes. Immersion, in the context of varying degrees of Internalization, may be beneficial to well-being. These findings are noteworthy because they suggest that a High Immersion/High Internalization status, originally not considered meaningful in this study, could be considered a preferable identity status for psychological well-being, not what was perceived as an achieved Internalization state (commitment after exploration). This pattern of racial identity, quantifiable with this scale, may be what Cross (1991) considered Internalization-Commitment. The Immersion scale used in this study assessed a degree of “activeness” that Cross characterized in the Internalization-Immersion phase. Internalization-Commitment, not assessed in any racial identity measure at this time, could have far reaching implications for student well-being. Overall, these findings suggest that “exploration” and “commitment” are better defined by a composite of Immersion and Internalization attitude strength.

Interpretation of the interaction between Immersion and high school racial composition showed that among participants who had attended a predominantly Black high school, those with stronger Immersion attitudes were more at risk for increases in depression during their first semester at a predominantly White university than those with relatively weak Immersion attitudes. The mental health implications of Immersion attitudes are not moderated only by the strength of Internalization attitudes, but also by environment. An African American student may be in the process of defining themselves racially, but be less distressed if the environment remains supportive of their emerging racial identity. However, because this study did not examine the implications of racial identity among freshmen at a predominantly Black university, this possibility remains to be confirmed. Notably, students who attended a predominantly White high school had relatively no change depression regardless of the strength of their Immersion attitudes, suggesting that prior interracial experience may be a buffer for depression in this population.

Limitations

An important strength of this research was its longitudinal design. However the study was limited by a smaller sample size than originally intended, which may have reduced the possibility of finding a three-way interaction.

Another major limitation was possible recruitment biases. A substantially larger number of women participated in the study than men. It is unclear how sex may have acted as a selection bias (i.e. were women more open to help) or why men were more difficult to recruit. Given that males reported higher levels of Immersion than females in this study, it is conceivable that racial identity may have contributed to the difficulty in

recruiting men. While there is no information regarding the role racial identity may have played in the likelihood of participation, stronger Immersion attitudes may have been associated with a suspiciousness of a “Black” study on a predominantly White campus. It is also unclear if having an African American primary investigator on the study minimized the effect for some participants that were initially reluctant.

Although the study design called for the recruitment of “at risk” students (identified by their involvement in a campus program geared toward that population), a minimal number of those students participated. There were not enough students enrolled in the “at risk” program to do separate analyses, but it is possible that “at risk” students were also more at risk for psychological distress, given the number of stressors they may presented with (e.g. financial difficulties, poor college preparation). Future researcher may wish to look a level of “risk” as a moderating construct.

As previously discussed, other investigators have pointed out problems in the RIAS. Many of the items appear too ambiguous to differentiate between the dimensions they are theorized to reflect. While a CFA led to development of “tighter” measures of Immersion and Internalization, as conceptualized in this study, the measurement constructs may prove sample specific. Future research is needed to test whether these particular solutions can be found elsewhere. It is also unclear to what degree social desirability played a role in item response on the two scales.

Implications and Future Research

Given that the results tend to support the construct of Black racial identity theorized in this study; using levels of Immersion and Internalization as dimensions in which to identify Black identity statuses (i.e. moratorium and achieved) researchers in the

area of racial identity can utilize the RIAS in a new way, providing a way to appreciate the dimensional nature of the Immersion and Internalization constructs while employing them in a way consistent with generally identity “stages.” Since individuals, particularly adolescents, have been hypothesized to cycle through identity stages (Adams & Fitch, 1982; Meeus, Iedema, Helen, & Volleberg, 1999), it may be interesting to explore how varying levels of Immersion and Internalization may influence how African Americans cycle during their search for racial identity.

The study had a limited time frame for a change in distress to occur and it would be worthwhile to examine racial identity and psychological distress over a longer period of time. Stronger Internalization may have a protective, buffering effect over time instead of an immediate effect as theorized in this study. Alternatively, stronger Immersion attitudes may be associated with a trajectory of initially low to increasingly high psychological distress over the freshman year; which could explain the absence of a main effect for Immersion in this study. Analyzing individual differences in variable trajectories will help determine which variables have a significant influence on the development of depression and anxiety over time, thereby facilitating the creation of preventive treatment plans for student that may show little to no pathological symptomotogly earlier in the year, but experience greater distress as the semester progresses. Additionally, the study only looked at changes in psychological well-being as a function of racial identity measured at one point in time. Given the brief amount of time between data points, the likeliness of finding appreciable changes in racial identity was thought to be minimal. Therefore, utilizing only the initial racial identity scores seemed appropriate. However, further research examining changes in racial identity and the

associated changes in psychological well-being are needed for a more profound understanding of that relationship.

It is unclear why there were no significant changes in anxiety. One possible explanation is that changes in trait anxiety, considered a generally stable emotion, may take longer to manifest. Another possibility is that the changes in distress were limited changes in low positive affectivity, thereby inaccessible to an anxiety measure. Potential researchers may want to consider state and trait differences, as well as positive and negative affectivity, in their psychological distress outcome measures.

Another area of future interest may lie in students' perceptions of the university. Although this study viewed a predominantly White university as a new stressor in the students' lives, necessitating some type of reaction, students' perceptions of the environment were not assessed and hence not considered as a moderating variable. The way in which African American students' perceive their new environment may have significant implications on their well-being. For instance, an African American student coming from a predominantly African American high school with strong Immersion beliefs could perceive the campus as negative (discriminating, racist, and alienating) or positive (opportunity for upward mobility, career opportunities) leading to different levels of distress.

Factors that compromised psychological well-being among African American students attending predominantly White universities are still inadequately understood. The findings from this study can be utilized in designing and enhancing services and interventions targeting psychological well-being among African American university students. These findings may also serve as a basis for interventions in high schools

designed to prepare African American students for the transition to college. Programs that prevent psychological morbidity among African American freshmen can help ensure that these students have equal access and opportunities to enjoy the educational and life benefits of these institutions.

Appendix A

Racial Identity Attitudes Scale (Helms & Parham, 1985)

Directions: This questionnaire is designed to measure people's attitudes about social and political issues. There are no right or wrong answers. Different people have different viewpoints; so try to be as honest as you can. Beside each statement, circle the number that best describes how you feel using the scale below.

1 2 3 4 5
Strongly disagree Disagree Uncertain Agree Strongly agree

1. I believe being Black is a positive experience.	1	2	3	4	5
2. I know through experience what being Black in America means.	1	2	3	4	5
3. I am increasing my involvement in Black activities because I don't feel comfortable in White environments.	1	2	3	4	5
4. I feel an overwhelming attachment to Black people.	1	2	3	4	5
5. I involve myself in causes that will help all oppressed people.	1	2	3	4	5
6. People's race do not influence how comfortable I feel when I am with them.	1	2	3	4	5
7. I feel good about being Black, but do not limit myself to Black activities.	1	2	3	4	5
8. I often find myself referring to Whites as "honkies," "crackers," "devils," ect.	1	2	3	4	5
9. I believe certain aspects of "the Black experience" apply to me, and others do not.	1	2	3	4	5
10. I frequently confront the system and the (White) man.	1	2	3	4	5
11. I constantly involve myself in Black political and social activities (such as art shows, political meetings, Black theatre, and so forth).	1	2	3	4	5
12. I involve myself in social and political groups even if there are no other Blacks involved.	1	2	3	4	5
13. I believe that the world should be interpreted from a Black or Afrocentric perspective.	1	2	3	4	5
14. I am changing my style of life to fit my beliefs about Black people.	1	2	3	4	5
15. I feel excitement and joy in Black surroundings.	1	2	3	4	5

16. I am determined to find my Black identity.	1	2	3	4	5
17. People, regardless of their race, have strengths and limitations.	1	2	3	4	5
18. I speak my mind regardless of the consequences (e.g. being kicked out of school, disappointing my parents, being exposed to danger).	1	2	3	4	5
19. I limit myself to Black activities as much as I can.	1	2	3	4	5
20. I believe that I have many strengths because I am Black.	1	2	3	4	5
21. I believe that White people should feel guilty about the way they have treated Blacks in the past.	1	2	3	4	5
22. White people can't be trusted.	1	2	3	4	5
23. The most important thing about me is that I am Black.	1	2	3	4	5
24. Being black just feels natural to me.	1	2	3	4	5
25. Black people who have any White people's blood should feel ashamed of it.	1	2	3	4	5
26. A person's race usually is not important to me.	1	2	3	4	5
27. A person's race has little to do with whether or not he/she is a good person.	1	2	3	4	5
28. I believe that a Black person can be close friends with a White person.	1	2	3	4	5
29. I am satisfied with myself.					
30. I have a positive attitude about myself because I am Black.					

Appendix B

Demographic Questionnaire

Name (last, first) _____

Sex: M F

MSU PID A _____

Date of Birth _____ Age _____

Local Address _____

Local Phone _____

MSU e-mail address _____

secondary e-mail address _____

(please place a star by the account you would like us to use first)

Home Address _____

Home Phone _____

Mother's Name _____

Occupation _____

Father's Name _____

Occupation _____

What is the total income of your family household per year?

_____ below \$19,999

_____ \$120,000 to \$139,999

_____ \$20,000 to \$39,999

_____ \$140,000 to \$159,999

_____ \$40,000 to \$59,999

_____ \$160,000 to \$179,999

_____ \$60,000 to \$79,999

_____ \$180,000 to \$199,999

_____ \$80,000 to \$99,999

_____ \$200,000 to \$219,999

_____ \$100,000 to \$119,999

_____ \$220,000 and above

High School _____

Address _____

What was your high school GPA? _____

Please estimate the racial composition of your high school to the best of your ability (using percentages)

White _____%

Asian _____%

Other _____%

Black _____%

Latino _____%

How long (in years or months) were you at this school? _____

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