An Examination of the Racial Identity Attitudes Scale and African American Psychological Functioning: A Meta-Analysis

By

Aaronson Y Chew

A dissertation submitted in partial fulfillment of

the requirements for the degree of

Doctor of Philosophy

(Counseling Psychology)

at the

UNIVERSITY OF WISCONSIN – MADISON

2015

Date of final oral examination: May 20 , 2014

The dissertation is approved by the following members of the Final Oral Committee:

Stephen M. Quintana, Professor, Counseling Psychology
Alberta M. Gloria, Professor, Counseling Psychology
William T. Hoyt, Professor, Counseling Psychology
Daniel Bolt, Professor, Educational Psychology
Angela Byars-Winston, Associate Professor, Medicine and Public Health

Acknowledgements

This dissertation is a product of the hard work and labor for all those that fight and have fought for justice. It would not have been possible without the path paved by historical and present-day luminaries that continue to advocate for underrepresented populations. This study is a mere reflection of where we have been and where we still need to go; in the wise words of James Baldwin, "not everything that is faced can be changed, but nothing can be changed until it is faced."

I am extremely grateful to Dr. Quintana and my dissertation committee members for their unwavering support during this process. My parents that supported me through thick and thin in the long endeavor that was graduate school. My fellow graduate students, with whom I have made life long friends. Thank you for all the support and inspiration.

Table of Contents

Abstract

The present study examined the reliability, validity, and theoretical consistency of the Racial Identity Attitudes Scale (RIAS) on African American psychological functioning over the past 25+ years. The RIAS and its alternate forms are the most utilized instruments in the African American racial identity literature, which operationalizes Cross' theory of nigrecense. Fifty-seven studies, including dissertations and published articles, were meta-analyzed yielding alpha generalizability estimates (Rodriguez & Maeda, 2006; Vacha-Haase, 1998), omnibus effect sizes with psychological criterion variables (i.e., psychological distress and psychological well-being), aggregated intercorrelations among RIAS subscales, and average item RIAS subscale means. Meta-analytic regression methods (Viechtbauer, 2007) were utilized to test for multiple moderating effects of demographic and study variables. The results identified small-to-medium correlations between RIAS subscales and psychological criterion variables with only the Internalization subscale being positively correlated with psychological well-being. Although some of the RIAS subscales' internal consistencies were moderated by RIAS version, all RIAS subscales met acceptable internal consistency standards with the exception of the Encounter subscale. Percent of African American in the sampled context, cohort year of the sample, and recruitment from college settings, as compared to community settings, were significant moderators in the RIAS and psychological adjustment relationships. Furthermore, RIAS subscale average item means were non-centered and skewed. Overall, the present study raises important theoretical and empirical issues related to the RIAS in the examination of psychological functioning among African Americans.

Chapter 1: Introduction

Being Black, or African American (used interchangeably), in America has many associated psychological health risks. Not only are African Americans more susceptible to poor health outcomes, such as high blood pressure and elevated prevalence of certain diseases, but these health outcomes are also complicated by ecological factors, which include but are not limited to low access to health services, poverty, and living conditions due to poverty. Race can be said to be a social construction rooted in historical and sociopolitical contexts, which classifies individuals into distinct and socially salient groups (Sellers et al., 1998; Smedley & Smedley, 2005). From this perspective, the concept of racial identity refers to the psychosocial classification of one's self within a particular racial group (Helms, 1990), which is thought to influence an individual's emotional status (Cross, 1971), sociopolitical norms (Helms, 1995), and the internalization of racism and prejudice (Jones, 1997).

The psychological literature on African Americans has attempted to further understand the influence of ecological factors on the mental health functioning for African Americans. For instance, racial discrimination is linked to negative biopsychosocial sequalae (Clark, Anderson, Clark, & Williams, 1999) and increased psychological distress (Sellers & Shelton, 2003). Pieterse, Todd, Neville, and Carter (2012) conducted a meta-analysis on racial discrimination and psychological distress that revealed a moderately strong relationship, which was stronger for individuals with a self-reported history of anxiety, depression, and/or psychiatric symptoms. Hence, racial discrimination in its various forms is associated with increased psychological distress and negative mental health outcomes.

Other researchers have explored within group variability for African Americans with the understanding that not all individuals within a group are alike. This is important as it highlights

the ways in which multiple psychological processes may account for the variability observed in mental health outcomes among African Americans. Over the past 40 years, the literature has attempted to explore these within group differences and psychological processes through the construct of racial identity, which is defined as ‘‘a sense of group or collective identity based on one’s perception that he or she shares a common racial heritage with a particular racial group’’ (Helms 1990, p. 3). It is theorized that members of stigmatized racial and ethnic groups derive positive benefits (i.e., self-esteem, buffering against stressors, and feelings of pride) from feeling connected to other members in their group and maintaining a positive view of their racial/ethnic group (Greene, Way, & Pahl, 2006; Quintana, 2007). Therefore, a salient racial identity is assumed to assist stigmatized groups in coping with racial/ethnic discrimination (Cross, 1995; Helms, 1995; Quintana, 2007; Neblett, Rivas-Drake, & Umaña-Taylor, 2012).

Although more sophisticated racial identity attitudes are conceptually linked to decreased psychological distress and improved functioning (White & Parham, 1990), empirical evidence remains mixed. For African Americans, a more salient racial identity was associated with higher levels of mental health functioning (Elion et al., 2012; Mahalik, Pierre, & Wan, 2006; Pierre & Mahalik, 2005; Oney, Cole, & Sellers, 2011; Rowley, Sellers, Chavous, & Smith, 1998), higher levels of psychological well-being (Pieterse & Carter, 2010; Seaton, 2009; Whittaker & Neville, 2010; Yap, Settles, & Pratt-Hyatt, 2011), lower levels of psychological distress (Sellers et al., 2003), less psychological symptoms (Carter, Williams, Juby, & Buckley, 2005; Elion, Wang, Slaney, & French, 2012; Flowers, Levesque, & Fischer, 2012; Forsyth & Carter, 2012; Pieterse & Carter, 2010; Mulser, Hucke, Trask-Tate, & Cunningham, 2012; Seaton, 2009), more effective coping strategies (Forsyth & Carter, 2012), and higher levels of educational attainment (Hurd, Sanchez, Zimmerman, & Caldwell, 2012). Moreover, racial identity in African Americans

moderated the relationship between racial discrimination and blood pressure (Neblett & Carter, 2012), racial discrimination and reports of pain in children with sickle cell disease (Lim, Welkom, Cohen, & Osunkwo, 2012), and racial discrimination and substance abuse (Fuller-Rowell, Cogburn, Brodish, Peck, Malanchuk, & Eccles, 2012).

Conversely, racial identity for African Americans was also associated with higher levels of psychological symptoms. A review of literature reveals that a more salient racial identity was related to increased psychological symptoms (Burrow & Ong, 2010; Carter, 1991), greater personal distress (Parham & Helms, 1985), and lower levels of psychological well-being (Whittaker & Neville, 2010). There is additional evidence to suggest that racial identity both protects and makes African Americans more susceptible to discrimination, such that racial identity is related to increased psychological distress and also acts as a buffer against the deleterious impact of discrimination on psychological distress (Burrow & Ong, 2010; Sellers, Caldwell, Schmeelk-Cone, & Zimmerman, 2003).

Several studies have also found no relationship between racial identity and psychological symptoms (Caldwell, Zimmerman, Bernat, Sellers, & Notaro, 2002; Gilbert, So, Russel, & Wessel, 2006; Neblett, Shelton, & Sellers, 2004; Pyant & Yanico, 1991; Sellers & Shelton, 2003), no relationship between racial identity and psychological well-being (Forsyth & Carter, 2012; Pyant & Yanico, 1991), and no moderating effect of racial identity on the relationship between racial stressors and psychological well-being (Seaton, 2009; Sellers, Neblett, Upton, Hammond, & Sellers, 2011). Given these equivocal results in the relationship between African American racial identity and mental health functioning, a quantitative summary, in the form of a meta-analysis is warranted and appropriate (Quintana & Minami, 2006).

Two recent meta-analyses on racial identity have been conducted. Elmore, Mandara, and Gray (2012) created a new conceptual framework that integrated multiple theories of racial identity into a five dimensional model of racial identity for African Americans. They concluded that *racial pride* is associated with the most adaptive psychological functioning and mental health functioning. Although illuminating, these findings are limited as the disparate ethnic and racial identity theoretical tenets are mixed together (e.g., developmental vs. phenomenological). Additionally, moderating variables on the relationship between racial identity dimensions and psychological functioning were limited.

More recently, Lee and Ahn (2013) conducted a meta-analysis on the mediating role of racial identity and ethnic identity in the relationship between racial discrimination and psychological distress. They found that discrimination was significantly related to psychological distress and that Encounter attitudes, Immersion/Emersion attitudes, Internalization attitudes, racial centrality, and public regard mediated the relationship. Their rigorous meta-analysis was limited to studies that included discrimination, racial or ethnic identity, and psychological distress, which narrowed their pool of appropriate African American racial identity studies to 27. However, there are over 90 studies (i.e., published articles and dissertations) that have examined the relationship between racial identity and psychological functioning variables. Moreover, Lee and Ahn restricted their analysis to the outcome variable of psychological distress, which is not necessarily a proxy for psychological health, as the two constructs are often found to be orthogonal. Based on the limitations of these two meta-analyses, the present study includes a larger database of published articles and dissertations with an exclusive focus on Cross' (1971, 1991, 1995) model of African American racial identity development operationalized by the Racial Identity Attitudes Scale (RIAS: Parham & Helms, 1981; Helms & Parham, 1990).

It is important to note that these equivocal findings are subject to measurement issues based on the psychometric properties of the selected racial identity instruments. The most utilized instrument in the exploration of African American racial identity is the Racial Identity Attitudes Scale, which has yielded 50+ published articles over the past 30 years. The RIAS subscales have received multiple critiques due to its low internal consistency (Cokley, 2007; Ponterotto & Wise, 1987) as well as its high intercorrelation between non-adjacent statuses, which seems contrary to its theoretical assumption that racial identity is developmental (Rowley & Sellers, 1998; Sellers, Rowley, Chavous, Shelton, & Smith, 1997). It is within this context that results from the RIAS must be interpreted, as inconsistent measurement may yield inconsistent results. Despite these identified limitations and the validation of newer racial identity measures, the RIAS remains the instrument of choice (Cokely, 2007). Hence, the present study empirically tests these proposed critiques of the RIAS and examines the differences in results yielded by RIAS form utilized.

Multiple researchers have critiqued the utility of assessing direct relationships between racial identity and psychological outcomes without accounting for the way in which racial identity operates differently across contexts (Cross, 1991; Sellers, Morgan, & Brown, 2001). A handful of studies have began to explore the influence of contextual variables on racial identity development (e.g., Fuller-Rowell, Burrow, & Ong, 2011) and the moderating effect of social context on the relationship between racial identity and mental health outcomes (Byrd & Chavous, 2012; Cokley, 1999; Hurd, Sellers, Cogburn, Butler-Barnes, & Zimmerman, 2012; Umaña-Taylor, 2004; Sellers, Rowley, Chavous, Shelton, & Smith, 1997). This meta-analysis attempts to further examine the moderating effect of four contextual variables (i.e., study date, cohort effects, percentage of African Americans in the sampled context, and study recruitment

method) on the relationship between racial identity statuses and psychological functioning. The sampling procedures frequently used in racial identity studies are based on snowball and convenience sampling, which most likely limits the external validity of racial identity findings (Quintana, Chew, & Schell, 2012). More specifically, the majority of the samples in the African American racial identity literature are collected from African American specific contexts (e.g., African American student organizations, Historically Black Colleges/Universities, African American church organizations, African American courses, etc.) and college/university campuses. Therefore, these contextual recruitment methodological limitations are expected to moderate the relationship between racial identity statuses and psychological functioning, as the context sampled most likely limits the range of observed outcomes.

Many researchers reflexively test for the moderating effect of various demographic variables frequently without posing a priori hypotheses. There are often no theoretically derived hypotheses to explain why gender, for example, may moderate the relationship between racial identity status and psychological functioning. However, conceptual links do exist that hypothesize whether a higher or lower level of certain racial identity statuses may be related to gender, age, and cohort of the sample. Thus, this meta-analysis proposes a priori hypotheses to examine the ways in which gender, age, and cohort directly influence the average item means of the racial identity statuses (i.e., main effects).

Overall, the purpose of the present study is to provide future directions for the study of African American racial identity in the context of psychological adjustment by obtaining an aggregate effect size of the internal consistency of the RIAS subscales, synthesizing the intercorrelations between non-adjacent statuses, providing quantitative summaries of the relationship between RIAS subscales and psychological outcomes (i.e., psychological well-being

and psychological distress) for African American populations, and exploring the influence of RIAS version on the aggregated results. Additionally, the contextual variables of percentage of African Americans in the sampled context, cohort, and study recruitment method are expected to moderate the relationship between the RIAS subscales and psychological functioning. Lastly, normative data on the average item mean per RIAS subscale will be provided, as an index for future studies, as well as the regression coefficients to adjust the means for the influence of demographic variables, specifically gender, age, and cohort year. Hence, this study proposes an indepth analysis of the equivocal results produced by the RIAS on African American populations as well as future directions for the study of African American racial identity.

Chapter 2: Literature Review

"No discourse on the psychological functioning of African Americans can be complete without investigating the impact of chattel slavery" (Pillay, 2005, p.49). Chattel slavery refers to "a unique and complex economic and social institution… which required the total submission and complete obedience of the enslaved African" (Utsey, Bolden, & Brown, 2001, p. 315). A literature review of African American racial identity warrants an introduction to African American history and the struggles associated with being African American in the U.S., as the evolution of understanding the African American experience is inextricable from the historical and sociopolitical zeitgeist of the time. The first section of this literature review highlights the unique struggles with social, political, economic, and legal discrimination for African Americans to illuminate the historical grounds that fueled the need and birth of African American racial identity.

Over a century ago, scholars and activists were giving voice to the lived Black experience in an Eurocentric world. The phenomenon of *double consciousness*, a term coined by WEB Du Bois in 1897, is the first reference to the unique struggle of being Black in America. It highlighted the duality in being both Black and American; this sense of identity, which was thrust upon African Americans in a white political and economic world, assumed that to be American was to be white, thereby resulting in no true self-consciousness but rather judgments of oneself based on white norms and ideals (Du Bois, 1903). In his words, *double consciousness* is:

> "[T]his sense of always looking at one's self through the eyes of others, of measuring one's soul by the tape of a world that looks on in amused contempt and pity… [a two-ness, of being,] an American, a Negro; two warring ideals in one dark body, whose dogged strength alone keeps it from being torn asunder" (Du Bois, 1903, p.2).

Setting the stage for a deeper understanding of being Black in America, WEB Du Bois collaborated with other scholars and African American leaders of the time. One of the most notable was Alain LeRoy Locke, who created the first work of African American literature, titled *The New Negro*. He defined a transformation from the old to the "new Negro," in an attempt to reclaim the humanness inherent in Black people by emphasizing the talents and strengths of the Black community through the diversity of its voices (Locke, 1925). The publication of his work sparked the self-expression and reclaimed humanity of African Americans in the Harlem Renaissance.

Carter G. Woodson, who is considered the father of Black History, published *The Miseducation of the Negro* in 1933, which revealed that veil that taught African Americans that they have no history. While the only history African Americans learned was that of European achievement, the message of African American inferiority was buttressed and African Americans were taught to despise themselves. As Woodson brought light to this insidious socialization process, he set the foundation for the formation of an African American history, planting the seeds for a culture and identity to being Black in America. In addition, Woodson started Negro History Week, which has been expanded and is now celebrated as African American History Month.

Concurrently, the Pan-African and Black Nationalism movement gained momentum espousing the ideology of solidarity among Africans worldwide. It was a response to years of colonization and sought to bring economic prosperity, social and political progress to African nations as well people of African descent in the Diaspora (Garvey, 1986). Marcus Garvey, a Jamaican politician, was a prominent leader in this movement and founded the Universal Negro Improvement Association and African Communities League (UNIA-ACL), which carried forth

the Pan-African and Black Nationalism ideology. UNIA-ACL adopted "the Red, Black, and Green" flag as a symbol for the struggle of unification and liberation of African peoples (Martin, 1976). He stated that:

> "Our union must know no clime, boundary, or nationality… to let us hold together under all climes and in every country" (Garvey, 1986, p. 163)

On the African continent, political leaders and activists in the Pan-African movement fought for the same ideals of unity. Kwame Nkrumah was elected the first prime minister of Ghana, which was the first African nation to gain independence, and founded the Organization of African Unity (OAU). Léopold Sédar Senghor, the first president of Senegal, developed the concept of *negritude,* which was a call for solidarity through active claiming of a Black identity rooted in the African heritage. It assumed a shared culture, subjectivity, and spiritual "essence" among members of the same racial group (Senghor, 1993). It was used as a tool of liberation against colonialism by rejecting the notion of African inferiority and white superiority (Loomba, 2005). As an accomplished poet, Senghor alluded to reclaiming an African identity:

> "Listen to the far beating of your nocturnal heart, rhythm, and blood of the drum and let the black blood flow into/ your blood" (Senghor, 1965, p. 157)

These intellectuals, political leaders, and poets were rallying against the European colonial hegemony, which used the social construct of race as a pseudoscientific tool to categorize humans into different castes (Smedley & Smedley, 2005). Race was used by European nations to justify the oppression of non-white people by identifying them as subhuman beings, which has resulted in the systematic subjugation of countless cultures (Fanon, 1963; Williams, 1975). Not only has race been used to divisively structure society for past centuries, but it also has present day power through the ways it has shaped the social, psychological, and economic landscape of U.S. (Bryant-Davis & Ocampo, 2005).

Impact of Slavery and Colonization

Illuminating the deleterious effects of colonization, Franz Fanon, a Martinique-born French-Algerian psychiatrist and philosopher, writes about the psychological sequelae resulting from being oppressed and colonized. In *Black Skin, White Masks*, Fanon (1963) utilizes psychoanalysis to illustrate the difficulty Black people face fitting into white society. He shows the ways in which "trauma," defined as contact with white hegemony, influences the unconscious of Black people. This contact with the white world implants self-denigrating values and standards for Black children, such that the inherent nature of being Black is associated with evil and wrongness.

Adding to this notion, Akbar (1996) illuminates the lasting impact of slavery and the influence of the worship of White images on the psychology of African Americans. He speaks to the social and psychological sequelae of the inhumane, soul crushing, and haunting past of 300 years of slavery on African Americans, as he roots the current struggles and persistent problems in the lives of African Americans in the residuals from slavery, or as he calls "the ghost of the plantation." Additionally, Akbar highlights the inherent sense of endowment and divinity that Caucasians are given because the Creator has been worshipped for many years depicted as having Caucasian features; this, he posits serves as an unconsciously controlling factor in the African American psyche. Lastly, he offers the vision of liberation from mental slavery through the acquisition and dissemination of accurate knowledge about the Black reality.

Current day discrimination. The African experience in America is fraught with social subordination, political oppression, and economic exploitation through overtly discriminatory laws, such as *Jim Crow*, and currently more insidious ways, such as discrimination, lack of resources, poverty, lack of educational opportunity, and voter suppression efforts (Bobko, Roth,

& Potosky, 1999; Williamson, 1999). The most startling and apparent form of oppression is the fact that African American men are seven times more likely to be incarcerated than White Americans, and African American females are two to three times more likely to be imprisoned than their white female counterparts (Carson & Sabol, 2012). The Bureau of Justice Statistics estimates that 12% of all African American men in their twenties are incarcerated and that 40% of all Black men are under the supervision of correctional system (Carson & Sabol, 2012). More alarming, Western and Pettit (2010) estimate that 68% of African American men, between the ages of 32-36 who are not high school graduates, have been incarcerated.

The increased incarceration rate of African Americans is directly related to events following 1986, the time of the so called "crack epidemic" (Mauser & Huling, 1995), referring to the perceived epidemic in crack cocaine abuse and the perceived increase in crime associated with its usage. President Regan's "War on Drugs" was coined to gain support to fight the crack cocaine crisis in black ghettos; however, minimum sentencing laws and disproportional sentences for crack cocaine versus powder cocaine were racially biased (Kurtzleben, 2010). Twenty years later, data shows a racial disparity in crack sentencing, such that the possession of crack carries the same sentence as the possession of a quantity of cocaine that is 100 times larger; additionally, the US Sentencing Commission figures display that no class of drug is as racially skewed as crack, as 79% of the 5,669 sentenced crack offenders in 2009 were African Americans (Kurtzelben, 2010).

In *The New Jim Crow*, Alexander (2012) likens mass incarceration to the formerly legalized Jim Crow laws, which legally allowed for practices of racial discrimination. She argues that the "War on Drugs" has been used as a tool to continue new forms of discrimination by means of creating "racial castes." These racial castes are created by persistent inequality,

which are artfully hidden from view in a veil of rationality, of which the most visible is the mass incarceration of African Americans. African Americans are stigmatized and automatically stereotyped as criminals in the American psyche. Moreover, the legal system perpetuates discriminatory practices and separates African Americans from their communities, which has lasting effects, leaving African American children in poverty. The incarceration and removal of African American family members decreases the overall educational rates of African Americans and increases caretaking burdens on other family members (Oliver, Sandefur, Jakubowski, & Yocom, 2005).

In addition to the legal discrimination and stigmatization that African Americans face, they also experience lack of opportunities in work and diminished education attainment. With respect to education, the percentage of African Americans age 25 and older with a high school diploma or more was 72% in the 2000 U.S. Census Bureau, as compared to 85.5% for Whites. Additionally, African Americans with a bachelor's degree or more was 14% as compared to 27% for Whites. Several scholars have identified this persistent disparity in educational attainment for African Americans and have made numerous calls to close this "achievement gap" (Lieberman & Hoody, 1998).

Genetically deficient. The field of psychology has been at the forefront of understanding this discrepancy and the possible mechanisms responsible for the 1.1 standardized difference in intelligence scores between African Americans and White Americans (Coleman et al., 1966; Roth, Bevier, Bobko, Switzer, and Tyler, 2001; Rushton & Jensen, 2005; Thorndike, 1921). It is important to note that the history of psychology is not unique or disconnected from the historical and sociopolitical landscape of the United States. It, too, is steeped in a history of racial discrimination (Guthrie, 2004). Guthrie identifies the ways in which standardized

intelligence (IQ) testing was originally biased against African Americans, as it "placed Black people beyond the possibility of civilization," and pathologized (e.g., drapetomania) their desire for freedom and humanity (p. 76). He claims that psychology was historically used to prove white superiority over other groups and is rooted in the theories of Darwin's *Origin of Species* and Galton's *Eugenics*.

Jensen's (1969) published article in the Harvard Review examined the IQ heritability of 122 pairs of white twins and concluded that 80% of the variability in intelligence is due to genetics; he concludes that education is working for the majority of the students, and as a result, should not receive efforts to be made more equitable for African American students. Interestingly, his article was published only a mere 15 years after the 1954 *Brown vs. Board of Education* Supreme Court case, which declared that separate but equal was unconstitutional, overturning the *Plessy v. Ferguson* decision of 1896, which previously allowed for state-sponsored segregation. The point being is that fifteen years is a short period of time to expect significant change given the United States history of 246 years of legalized slavery and 89 years of legalized discrimination, not to mention the present-day stigmatization and social discriminations that African Americans face daily. Additionally, there are questions as to the purely scientific merit of his work, as Jensen received over one million dollars in grants from the Pioneer Fund (Adam, 1994). According to Tucker (2002), the Pioneer fund was an organization formed from the wealth of the deceased Colonel Draper in 1967 that was expected to pursue "only politically acceptable projects," the main objective being "the opposition of racial equality [and use of its] resources to pursue this goal" (Tucker, 2002, p. 131, 134). This evidence does not debunk his conclusions or incriminate Jensen as dishonest but rather highlights the zeitgeist of the time, and the political, financial interests in proving a white superiority.

More recently, Hernstein and Murray (1994) published *The Bell Curve*, which highlights failed attempts to raise IQs of African American school children, thereby corroborating Jensen's proclamation that heredity is a major determinate of intelligence. They state that intelligence is based on racial difference and that intelligence is the best predictor of financial income, job performance, unwanted pregnancy, and involvement in crime over and above parental socioeconomic status and education level. They analyzed the National Longitudinal Survey of Youth, which included 11,878 youth including 3,022 African American youth and found that the average IQ for African Americans was lower than the average IQ for Latino, White, Asian, and Jewish Americans. Hence, they concluded that intelligence differences are genetically determined, and account for the class structure and racial divide observed in present day society.

As a response to the publication of *The Bell Curve*, the American Psychological Association (APA) created a Task Force (Neisser et al., 1996) to evaluate conclusions drawn from Hernstein and Murray. They confirmed the heritability of IQ in White populations (~ .75), but stated, "there is certainly no support for a genetic interpretation" as to the cause of the Black-White mean difference (p. 97). They concluded that heritability does not mean that environmental influences do not impact the development of a trait, and that heritability does not imply immutability. The importance of formal education is highlighted as a means of transmitting specific information as well as developing certain intellectual skills and attitudes; hence, failure to attend schools, or attendance at poor schools, can and does negatively affect intelligence scores. They also identified the dearth of research on multiple forms of intelligence, such as wisdom, creativity, practical knowledge, and social skills that may impact life functioning. Additionally, other environmental effects in the form of exposure to toxic chemicals (e.g., lead), prenatal alcohol levels, and malnutrition in childhood may have negative

consequences on intelligence. Furthermore, Deary (2012) in the *Annual Review of Psychology* concluded that IQ is actually less reflective of genetic factors for low resources contexts as compared to high resource contexts, which further narrows the generalizability of the intelligence literature.

More recently, Roth, Bevier, Bobko, Switzer, and Tyler (2001) conducted a meta-analysis of 247 studies that compared intelligence between Black and White samples. They found a standardized mean difference of 1.10 [95%CI: 1.06,1.15; k=105; N=6,246,729] for overall intelligence (*g*), a standardized mean difference of 1.12 [95% CI: 1.09, 1.17; k=48; N=5,378,539] for educational intelligence (GRE, SAT, and ACT), a standardized mean difference of 1.00 [95%CI: .98, 1.06; k=38; N=3,007,284] for non-standardized educational ability, a standardized mean difference of .99 [95%CI: .88, 1.11; k= 34; N=464,201] for industrial intelligence (tests for job applicants in corporate settings), and a standardized mean difference of 1.10 [95%CI: .56, 1.19; k=22; N=387,75] in military intelligence tests. The researchers did not identify any sources of the discrepancy in intelligence levels between Blacks and Whites, but rather sought to provide a quantitative summary of the extant literature. Despite these efforts, the question for psychologists still remains as to what contributes to this difference in intelligence between African Americans and White Americans.

Culturally deficient. Opposing the hereditarian view, the culturally deficient model attempts to explain this intelligence gap between African Americans and White Americans by exploring the role of environmental deficits (Riessman, 1962). Reissman (1962) uses the terms *culturally deprived*, *educationally deprived, deprived, underprivileged, disadvantaged, lower class*, and *low socioeconomic group* to identify the deficits that account for high drop out rates and low academic performance for low income students and students of color. It is posited that

African American students often perform poorly because of a lack of *cultural capital* (Bourdieu, 1997), higher enrollment in high-poverty schools (33% of African Americans vs. 4% of white Americans) (NCES, 2007), and their overrepresentation in special education programs that a lack college-preparatory focus (Russo & Talberg-Johnson, 1997; Coutinho & Oswald, 2000). Additionally, several scholars have identified that an inadequate home environment, lack of early socialization for educational aspirations (Ramey & Suarez, 1985), inability to attain higher level occupations (Ogbu, 1978), and negative beliefs about African American students' intellectual ability manifesting in stereotype threat, accounts for lower academic performance (Steele, 1997).

By highlighting these environmental deficits that many African Americans face, it is clear that African Americans tend to live in higher rates of poverty and have more health complications than their white counterparts. For instance, the poverty rate for African Americans is 27.6% as compared with 9.8% for White Americans, 19.5% of African Americans do not have health care insurance as compared to 11.1% of White Americans, African American men are 30% more likely to die from heart disease than white males, African Americans are 1.5 times more likely to contract diabetes than White Americans, and there is a 51% higher prevalence of adult obesity compared to White Americans (NAACP, 2013; US Census Bureau, 2011).

This historical perspective is important in understanding the social, economic, and political landscape that African Americans encounter on a daily basis. Although the presented history is relatively a century old, it is unarguably inextricable from the societal fabric of the United States (Zinn, 1980). Since the birth of the United States, wealth was created by the commoditization and dehumanization of Black bodies for over two centuries (Montagu, 1999).

No single intervention can undo or reverse the economic, social, cultural, and political disenfranchisement experienced by individuals of African descent.

Impact of discrimination. Recently, the United States Surgeon General stated that racial and ethnic mental health disparities stem from historical and current struggles with racism and discrimination (US Department of Health and Human Services, 2001), legitimizing the deleterious effects of racialization. Racism is defined as an ideology of racial superiority that manifests in the form of discrimination and prejudicial behavior in the individual, institutional, and cultural realms (Jones, 1972, 1997; Neville & Pieterse, 2009). Jones and Carter (1996) have defined racism as:

> the transformation of racial prejudice into individual racism through the use of power directed against racial group(s) and their members, who are defined as inferior by individuals, institutional members and leaders, and which is reflected in policy and procedures with the intentional and unintentional support and participation of the entire race and dominant culture. (p. 3)

Stemming from racism, discrimination refers to the negative actions and behaviors directed at a person or group because of their marginal social status (Jones & Carter, 1996). It is understood that racial discrimination has negative effects on the well-being and psychological health of African Americans. Not only is racial discrimination experienced as environmental stress that taxes an individual's social and psychological resources (Clark et al., 1999; Harrell, 2000), but it also leads to psychological distress depending on the frequency and intensity of the stressor (Klonoff, Landrine, and Ullman, 1999). In a meta-analysis, Pieterse et al. (2012) found a moderately strong relationship (r = .20) between racial discrimination and psychological distress for African Americans, which was stronger for individuals with previously reported anxiety, depression, and psychiatric symptoms. They systematically reviewed 66 studies with a total sample size of 18,140 between 1996 and 2011, and confirmed that greater reported

exposure and intensity of racist events were moderately correlated with reports of psychological distress. Moreover, their moderator analysis revealed that the negative psychological responses to racism are more negative in the context of psychological trauma.

Several scholars have previously likened the experience of racism for African Americans to a traumatic event (Carter, 2007; Helms, Nicolas, & Greene, 2010), others have labeled it generational PTSD (Leary, 2005), and empirical research has found similar trauma-related symptoms to negative racial experiences (Ford, 2008; Khaylis, Waelde, & Brice, 2007; Pieterse et al., 2010). Moreover, Pieterse et al. (2012) highlight the ways in which the association between racism and self-reported depression and anxiety may account for some of the higher prevalence rates of hypertension in African Americans (Heard, Whitfield, Edwards, Bruce, & Beech, 2011) and noncompliance rates with medical care (DiMatteo, Lepper, & Croghan, 2000). Thus, the impact of racism and racial discrimination for African Americans has been given attention and legitimacy in more recent times.

Racial Identity Theories

Social Identity Theory. Accounting for the fact that racial discrimination operates on the in-group and out-group perspective of dominant society (i.e., White American as in-group and African American as out-group), Tajfel and Turner (1986) posit that the development of identity, or one's self-concept, is influenced by perceived group membership and social transactions, of which race happens to be one (Turner, 1975). In this theory, mechanisms, such as awareness of membership and appraisal that membership is valuable, are proposed to explain intergroup behaviors based on differences in perceived social status. The practice of racial discrimination can be understood as an intergroup behavior, in which individuals are categorized based on physical features (i.e., color of skin, texture of hair, etc.), and based on those physical

features are assigned to a specific group with a perceived social status. Hence, delineations are made between Black and White and also Black and Black.

Social Identity theory also posits that individuals are motivated to achieve and maintain positive self-concepts about themselves and the groups to which they belong. Through White American eyes, African Americans are identified by their skin tone and placed within a specific social status; similarly, African Americans also create intragroup behaviors within the African American communities, such that certain ways of being Black as well as skin tone gradient are seen as markers for group membership. For instance, Brewer (2007) identified the notion of ingroup bias, which refers to an individual's perceived loyalty (i.e., adherence to ingroup norms) and preference (i.e., acceptance of ingroup members over outgroup members) to their ingroup. Individuals that are perceived as disloyal to the groups cause and do not adhere to group norms and responses often experience ingroup rejection. Additionally, skin tone is used as a barometer that is predictive of White reactions to African Americans (Hagiwara, Kashy, & Cesario, 2012), as darker African Americans reported 11 times more discrimination from White Americans than their lighter skin counterparts (Klonoff & Ladrine, 2000). Furthermore, African Americans also use the skin tone of other African Americans to determine group status and allegience, such that having a lighter skin tone is associated with greater privileges and less discrimination (Bond & Cash, 1992).

These are forms of intragroup discrimination that create subgroups within the racial category of African American, highlighting and maintaining the notion that there are better ways to be African American through possessing certain qualities deemed to be inherently Black. Some individuals within a group may choose to distance themselves from the group in order to maintain their self-esteem by means of detaching themselves from group characteristics.

Although maintaining a positive self-concept within a group tends to be a natural phenomenon according to Social Identity Theory, these forms of intra-group discrimination from African Americans against other African Americans imply that the qualities of being uneducated and living in poverty are an inherent trait of how Blacks are viewed in America. This, too, is representative of the ways in which racism is internalized in a form of internal surveillance (Foucault, 1975), as African Americans imbue and recapitulate the messages received from dominant society (i.e., African Americans are uneducated, prisoners, and live in poverty).

African American self-hate paradigm. Based on the history of African Americans in American and the messages they received from dominant society, it was previously thought that African Americans suffered from pathologies of low self-esteem. These early studies in Black identity examined the construct of Black self-hatred (Johnson, Lecci, & Swim, 2006), which was based on the theory of "reflective appraisal," positing that the devalued nature of African Americans in this country would lead to a natural internalization of this stigma (Marks et al., 2004). Cooley's (1922) notion of the *looking glass self* and Mead's (1934) *reflected appraisal theory* provided the logic for the self-hatred paradigm; it was thought that since African Americans were stigmatized in society, they would internalize a negative self-concept and have negative self-esteem. In the late 1930s, this notion was empirically explored (Clark & Clark, 1939), resulting in a doll test that supposedly provided evidence for the phenomenon of "Negro self-hatred" (Clark & Clark, 1947).

The legacy of the famous Clark and Clark doll preference study (1947) investigated the degree to which Black children would prefer a stimulus/doll that represented a Black individual as opposed to one representing a White individual. They also attempted to measure the degree to which Black children would correctly identify with the appropriate Black doll when prompted.

In 1939, K. Clark and M. Clark presented 150 Black children with pictures consisting of a White boy/girl, a Black boy/girl, a lion, a dog, and a clown. The children were asked to identify "which one is you," and "which one is…?" using the name of the child's brother/sister, cousin, or friend. They found that the youngest children (3-4 years of age) chose the White child in the picture slightly more often as compared to the Black child. The 4-year-old Black children identified with the Black child in the picture 55% of the time, and the 5-year-old Black children identified with the Black child 45% of the time. In 1947, Clark and Clark interviewed Black children (3-7 years of age) using four dolls, two black and two white, asking them to: (1) "give me the doll that you want to play with," (2) "give me the doll that is a nice doll," (3) "give me the doll that looks bad," (4) "give me the doll that has a nice color," (5) "give me the doll that looks like a white child," (6) "give me the doll that looks like a colored child," (7) "give me the doll that looks like a Negro child," and (8) "give me the doll that looks like you" (Clark & Clark, 1947, p.602).

According to Clark and Clark, the first four questions measured racial preference and the last four questions measured racial self-identification. They observed that Black children preferred the white dolls when asked to choose which ones were nice, which one they would like to play with, and which was had a nice color. Clark and Clark (1939, 1947) concluded that Black children perceived Black as not being beautiful, which is a direct result from the historic and systematically unfair treatment of Black people in the United States. Hence, they claimed that Black children had developed contempt for being Black and a desire to be white.

Due to the results from these studies, Clark and Clark were asked to testify as expert witnesses in *Briggs vs. Elliot*, which was one of the many cases included in *Brown vs. Board of Education* (1954). They contributed to the decision by the U.S. Supreme Court, which

determined that de jure racial segregation in public education was unconstitutional. Chief Justice Earl Warren stated that, "to separate them from others of similar age and qualifications solely because of their race generates a feeling of inferiority as to their status in the community that may affect their hearts and minds in a way unlikely to ever be undone" (Benjamin, 2007, p. 193).

The Clarks made significant contributes to both the legal field and the psychology on race; however, these earlier studies were not a test of Black children self-hatred, but rather the development of racial identification (i.e., how African American children come to identify as people of their racial group) (Cross, 1991; Marks et al., 2009). They thought that they were assessing self-esteem, but they never actually assessed whether African American children suffered from low self-esteem or self-hatred, not to mention that there were no constructed measures of self-esteem at the time, resulting in unsubstantiated claims (Cross, 1991; Worrell, 2012). Additionally, they based their results on between-group comparisons and situated the white children as the reference group. When the African American children did not demonstrate the same preference for the Black dolls that the White children had displayed for the White dolls, it was interpreted as self-hatred. Furthermore, these early researchers operated within a psychology of inferiority, which understood racial identity as monolithic and static, and erroneously generalized the results from African American children to African American adults (Marks et al. 2004).

Baldwin (1979) also critiqued the self-hate empirical literature on the grounds that the researchers did not account for cultural differences among Black subjects and the diverse meanings of stimulus objects presented. With these critical perspectives, the self-hate research paradigm shifted as researchers started to realize that African Americans' self-concepts are not necessarily derived by the ways in which mainstream White Americans viewed African

Americans, but rather the ways in which African Americans viewed and appraised other African Americans (Crocker & Wolfe, 2001; Neblett Jr., Shelton, & Sellers, 2004). Moreover, two meta-analyses comparing self-esteem levels across races found a pattern often referred to as the *Black self-esteem advantage* because African American individuals consistently reported the highest levels of self-esteem of any racial group in the United States (Gray-Little & Hafdahl, 2000; Twenge & Crocker, 2002). Hence, there was more movement to encourage researchers to understand the African American worldview, rather than comparing African American performance to White American standards, which brought rise to the concept of African American racial identity.

Birth of racial identity construct. The construct of racial identity was birthed out of psychology's fascination with stage theories of development (e.g., Erikson, 1950, 1968; Freud, 1949; Kohlberg, 1973; Piaget, 1948, 1962) and the sociopolitical zeitgeist of the previous two decades, specifically the Black power movement and the Civil Rights movement (Altman, 1997; Smith, 2003; Worrell, 2012). Leading up to the call and study of African American racial identity, landmark legal decisions and social protests against discrimination and for equal rights proliferated on American soil.

In 1954, *Brown vs. Board of Education* declared that separate but equal public schools were unconstitutional, resulting in African Americans attending predominately white institutions in primary and secondary schools. From 1955 to 1956, the Montgomery bus boycott, which included Martin Luther King, Jr. and Rosa Parks, led to *Browder v. Gayle*, where the U.S. Supreme Court declared that segregated buses were unconstitutional. In 1957, the founding of the Southern Christian Leadership Conference by Dr. Martin Luther King, Jr. led the nonviolent campaign for civil rights. In 1963, Dr. King's "I have a dream" speech. In 1964, the Civil

Rights Act of 1964 prohibited discrimination in voter registration, federal facilities that served the public, and workplaces. In 1965, Malcolm X was assassinated and the Voting Rights Act eliminated literacy tests that previously determined voter eligibility. In 1966, the Black Panthers were founded in Oakland, California, and fought for freedom, public service (i.e., housing, food, etc.), education, justice, and protection against police brutality in the Black community (i.e., Ten Point Plan) (Austin, 2006). And in 1968, Martin Luther King Jr. was assassinated during the same time when Shirley Chisholm became the first African American woman to be elected to the U.S. House of Representatives.

Following this progression of historical events, J.L. White (1970) calls for the creation of a *Black Psychology*. He responds to Jensen's (1969) genetically deprived account of African Americans and sarcastically called the culturally deprived perspective "liberal" (White, 1970, p. 5). White creatively walks the reader through a typical day in the life of an African American family and continues to critique the deficits of psychology from a white American frame of reference by identifying the ways in which a white researcher may only see deficits observing an African American family. Additionally, he posits that white researchers consistently fail to see the strengths of oral culture, community involvement, cleverness, and mental toughness in navigating survival within the African American family and community. Moreover, he suggests that African Americans have a *healthy paranoia* due to systematic persecution and exploitation, which would be deemed pathological by a white psychologist. Overall, White turns the lens back on traditional principles and theories that had not have sufficient explanatory power to account for the behavior of African Americans in multiple arenas, such as family life, dialect, and lifestyle.

In the movement towards an African American Psychology, African American scholars have set forth the idea that the dominant psychology is the deficient one, as it attempts to understand people outside of its credible domain (Guthrie, 1976; Khatib, 1972; Nobles, 1976; Williams, 1975). Nobles (1972) argues that the development of a African American Psychology should have its roots in African tribal tradition and philosophy. As West Africans were enslaved, slavery preserved tribal traditions by not allowing Blacks to integrate into white society. As a result, African tribes were still able to subscribe to a specific philosophy – a unified Africa, such that the "I" does not exist without the "we" (i.e., *extended self*: Nobles, 1976). They believed that one was comprised of the unity between body and spirit, action and belief, good and bad, individual and collective whole, past (i.e., *Zamani*) and present (i.e., *Sasa*), and life and death. In contrast, dominant white society, which is individualistic, competitive, and future-orientated, has derived a specific psychology from these principles. Therefore, African mentality, which is unified, ensures the survival of the tribe as a whole, and even lacks a word for time designation of the future, cannot be accurately assessed by this limited white psychology.

White, Parham, and Parham (1980) make further suggestions towards the development of an African American Psychology. As a clearly established goal, the development of an African American Psychology is to refine and improve the Euro-American traditional psychology in order to expand its truths to be true for all peoples, not just whites. In addition, an African American Psychology should undermine notions of superiority. African Americans are cooperative, harmonious, and accepting of death as a life process; in contrast, whites are individualistic, competitive, and try to control every aspect of life (e.g. death, time, etc.). This stark contrast in values and culture brings light to the insufficiency and superficiality of the

assessment of African Americans by white standards. Thus, a new criteria needs to be created in order to rightfully assess the psychological functioning of African Americans. Currently, the Euro-American cognitive, intellectual, and written patterns are exalted, while the African American openness to feeling and oral tradition are denigrated.

While numerous discussions revolved around the need for and conceptualization of an African American Psychology, parallel studies were being conducted that sought to operationalize the experiences of African Americans within the context of identity development (Cross, 1972; Thomas, 1971; Jackson, 1976; Milliones, 1973; Taylor et al., 1972; Williams, 1975). The most prominent and notable model of racial identity was Cross' (1971) model of *nigrescence* (literally becoming black), which defined five distinct stages in the *Negro-to-Black* conversion. Critiquing the monolithic view of African Americans taken by Clark and Clark (1939, 1947), Cross sought to explore the within group variability for African Americans, noting that some African Americans had healthy psychological outcomes while others experienced psychological distress.

Those scholars in the realm of African American Psychology understanding the limitation of between-group comparisons sought to make what they deemed as more culturally appropriate, explorations of within-group variability (Taylor et al., 1972; Williams, 1975; Cross, 1972; Thomas, 1971). The notion of between-group comparisons is popular in the social science realm; it has seeped into such fields as mental health, educational achievement, political sciences, and economic trends. At some level, between-group comparisons are interesting; however, they do not relay any information about the people within those categories. And more distressing than that is the realization that the literature assumes the people within those categories share similar attitudes, values, strengths and weaknesses; nevertheless, it is commonly

understood that all people are not alike. And yet, when the literature relies on between-group comparisons, it acts as if everyone in that category is the same. Noticing these limitations and possible inaccuracies of between-group comparisons, many psychologists started to examine within-group variability, the ways in which individuals within a certain group vary based on different attitudes, values, beliefs, and behaviors. As a result, many models have been constructed in attempt to demarcate different stages of the African American racial identity and map a certain progression of attitudes, beliefs, and values in that development.

Racial identity theory. Racial identity is a complex construct, reflecting an individual's attempts to resolve the problems associated with racism directed at both the individual and at the group as a whole (Brondolo et al., 2009). It is defined as ''a sense of group or collective identity based on one's perception that he or she shares a common racial heritage with a particular racial group'' (Helms 1990, p. 3).

Racial identity refers to the attitudes and beliefs regarding the significance and meaning that people place on race in defining themselves (Sellers et al., 1998). Racial identity was originally conceptualized as a way to demonstrate a deficit in the African American psyche resulting from their stigmatized status (i.e., a self-hate paradigm); however, the African American scholars of 1970s reconceptualized the construct of racial identity to focus on African American resilience and strength in the face of oppression (i.e., how a health *black* identity developed from a psychologically-enslaved *negro* identity; Marks et al., 2004). Although racial identity attempts to explain the ways in which African Americans come to realize the salience of race in their life and develop a positive, healthy self-construct, these earlier racial identity models are actually an extension of the self-hate paradigm, as it hypothesized that a return to African values would help African Americans develop a healthier racial identity. Moreover, these

models focused on identifying an optimum level of racial ideology necessary for psychological adjustment.

Racial identity models and measures. Over the past 40 years, there have been numerous theories and conceptual models that have attempted to describe and explain the ways in which African Americans have come to identify with their racial group. The extant literature can be categorized in four different category types (Marks et al., 2004): Social development models, multidimensional models, Afrocentric models, and affilitation-commitment models. The social development models emphasize connections associated with the unique experiences that result from being designated as Black in American society; this is the most widely used and pervasive theory in the literature (e.g, Cross' 1971 model). Multidimensional models also emphasize the unique experience of being Black in America, but are built off of the limitations in the unidimensionality of the social development models; as a result, these models break African American racial identity into numerous dimensions, some of which are thought to be correlated and others orthogonal (e.g., Seller's 1998 Multidimensional Model of Racial Identity). The Afrocentric models emphasis the importance of adhering to African culture and group identity processes for the adjustment of African Americans (e.g., Baldwin's African Self-Consciousness). Affiliation-commitment models highlight the universal process of identifying with a specific culture, of which the African American identity is one culture (e.g., Phinney's 1992 Multiethnic Identity Measure). Given the numerous racial identity theories, the present literature review focuses on Cross' (1971, 1991, 1995) model of *nigrescence* as well as the original measure (i.e., the Racial Identity Attitudes Scale) associated with the model because they are the most utilized in the extant racial identity literature over the past 30 years.

The Cross model. The most prolific model of African American racial identity is the Cross model. William E. Cross Jr. (1971), in the *Black World*, outlines five stages in what he titles the "Negro-to-Black Conversion Experience." This model emphasizes the connection associated with unique experiences that result from being designated as Black in American society. Moreover, there is an underlying assumption in Cross' model that African Americans move from the least healthy stages of White identification to the most healthy stage of self-defined racial transcendence (Helms, 1990). The descriptive model clearly delineates each stage in order to understand that manners in which the African finds his "new" Black identity in a culturally dominant white world. Nigrescence theory was developed to address the degree to which racial preference was a part of the personal identity for African Americans and the ways in which that affected mental health functioning (Vandiver, et al. 2002). The original assumption behind this model is that African Americans, who accepted being African American, were better adjusted and had better psychological health than African Americans, who accepted the values of White society causing them to suffering from self-hatred and low self-esteem.

Parham & Helms (1985b) describe the Cross model as a "process of self-actualization under conditions of oppression" (p. 432). In mapping the developmental trajectory, Cross (1971, 1991) proposed five stages of racial identity development: *Pre-Encounter, Encounter, Immersion/Emersion, Internalization*, and *Internalization-Commitment*.

Pre-Encounter is the first stage, in which the European value system is pervasive upon most cultures. The result is an outwardly and inwardly degradation of blackness as the African worldview is dominated by Euro-American determinants. In short, the African subject is unaware of his blackness and acts in a manner that reinforces the white world view and degrades all aspects of his/her black heritage, for example putting lye in one's hair.

Encounter is the second stage, in which one becomes comfortable with the Negro worldview. At first, he/she may be resistant and/or hostile to these Negro components. Nevertheless, the subject proves to be receptive, if not even vulnerable, to a new interpretation of this identity. As a result, there is an increase in information and social support, which encourages the subject to become resolute towards becoming Black.

Immersion – Emersion is the third stage of Cross' racial identity model, in which Pro-Black and Anti-White sentiment develop. The first sub-stage, "Immersion", is characterized by a psychological metamorphosis, which attempts to destroy the "old" perspective and validate/clarify the "new" perspective. Although embracing Blackness is at a high level, internalization is low. There is a tendency towards glorifying one's African heritage, publicly displaying excessive pride in his/her African heritage, and the development of a Blacker-than-thou mentality. The second sub-stage, "Emersion", is an emergence from the previous reactionary view in the first sub-stage to a withdrawal into Blackness. Emotions tend to level off and psychological defensiveness is replaced with affective and cognitive openness. In this sense, one is more critical of analysis and attempts to ascertain the strengths as well as the weaknesses of "Blackness". At the end of this stage, the subject is no longer "ego-involved" and can understand one's Blackness in a more balanced light.

Internalization is the fourth stage, in which the subject is Pro-Black with a true sense of confidence. There is a resolution between the "old" and "new" worldviews. The emotional and defensive tension is resolved as a calm and secure demeanor is displayed. The subject becomes ideologically flexible, open, and self-confident in one's Blackness, especially in interpersonal exchanges. In addition, a non-racist pluralistic perspective develops, as one is now able to reconcile with White friends, control anger, and love oneself.

Internalization – Commitment is the fifth stage, in which the self-confident African-American continues on his/her path to be a social activist. The person has reached a level, where they have incorporated the new self, but they struggle to translate the personal identity into activities that are meaningful to the group. In terms of racial identity development, development actually levels off at stage four. However, stage five is a process by which the *self* must continue to be involved in the resolution of the shared problems of the group, which includes activism or the individuals commitment to challenge and eliminate systems of oppression (Kohatsu & Richardson, 1996).

Validation of the nigrescence model. Hall, Cross, and Freedle (1972) validated their social developmental stage model of racial identity through the Q-sort methodology, which asked African Americans to group phrases or stereotypic descriptions of Blacks based on their conceptualization and understandings. They found that the African Americans in the study categorized other African Americans based upon the stages in the Cross model and also describe personal identity development in accordance with *nigrescence* model. Based on these results, the first racial identity measure was created (i.e., RIAS-A: Hall, Cross, & Freedle, 1972).

Parham's revision. Parham's (1989) model is based on an adaptation of Cross' model of nigrescence. He observed that most of the racial identity studies had been conducted on college-aged samples, which excluded an understanding of late adolescence and young adulthood. Parham extended the Cross model to include developmental descriptions across the life span. Late adolescence/early adulthood characterized by activism and overt manifestation of "Blackness," the middle adulthood phase is characterized by an increased focus on institutional issues, and late adulthood is characterized by a reflection on one's role and contributions to society. Additionally, Parham posits the process of racial identity development occurs over the

entire lifespan and he identifies three alternative pathways to racial identity development: *stagnation, linear progression,* and *recycling*. *Stagnation* includes a static orientation in the model, remaining in one particular stage. *Linear progress* represents an individual moving from one stage to the next in the originally proposed model. Lastly, *recycling* occurs when an individual in the Internalized stage faces an experience that may cause the individual to re-think attitudes about Blackness, causing him/her to return to an early stage or racial identity development, however, a return to the Pre-Encounter stage is unlikely.

Racial Identity Attitudes Scale (RIAS: Hall, Cross, & Freedle, 1972; Helms & Parham, 1990, 1996; Parham & Helms, 1981). The *Racial Identity Attitude Scale – Short Form (RIAS)* developed by Parham and Helms (1981) is a 30-item self-report 5-point Likert scale that assessed the four stages of Cross' nigrescence model (i.e., Pre-Encounter, Encounter, Immersion/Emersion, and Internalization), which correspond to four individual subscales. The RIAS is not intended to categorize people into stages, but rather assess for the attitudes, values, and beliefs that an individual holds at a specific time (Helms, 1990). There are three forms of the RIAS: the *RIAS-A*, which is the original survey instrument including 30 items (Hall, Cross, & Freedle, 1972), the *RIAS (Short Form)* (Parham & Helms, 1981), which incorporated factor analysis on the Pre-encounter, Encounter, Immersion-Emersion, and Internalization items, and the *RIAS (Long Form)* (Helms & Parham, 1990, 1996), which is a further refinement of the two previous forms and is focused on increasing the reliability of the various scales by increasing the number of items. At first Parham and Helms (1981) categorized individuals into a certain stage, in which he/she attained the highest value. However, upon revision Parham and Helms (1985) decided that nigrescence stages should be considered as different types of attitudes specific to a certain individual, which varies in degree based upon that individual. Researchers in the extant

literature refer to this scale alternating between the *Black Racial Identity Attitudes Scale (BRIAS)* and *Racial Identity Attitudes Scale – Form B (RIAS)*. The most widely used forms are the RIAS (long form) and the RIAS (short form) (see Appendix A: Racial Identity Attitudes Scale – B Short Form, Appendix B: Racial Identity Attitudes Scale – B Long Form, & Appendix C: RIAS Short and Long Form Item Loadings, Appendix D: Permission Received).

Helms (1990) reported the following internal consistency coefficients for RIAS (short form): $\alpha = .69$ for the Pre-Encounter scale, $\alpha = .50$ for the Encounter scale, $\alpha = .67$ for the Immersion/Emersion scale, and $\alpha = .79$ for the Internalization scale. On the RIAS (long form), Helms (1990) reported the following subscale internal consistencies: $\alpha = .76$ for the Pre-Encounter scale, $\alpha = .51$ for the Encounter scale, $\alpha = .69$ for the Immersion/Emersion scale, and $\alpha = .80$ for the Internalization scale. Helms stated that these reliabilities are moderate and are comparable to reliabilities obtained from non-culture specific personality measures (Anastasi, 1982). Moreover, Helms reported intercorrelations of $r = -.16$, $p<.05$ (Short Form) and $r = -.001$ (Long Form) between the Pre-Encounter and Encounter scales, $r = -.15$, $p<.05$ (Short Form) and $r = .35$, $p<.01$ between the Pre-Encounter and Immersion/Emersion scales, $r = -.04$ (Short Form) and $r = -.58$, $p<.01$ (Long Form) between the Pre-Encounter and Internalization scales, $r = .62$, $p<.01$ (Short Form) and $r = .33$, $p<.01$ (Long Form) between the Encounter and Immersion/Emersion scales, $r = .17$, $p<.001$ (Short Form) and $r = .33$, $p<.001$ (Long Form) between the Encounter and Internalization scales, and $r = -.04$ (Short Form) and $r = -.06$ (Long Form) between the Immersion/Emersion and Internalization scales (Carter, 1996; Helms, 1990).

Helms posits that this is consistent with theoretical descriptions of the statuses, as the Pre-Encounter scale is negatively correlated with all other scales, and the highest positive correlation ($r = .62$) between Encounter and Immersion/Emersion scales is representative of the

Encounter status being psychological entry into African American identity issues and Immersion/Emersion is the immersing of oneself into these racial identity issues. However, several researchers (e.g., Cokley & Vandiver, 2011) have critiqued the RIAS on its psychometric properties and high level of intercorrelation between statuses (discussed in the subsequent sections).

Helms people of Color racial identity model. Helms (1989) noted that racial identity stages are permeable, and as a result, argued that stages were distinct "worldviews" (Helms, 1990, p.19). She theorized that each stage refers to a cognitive schema that individuals use to organize information about the self, others, the environment, and institutions (Helms, 1984). Additionally, the formation of these multiple schemas generated by the ego allow an individual to engage in more complex race-related behavior and responses due to the increased information-processing mechanisms (Helms, 1995). These noted distinctions lead to Helms (1995) to revise her theory by replacing stages with *statuses* (i.e., status of the ego). Furthermore, she defines *statuses* as the "dynamic cognitive, emotional, and behavioral processes that govern a person's interpretation of racial information in her or his interpersonal environments," which is consistent with the notion of a distinct worldview and cognitive template used to interpret stimuli (Helms, 1995, p. 184).

It was originally understood that African Americans exhibit attitudes, behaviors, and emotions that belong to more than one stage and that various stages are not mutually exclusive, pure, constructs (Helms, 1989; Helms, 1990; Parham & Helms, 1981). Helms (1995) discloses that the usage of stages connotes a Freudian epigenetic principle, such that the resolution of specific developmental tasks particular to one stage leaves residuals on subsequent stages; however with respect to racial identity, she claims that this is not entirely accurate in

representing the racial identity construct, as the stages represent interactive themes as opposed to mutually exclusive categories. She asserted that racial identity stages could be divided in two distinct expressions; for instance, a Pre-Encounter status could be expressed in the first form as an individual who "deliberatively idealizes Whiteness and White culture and denigrates Blacks and Black culture" (Helms, 1990, p. 21), and also as an individual who is "hard to recognize because [his or her] worldview so clearly mirror[s] that which is dominant in White society," representing an individual that desires to pass into White culture and uses any opportunity to do so (Helms, 1990, p. 22). Hence, Helms (1992) proposes that one set of attitudes can be dominant at any time, allowing individuals to concurrently possess multiple racial identity attitudes, the expression of which is determined by the presenting environmental circumstance.

Helms (1990, 1995) proposed that traditionally racially marginalized individuals need to process and work through attitudes and beliefs of internalized racism and develop an active awareness of racism and oppression to effectively address issues in their development. As people of color undergo this process, they may be able to identify, find coping mechanisms that resist the multiple forms of racism, and commit to the elimination of oppression through continual self-examination and intentionality in navigating their social environment (Helms, 1995; Thompson & Carter, 1997).

People of Color racial identity. Helm's people of Color model (1995) identified ego statuses that reflected attitudes, beliefs, and information processing strategies that an individual may utilize to make sense of racial stimuli. In this model, there are four statuses: conformity, dissonance, immersion/ resistance, internalization, and integrative awareness.

Conformity, the least sophisticated status, is characterized by a naïveté toward race and racial dynamics. Individuals in this status do not comprehend the meaning of race and tend to

assimilate into society by utilizing a color-blind lens. They may possibly be aware of racial disparities, but they tend to believe that disparities can be rectified if people of Color work harder. *Dissonance* is the second status, which is characterized by stress, anxiety, and confusion related to an encounter situation when s/he is treated differently solely because of his/her race. Movement to this status can be instigated by blatant experiences of racism, shattering an individual's previous belief system. The third status, *immersion-emersion*, is characterized by an individuals attempt to construct more positive image of themselves and their own racial group in efforts to resist the negative societal perceptions of one's racial group. Individuals in this status immerse themselves into activities that represent a newly accepted racial classification, which often times results in hostility towards White culture and people. It is a strong acceptance of their own racial identification and racial group as well as a rejection of dominant culture and societal views. Lastly, the *internalization* status, the most sophisticated status, is characterized by a development of a personal identity that takes into account the strengths and weaknesses of one's racial group and dominant culture. This status displays an increase in one's ability to be more receptive to increasing one's knowledge base about one's own racial group and other groups; there is a sense of internal security in one's identity and a greater appreciation of all ethnic groups. Cross, Parham, and Helms (1991) hypothesize that the more an individual is able to accept their differences and expand their self-awareness and acceptance of others, the better adjusted they will become.

People of Color Racial Identity Attitude Scale (POCRIAS or PRIAS; Helms, 1995).

The POCRIAS is a 50-item 5-point Likert scale (1=strongly agree, 5=strongly disagree) self-response survey instrument, which includes political and social attitudes, that is designed to assess the strength or racial identity attitudes of racial/ethnic minorities. It is an adaptation of the

original RIAS for all people of Color with subtle alternations in item wording and different names for the stages/statuses. Despite the six statuses outlined above, the instrument is composed of four subscales, each of which corresponding to one of the four specific racial identity status. The Immersion and Emersion statuses are combined into one subscale and the Internalization and Interactive Awareness are combined into one subscale. Conformity items assess a denial or color-blind suppression of racial awareness and embracement of White culture. For example, "Whites are more attractive than people of my race." Dissonance items measure anxiety, vacillation, or confusion about racism and one's commitment to one's racial group. For instance, "I feel anxious about some of the things I feel about people of my race." Immersion items assess a hypersensitivity to race-based stimuli and feelings of mistrust and hate towards White people. Emersion items measure solidarity, cultural involvement, and feelings of racial pride within one's own community and race. For example, an Emersion-Immersion item states that "most Whites are untrustworthy." Internalization items assess a flexible behavioral response to racial cues and situations as well as a positively internalized racial self-concept. Lastly, the integrative awareness items assess cognitive and emotional complexity with global empathy for all racial activism. For example, an Internalization-Integrative awareness item states "People, regardless of their race, have strengths and limitations." Previous studies have reported an internal consistency alpha reliability coefficient for individual subscales ranging from .61 to .87 (Alvarez, 1996; Helms & Carter, 1990).

Racial Identity Attitudes Scale – Revised (RIAS-Revised: Helms, 2003). In 2003, Helms revised the RIAS in an unpublished manuscript to separate the Emersion scale from the Immersion scale and re-label the Encounter subscale as the Post-Encounter subscale (as cited in Warren, 2004). The revised Black Racial Identity Attitudes Scale consists of 60 items that assess

five racial identity schemas (i.e., Pre-Encounter, Post-Encounter, Immersion, Emersion, and Internalization). The Post-Encounter scale assesses an individual's degree of disorientation and confusion about being Black in a White world; this revision does not seem to change the way in which the previous Encounter subscale operates, as some of the items on the Encounter and Post-Encounter are the same (e.g., "I feel guilty about some of the things I think about Black people"), with the Post-Encounter subscale including an additional four items (i.e., a total of eight items). The unpublished manuscript and item loadings for the 60-item version was unattainable, and all of the information provided about the 60-item scale is from Warren (2004) and Bazaelis (2011).

Helms (2003) split the previous Immersion/Emersion status into two discrete statuses because of its complexity. On one side, the Immersion scale assesses psychological withdrawal into Black culture and the idealization of Black culture and denigration of Whiteness. On the contrary, the Emersion scale assesses contentment with and commitment to Black culture and community. A few studies have actually used the RIAS-Revised instrument. Warren (2004) established some construct validity in a dissertation for the RIAS-Revised on a community sample of Black women, as the RIAS-Revised subscales had significant positive correlations with adaptive survival mechanisms used by Black women.

Cross Model – Revised (Cross, 1991, 1995; Cross & Cross, 2007). Cross (1991, 1995) revised his model and conceptualizing different modes of existing with the Pre-Encounter stage. He emphasized the notion of racial salience, which is the meaningfulness of race during certain periods in one's life, in his conceptualization. He proposed multiple identity clusters at each stage of development. For example, he delineated between anti-Black and low salience Pre-Encounter attitudes, such that anti-Black attitudes was consistent with his previous description, but individuals with low salience for race do not deny being Black but instead being Black does

not play a significant role in their life. Additionally, the names of the stages in the revised model do not represent identities, but rather describe the overarching theme of the stage (Vandiver et al., 2002). Similar to Helms (1990), Cross (1991) noted that nigrescense identities describe frames of reference with which the world is viewed, which are exemplified by particular attitudes; he added that the process of nigresence is a "resocialing process" (p. 190).

These revisions incorporated theory on the structural analysis of the self, which is divisible into personal identity (PI) and group identity (GI) (Cross, 1991; Porter & Washington, 1979; Spencer, 1982). PI focuses on personality traits, a matrix of traits, and psychodynamic drives that highlight a person's general personality, which stems from the individuation-separation process that is the comprehension of the distinctness between one's physicality and psychology (Cross & Cross, 2007). It is posited that PI is a prerequisite for GI development because an individual needs to first understand that s/he is one human being among others via the process of separation-individuation, through which s/he may being to share similar commonalities and feelings of attachment to a group. Hence, the GI is the second component of the self-concept (Cross, 1991; Cross & Cross, 2007; Spencer, 1982), and is an out growth of the attachment experience.

Attachment theory is central in Cross' revised theory as "attachment makes possible the experience of collective self-esteem and collective or group identity (GI)," noted by the sense of connection and closeness to a group entity (Cross & Cross, 2007, p. 11). Cross and colleagues make the distinction between the PI and GI to situate the study of racial-ethnic identity development within the larger discourse on self-concept development; hence, racial and ethnic identity are embedded within the GI component of the self-concept and refers to a single cell in

the self-concept matrix. Hence, one's self-esteem (PI variable) may differ from one's racial identity (GI variable).

As a result, the revised nigrescnece theory postulates that PI plays a minor role in the definition of Black identity because Blackness is a reference group variable, not a personal identity variable. The GI is often referred to as a reference-group orientation (RGO), which reflects the importance and salience of race in an individual's life as well as the valence (i.e., value and regard) given to race. Therefore, the role of RGO may play no importance with a neutral valence, singular importance with a positive valence, or singular importance with a negative valence (Cross & Vandiver, 2001; Vandiver et al., 2002).

Cross Model – Extended. With this conceptualization between PI and RGO variables, Vandiver, Cross, Fhagen-Smith, et al. (2000) expanded the Cross model in a third, final extended version, which identified multiple identity clusters within the Pre-Encounter, Immersion-Emersion, and Internalization stages. The Pre-Encounter stage was expanded to include Assimilation, Miseducation, and Self-Hatred orientations, the Immersion-Emersion stage was expanded to include Anti-White and Intense Black Involvement orientations, and the Internalization stage was expanded to include Nationalist, Multiculturaist, and Biculturalist orientations. To view the evolution of the Cross model through its two revisions; please see the table below provided by Worrell, Cross, and Vandiver (2001). Cross and Vandiver (2001) provide an overview of the extended model:

Pre-Encounter - Assimilation describes African Americans whose social identity is organized around her or his sense of being an American and an individual, as such little significance is given to one's racial group identity. The person may actually work with White groups to destroy what are perceived as "race-based" programs, and the person often shows

disdain for Black culture, all-Black groups, and multiculturalism. It is a relatively passive orientation, as the individual does not engage Blackness.

Pre-Encounter - Miseducation depicts African Americans who accept, as truthful, facts, images, and historical information about Black people that are, in fact, stereotypical and forms of cultural-historical misinformation. The miseducated individual may hesitate to engage Black problems and Black culture, as s/he holds dominant culture's pejorative perspective on Black culture. The individual will most likely compartmentalize his/her stereotypic perceptions so that such negative group images do not affect her/his personal self-image.

Pre-Encounter - Self-Hatred characterizes individuals whose experiences are shrouded in profoundly negative feelings and deep self-loathing associated with being Black. Group hatred for this individual limits any positive engagement of Black problems and Black culture.

Immersion-Emersion Anti-White describes individuals who deeply explore and identify with Black culture, but are nearly consumed by a hatred of White people and White society. These individuals tend to engage Black problems and Black culture but are frequently predictably unpredictable, volatile, and hold hostility towards dominant White culture and society.

Immersion-Emersion Intense Black Involvement represents an individual who holds a relatively simplistic and romantic picture of Black culture, and is obsessed with all things Black. The person engages Blackness in a nearly cult-like fashion and tends towards a Blacker-than-thou social perception and interaction with other African Americans.

Internalization - Nationlist describes an individual who stresses an Africentric perspective about oneself, Black people, and the surrounding world. There is no question that such persons engage Black problems and Black culture.

Internalization - Biculturalist exemplifies a Black person who gives equal importance to "Americanness" as well as Africanness, and engages Black issues and culture but also openly engages aspects of the mainstream culture. This person can be as dedicated as anyone else but also enjoys and feels part of mainstream events, celebrations, and issues.

Internalization – Multiculturalist is an individual whose identity fuses or reticulates linkages between three or more social categories (multiplicity) or frames of reference. Whether it is the person's perceptions of a situation or the need to make a key identity decision, nearly equal weight is given to the multiple categories that drive the person's sense of identity. Although the person feels very much a part of the Black community and the Black struggle, he or she easily appreciates a wide range of cultural events and activities. As a result, a person with a Multiculturalist identity eschews solutions that rely on single-group interests and prefers solutions that address multiple oppressions.

It is important to note that Internalization and Internalization Commitment stage attitudes are similar to the point that the two stages are combined to exist as merely "Internalization" (Vandiver et al., 2001). Additionally, the term Black Nationalist exists within the Internaliation stage, which is often misunderstood; the Black Nationalist Internalization stage is culturally inclusive and Africentric without the radicalness as assumed. Vandiver et al., (2001) state that " the inclusion of Afrocentricity as a type of Nationalist in the final stage of Nigrescence (Cross, 1991) offers one possible non-Western framework that "internalized Blacks may rely on to diminish the hegemonic influence of Eurocentric worldview" (p. 182). For an outline of the Cross model and its revisions, see Appendix E.

Cross Racial Identity Scale (CRIS; Vandiver et al., 2002). The CRIS is a 40-item self-report 5-point Likert scale instrument that measures stages and orientations within the Cross

Revised and Expanded Model of racial identity. Thirty items comprise six identity types, including three pre-encounter types, one immersion-emersion type, and two internalization types. Ten items are used to reduce response bias. Exploratory factor analysis (Principle Components Analysis with Oblique rotation) on a sample size of 296 African American participants was conducted on the CRIS yielding a six-factor solution with factor loadings > |.50| as the cut off, accounting for 43.13% of the overall variance. Initial coefficient alphas ranged from .72 to .89. In a second study, a confirmatory factor analysis was conducted and resulted in an acceptable fit ($\chi 2$, 390 = 604.99; CFI = .94; RMSEA = 90%CI [.043 .055]) of the model to the data. Convergent validity was assessed with significant and meaningful correlations with the Multidimenisonal Inventory of Black Identity (Sellers et al., 1997). Discriminant validity was assessed with low correlations between the CRIS subscales and social desirability scale (BIDR; Paulhus, 1984, 1991), personality (Big Five Inventory; John et al., 1991), and global self-esteem (RSES; Rosenberg, 1965). A significant negative correlation was found between global self-esteem and the Pre-Encounter Self-Hatred subscale, which was supported by apriori hypotheses that the RGO may be connected with PI for individuals in this stage (Vandiver, 2001); however, no other CRIS subscale was related to self-esteem. The CRIS has been adapted to all individuals of Color in the Cross Scale of Social Attitudes (CSSA; Worrell, Vandiver, Cross, and Fhagen-Smith, 2010).

Cluster analyses with the CRIS. Cluster analysis has become extremely popular with the recent inquiries into racial identity statuses and psychological functioning (e.g., Worrell, Vandiver, Schaefer, Cross, and Fhagen-Smith, 2006). The assumption behind this is that various racial identity attitudes exist across African Americans, that these attitudes are stable most of the time, and that different racial identity profiles are related to different functioning (Worrell,

Vandiver, Schaefer, Cross, & Fhagen-Smith, 2006). Additionally, psychological adjustment and well-being have been studied in relation to the CRIS. Jones et al. (2007) found that self-hatred attitudes predicted depression and that multicultural inclusive attitudes moderated the relationship between racial stress and depression. Whittaker and Neville (2010) found that self-hatred does not have the worst outcome on psychological distress, well-being, and hardiness. Immersion/Anti-White profile had substantially poorer adjustment on all three. Multiculturalists report the best psychological adjustment on three constructs. Anti-white participants reported poorer adjustment than other groups on psychological well-being. Self-hatred attitudes did not differ significantly from Multiculturaist on psychological well being (d=-.02). Self-hatred group did not have significantly different scores than the Multiculturaists on Hardiness and psychological distress.

Extant Racial Identity Literature

"Perhaps no other topic in multicultural counseling and psychology literature has been heavily researched with African Americans as that of racial identity" (Cokley, 2002, p. 476). Since 1981, more than 50 studies have been conducted and published using Cross' model of African American racial identity. These empirical studies have attempted to explore the relationship of racial identity on psychological distress, self-esteem, and other psychosocial constructs in efforts to illuminate the psychological outcomes related to the process of racialization for African Americans. The extant published literature on racial identity, using the Cross model and respective measures, displays a somewhat dominant trend that somewhat confirms the theoretical tenants proposed by Cross (1990) and Helms (1991) regarding psychological variables associated with higher racial identity statuses. The next section

summarizes the extant published literature on racial identity using the Cross model. Dominant trends are highlighted as well as the equivocal nature of the findings.

Empirical research on Pre-Encounter attitudes. Consistent with Cross (1971, 1978) and Helms (1995) perspective on the hierarchical nature of racial identity (i.e., higher racial identity statuses are correlated with more positive psychological functioning), multiple researchers have found that the Pre-Encounter status, deemed the least complex and most maladaptive form of racial identity, is associated with psychological distress and psychological symptoms as measured by the RIAS. The Pre-Encounter status refers to attitudes that deny and devalue one's blackness, idealizing everything that is white. In one of the earlier studies, Parham and Helms (1985a) found that the Pre-Encounter status was associated with greater personal distress among African American college students. More recently, several researchers found that the Pre-Encounter status ranged in observed correlation with psychological distress, correlations ranging in magnitude from small-to-medium (Franklyn-Jackson & Carter, 2007) to large (Mahalik, Pierre, & Wan, 2006).

Psychological symptoms have also been studied in relationship to African American Pre-Encounter attitudes. The Pre-Encounter status has been found to be associated with anxiety, memory impairment, paranoia, hallucinations, alcohol concerns, and global psychological distress, correlations ranging in magnitude from medium to large (Carter, 1991). The Pre-Encounter status is also correlated with illegal drug use (Croasdale & Mate-Kole, 2006), depressive symptoms (Munford, 1994; Pyant & Yanico, 1991), the Global Severity Index (Carter, Williams, Juby, & Buckley, 2005), and the use of "immature" psychological defensive styles (Nghe & Mahalik, 2001). Moreover, Pre-Encounter scale scores on the RIAS have been found to be negatively predictive of psychological health (Plummer, 1996) and to serve as a risk

factor for substance abuse, marital discord, academic difficulties and low self-esteem in African American populations (Anderson, 1991).

Understanding that a lack of psychological distress and symptoms is not necessarily a proxy for psychological health, studies within the last 20 years found that the Pre-Encounter status was associated with greater psychological distress as well as lower levels of self-esteem (Mahalik, Pierre, & Wan, 2006; Pierre & Mahalik, 2005). Corroborating this finding, lower levels of self-esteem were correlated with the Pre-Encounter status among African American women at a Historically Black College/University (HBCU) (Watts, 2006), African American undergraduate and graduate students at Predominately White Institutions (PWI) (Goodstein & Ponterotto, 1997), African American protestant church attendees (Speight, Vera, & Derrickson, 1996), African American women in a private misdemeanor probation institution (Collins & Lightsey, 2001), and African American high school girls in the New York City public school system (Buckley & Carter, 2005). Not only have Pre-Encounter attitudes been found to be correlated with lower levels of self-esteem, but they have also been found to be related with lower levels of self-efficacy (Collins & Lightsey, 2001), self-regard (Parham & Helms, 1985a; Pyant & Yanico, 1991), self-concept (Wilson & Constantine, 1999), and psychological well-being (Franklyn-Jackson & Carter, 2007; Pyant & Yanico, 1991).

On college campuses, Pre-Encounter attitudes are associated with psychosocial factors and perceptions, such that African American college students' Pre-Encounter attitudes predicted more favorable perceptions of racial climate, a lack of personal perceived discrimination in campus organizations at PWIs (Watts & Carter, 1991), less participation in African American oriented campus activities (Mitchell & Dell, 1992), and less psychological closeness to other African Americans (Brookins, Anyabwile, & Nacoste, 1996). Pre-Encounter attitudes were

related to vocational identity foreclosure, such that higher Pre-Encounter attitudes predicted a greater number of career options discarded (Manese, 1984) and lower tolerance of career indecision (Thompson, 1985). Furthermore, Pre-Encounter attitudes were related to lower levels of moral development, such that African Americans with higher Pre-Encounter attitudes were less able to exhibit complex moral reasoning about racial issues (Moreland & Leach, 2001), which is consistent with the lack of cognitive processing in lower racial identity states (Helms, 1995), as well as lower reading and math standardized achievement levels at the high school level (Sandoval, Gutkin, & Naumann, 1997). Pre-Encounter attitudes were predictive of more effective counseling, but more counseling stigma for African American college students both a PWI and HBCU (Austin, Carter, & Vaux, 1990).

Although there seems to be some convergence of the data, the relationship between Pre-Encounter attitudes and distress (r= 0.22 to 0.45) as well as Pre-Encounter attitudes and self-esteem (r= -0.12 to -0.38) vary drastically in the strength of their relationships. Not to mention, several studies find no relationship between the Pre-Encounter status and well-being (e.g., Forsyth & Carter, 2012, Spurgeon & Myers, 2008) as well as between Pre-Encounter attitudes and psychological symptoms (e.g., Gilbert, So, Russell, & Wessel, 2006; Whatley, Allen, & Dana, 2003). Hence, the main purpose of this racial identity meta-analysis is to attain a more precise estimate of this relationship and increase the power to detect small effects, as the study participant size ranged from a study with 26 participants (Sandoval, Gutkin, & Naumann, 1997) to 713 participants (Smith et al., 2009).

A smaller set of studies (k=7 studies) has used the new and psychometrically improved CRIS instrument to measure similar psychological constructs related to African American racial identity. The CRIS similar to the RIAS provides a score on each of the subscales for each

individual. Thus the CRIS yields three Pre-Encounter attitude subtypes (i.e., Miseducation, Self-Hatred, and Assimilation). Pre-Encounter- Miseducation attitudes were associated with psychological symptoms (Telesford, Medoza-Denton, & Worrell, 2013) and psychological distress (Whittaker & Neville, 2010). More specifically, Pre-Encounter - Miseducation scores were correlated with depression, interpersonal sensitivity, hostility, phobic anxiety, and psychoticism in African American college men from both PWIs and HBCUs (Wester, Vogel, Wei, & McLain, 2006). Additionally, Pre-Encounter - Miseducation attitudes were related to more difficult overall and academic college adjustment at both a HBCU and PWI (Anglin & Wade, 2007).

The Pre-Encounter – Assimilation subscale displayed small to medium intercorrelations with the Pre-Encounter – Miseducation subscale, correlations ranging in magnitude from small (Anglin & Wade, 2007) to medium (Telesford et al., 2013), and small to medium intercorrelations with the Pre-Encounter – Self-Hatred subscale, correlations ranging in magnitude from small (Anglin & Wade, 2007) to medium (Telesford et al., 2013). The Pre-Encounter – Miseducation subscale displayed small to medium intercorrelations with the Pre-Encounter – Self-hatred subscale, correlations ranging in magnitude from small (Anglin & Wade, 2007) to medium (Wester et al., 2006). All of the CRIS Pre-Encounter subscales were intercorrelated at a small-to-medium level.

The Pre-Encounter – Self-Hatred attitude was found to be strongly, albeit inversely, correlated with self-esteem in African American college students (Awad, 2007; Flowers, Levesque, & Fischer, 2011). Moreover, the Pre-Encounter – Self-Hatred attitude was strongly related to psychological distress , psychological symptoms , depression, and moderately related to satisfaction with life in African American college students (Telesford, Mendoza-Denton, &

Worrell, 2013; Wester, Vogel, Wei, & McLain, 2006; Whittaker & Neville, 2010). However, empirical evidence with the CRIS on both Pre-Encounter- Miseducation and Pre-Encounter - Assimilation subscales in relation to self-esteem yields contradictory findings. For instance, Awad (2007) found that Pre-Encounter - Miseducation scores were inversely related to self-esteem, but Flowers, Levesque, and Fischer (2011) found no relationship between Pre-Encounter – Miseducation scores and self-esteem, both studies sampling from African American college students. Additionally, Awad (2007) found that Pre-Encounter – Assimilation scores were inversely related to self-esteem, whereas Flowers, Levesque, and Fischer (2011) did not find any relationship, both of which sampled African American college students. Additionally, Pre-Encounter – Assimilation was not related to psychological distress in African American college students (Wester, Vogel, Wei, & McLain, 2006). Hence, there appears to be some equivocal findings with the Pre-Encounter subscale as well as imprecise measures of the strength of Pre-Encounter attitudes to psychological constructs.

Empirical research on Encounter attitudes. The Encounter stage refers to a shocking event, which causes an individual to question her or his identity; in this case, an event that forces and individual to recognize that they are African American and different from mainstream white society. The Encounter subscale is related to psychological distress (Franklyn-Jackson & Carter, 2007) and has produced observed correlations with somatization tendencies, anxiety (Croasdale & Mate-Kole, 2006), depressive symptoms (Pyant & Yanico, 1991), and the Global Severity Index in African American college students. Encounter attitudes are moderately predictive of psychological health (Plummer, 1996) and are highly related to the utilization of neurotic psychological defenses (Nghe & Mahalik, 2001) in African American college students. Several psychosocial college variables are associated with Encounter attitudes, such as psychological

closeness to other African Americans (Brookins, Anyabwile, & Nacoste, 1996), preference for African American counselors (Parham & Helms, 1981), lower levels of career identity foreclosure (Thompson, 1985), and more perceived cultural and individual stressors (Johnson & Arbona, 2006; Neville, Heppner, & Wang, 1997).

Equivocal empirical evidence yields positive, negative, and a lack of relationship between Encounter attitudes and self-esteem/well-being variables. For instance, Pyant and Yanico (1991) found that Encounter attitudes were related to lower psychological well-being and lower levels of self-esteem, which is supported by Wilson & Constantine's (1999) finding that Encounter attitudes were moderately predictive of lower levels of self-concept. However, Encounter attitudes were also related to self-actualization tendencies and a lack of feeling inferior and anxious in African American college students (Parham & Helms, 1985b), as well as higher levels of self-esteem in African American high school girls in the New York public schools (Buckley & Carter, 2005). To further complicate matters, several studies found no correlation between Encounter attitudes and self-esteem among African American women at a HBCU (Watt, 2006), African American women at a church (Collins & Lightsey, 2001), African American undergraduate and graduate students at a PWI (Goodstein & Ponterotto, 1997), and African American adults in community organizations in the Maryland, District of Colombia, and New York City area (Franklyn-Jackson & Carter, 2007).

Subscales of the RIAS have received critiques about its low reliability, especially on the Encounter subscale, which may contribute to such divergent findings (Akbar, 1989; Ponterotto & Wise, 1987; Rowley & Sellers, 1998). And as a result, no recent studies use the Encounter subscale on the CRIS when reporting findings (Cokley, 2007). With this in mind, a meta-analysis of the reliability coefficients for all of the subscales, especially the Encounter subscale,

is indicated prior to a meta-analysis of the RIAS subscales on psychological constructs to test the alleged low reliability scores of subscales across studies.

Empirical research on Immersion-Emersion (I/E) attitudes. The Immersion–Emersion (I/E) stage refers to attitudes that reflect a high level of Black pride, to the extent that everything that is black is idealized and everything that is associated with white is devalued. I/E attitudes were highly associated with psychological distress among young adult African American men (Mahalik, Pierre, & Wan, 2006; Pierre & Mahalik, 2005) and African American college students at PWIs (Carter, Williams, Juby, & Buckley, 2005). Additionally, I/E attitudes were related to drug use (Croasdale & Mate-Kole, 2006), drug concerns (Carter, 1991), and a hypersensitivity to racism (Carter, 1991). I/E attitudes were moderately predictive of MMPI-Psychopathic Deviate scores and MMPI – Hypomania scores (Whatley, Allen, & Dana, 2003) for African American male college students attending a racially homogenous urban, community college. Corroborating these MMPI findings, Parham and Helms (1985a) found high levels of anxiety and hostility among African American college students. Using the CRIS, Wester, Vogel, Wei, and McLain (2006) observed I/E correlations ranging in magnitude from small to medium for depression, anxiety, interpersonal sensitivity, hostility, phobic anxiety, paranoid ideation, and psychoticism in African American male college students, which is supported by Telesford et al. (2013), who found that the CRIS I/E scores were moderately associated with increased psychological symptoms. However, there is one study that found no relationship between I/E attitudes and psychological distress (Franklyn-Jackson & Carter, 2007).

I/E attitudes are related to a number of psychosocial factors, such that individuals with higher I/E attitudes are more likely to engage in African-American oriented campus activities (Mitchell & Dell, 1992), report higher levels of psychological closeness to other African

Americans college students at a PWI (Brookins, Anyabwile, & Nacoste, 1996), and hold Afrocentric beliefs (Carter & Helms, 1987; Cokley, 2002; Martin & Nagayama-Hall, 1992). I/E attitudes are significantly correlated with less sophisticated defense mechanisms and more reliance on externalizing coping strategies (Nghe & Mahalik, 2001) as well as a lack of confidence in one's own problem solving abilities (Neville, Heppner, & Wang, 1997). I/E attitudes are also significantly associated with more mature career development attitudes (Manese, 1984), but higher levels of counseling stigma and ineffective counseling at both PWIs and HBCUs (Austin, Carter, & Vaux, 1990). Additionally, I/E attitudes are moderately correlated with perceived cultural, are slightly correlated with individual racism (Johnson & Arbona, 2006), and are moderately predictive of acculturative stress while controlling for demographic factors and racial socialization (Thompson, Anderson, & Bakeman, 2000) in African American undergraduate students. These stressors may be linked to the observed extremely high correlations between I/E attitudes and African American high school student cumulative GPA, mid-semester GPA, and attendance in a predominately White Midwestern city (Sandoval, Gutkin, & Naumann, 1997) as well as difficulty with college adjustment at both a PWI and racially diverse college (Telesford et al., 2013).

With the psychological construct of self-esteem, the extant published literature displays contradictory findings with I/E attitudes. I/E attitudes have been found to be moderately-to-highly correlated with lower levels of self-esteem in African American high school women (Buckley & Carter, 2005), low self-actualizing tendencies and low self regard in African American college students at a PWI (Parham & Helms, 1985a), and with the Rosenberg Self-Esteem scale (Awad, 2007). However, a couple studies have found that I/E attitudes were slightly correlated with self-esteem among African American college students at an HBCU

(Speight et al., 1996) as well as moderately correlated with self-esteem among African American women at a church and misdemeanor probation center (Collins & Lightsey, 2001). Additionally, several studies failed to find any significant relationship between self-esteem and I/E attitudes among African American students at a racially diverse university (Wilson & Constantine, 1999), at an HBCU (Watt, 2006), and at a PWI (Goodstein & Ponterotto, 1997). Interestingly, Whittaker and Neville (2012) used the CRIS and found that the Immersion attitude cluster revealed the lowest levels of psychological well-being, but at the same time, the lowest levels of psychological distress. Thus, there is equivocal evidence in the relationship between the I/E attitudes scale and the psychological variables of psychological distress, psychological symptoms, and self-esteem. Moreover, these findings also allude to a possible moderator effect of the college's racial composition, as most of the studies have been conducted on African American college students at a PWI, HBCU, or racially diverse college.

Empirical evidence for Internalization attitudes. The Internalization status refers to attitudes that reflect a sense of inner security about one's Blackness, which does not denigrate White people or values. Most of the empirical studies have found lower levels of psychological symptoms and distress for African Americans with Internalization attitudes, which are deemed the most adaptive and healthy stage/status of racial identity. Several authors have found that Internalization attitudes are associated with the least psychological symptoms (Carter, Williams, Juby, & Buckley, 2005; Forsyth & Carter, 2012) and least psychological distress in college samples (Franklyn-Jackson & Carter, 2007) as well as community samples (Pieterse & Carter, 2010).

More specifically, other researchers concluded that Internalization attitudes are significantly related to lower levels of depression (Munford, 1994) and moderately predictive of

lower scores on the MMPI – Paranoia subscale (Whatley, Allen, & Dana, 2003) in African American college students. However, one study identified that Internalization attitudes were moderately predictive of paranoia (among African American college students (Carter, 1991) and another study, using the CRIS, found that Internalization – Afrocentric attitudes were significantly correlated with depression, hostility, and paranoid ideation (Wester, Vogel, Wei, & McLain, 2006). Furthermore, one study did not find any relationship between the Internalization status and the Global Severity Index for African American college males (Carter, Williams, Juby, & Buckley, 2005). With the CRIS instrument, several researchers found a lack of relationship between all Internalization subscales and psychological distress (Telesford, Mendoza-Denton, & Worrell, 2013; Whittaker & Neville, 2010). Again, these results yield equivocal findings.

Overall, Internalization attitudes have been identified as the most adaptive attitudes because African Americans who embrace or internalize a new found identity support acceptance of self and an appreciation of other racial-ethnic groups, thereby leading researchers to posit a positive relationship with self-esteem (Johnson, 2002, p.197). Most studies that have examined self-esteem in relation to Internalization attitudes have identified a statistically significant positive relationship. This finding is consistent among young adult African American males (Mahalik, Pierre, & Wan, 2006; Pierre & Mahalik, 2005), African Americans at church (Collins & Lightsey, 2001; Speight, Vera, & Derrickson, 1996), African American women at a misdemeanor probation center (Collins & Lightsey, 2001), African American high school women (Buckley & Carter, 2005), African American undergraduate and graduate students at a mixed race university (Goodstein & Ponterotto, 1997), African American undergraduate students

at a PWI (Phelps, Taylor, & Gerard, 2001), and African American women at both a PWI and HCBU (Poindextern-Cameron & Robinson, 1997).

Corroborating the RIAS findings, Whittaker and Neville (2010) found that the CRIS Internalization - Multiculturalist subscale was associated with the highest levels of psychological well-being and lowest levels of psychological distress. Two studies found no relationship between Internalization attitudes and self-esteem (Awad, 2007; Watt, 2006), one of which used the CRIS Internalization – Multiculturalist subscale. Moreover, the CRIS Internalization – Afrocentric subscale was found to be related to lower levels of self-esteem for African American college students at a HBCU (Awad, 2007). The two CRIS Internalization subscales displayed a small correlation among selected studies, ranging in magnitude from small (Anglin & Wade, 2007) to small-medium (Awad, 2007). Although there seems to be a trend of convergence in these empirical findings, the relationship between Internalization attitudes and self-esteem shows some variation in direction and strength, which ranges from correlation coefficients in small (Speight et al., 1996) to large magnitudes (Poindextern-Cameron & Robinson, 1997). Hence, a more precise estimate of relationship between Internalization attitudes and self-esteem is needed.

Internalization attitudes are also related to the development of a healthy self-concept in African American college students (Wilson & Constantine, 1999), adaptive psychological functioning in college (Anglin & Wade, 2007; Neville & Lily, 2000; Pieterse & Carter, 2010), more mature psychosocial development (i.e., establishing purpose, developing mature interpersonal relationships, etc.) (Pope, 1998), and higher levels of moral development (Moreland & Leach, 2001). Additionally, African Americans with Internalization attitudes report closer psychological closeness to other African Americans at a PWI (Brookins, Anyabwile, & Nacoste, 1996) as well as endorse strategies to educate Whites, mobilize African

Americans, lobby for laws, vote, and put African Americans in policy-making decisions towards the goal of reducing racism (Watts, 1992).

Moreover, Internalization attitudes are significantly correlated with academic achievement, such that African Americans that hold Internalization attitudes tend to have higher cumulative GPAs (Lockett & Harrell, 2003; Sandoval, Gutkin, & Naumann, 1997) and experience a buffering effect on GRE verbal performance in the face of low stereotype threat at PWI (Davis, Aronson, & Salinas, 2006). However, Anglin and Wade (2007), using the CRIS on a sample split between a HBCU and a racially diverse college, found that Internalization – Nationalist attitudes were significantly correlated with decreased college adjustment, but Internalization – Multicultural attitudes were significantly correlated with increased college adjustment. Although it is uncertain as to whether or not Internalization attitudes are related to increased perceptions of cultural and individual racism (Johnson & Arbona, 2006 vs. Neville, Heppner, & Wang, 1997), Internalization attitudes were significantly predictive of less acculturative stress (Thompson, Anderson, & Bakeman, 2000), lower levels of general stress, and higher levels of psychological well-being (Pieterse & Carter, 2010). This phenomena has been linked to the more complex psychological processes associated with Internalized racial identity attitudes; that is, a more complex racial identity status allows for an "objective response to members of the dominant racial group" based on decision making strategies that include a positive commitment to one's group, and the assessment and integration of oneself and one's socio-racial group (Helms, 1995, p.186).

Lack of relationships in racial identity. Many of the published studies report only significant findings; however, a more in depth review of the articles identifies a common lack of relationship between the RIAS and the psychological variables of self-esteem, wellness,

psychological distress, and psychological symptoms. Forsyth and Carter (2012) found no differences among racial identity statuses and well-being. Poindextern-Cameron and Robinson (1997) displayed no correlation between self-esteem and Encounter or Immersion-Emersion attitudes among students at both a PWI and HBCU. Spurgeon and Myers (2008) did not find any relationship between racial identity statuses and the five dimensions of college student wellness at both a PWI and HBCU. Whiterspoon, Speight, and Thomas (1997) showed no relationship between racial identity stages/statuses and academic self-concept or self-regard scales. Gilbert, So, Russell, and Wessel (2006) reported that racial identity statuses were independent of and not associated with psychological symptoms. Halgunseth et al. (2005) noted no relationship between racial identity stages/statuses and level of maternal depression. Whatley, Allen, and Dana (2003) found that Pre-Encounter and Encounter attitudes were not predictive of scores on the MMPI – Psychopathic-Deviate, Paranoia, or Hypomania subscales. Using the CRIS, Whittaker and Neville (2010) found that specific Internalization attitudes were not correlated with psychological distress and Telesford et al. (2013) did not find any associated between any of the Internalization subscales and psychological symptoms. The presented published racial identity literature is extensive and vast, but there are some trends that emerge. At a basic narrative glance, there seems to be evidence suggesting that higher statuses of racial identity are associated with less psychological symptoms, less psychological distress, higher levels of self-esteem, and higher levels of psychological well-being.

Purpose of the Present Study

These observations illuminate the large amount of equivocal evidence that suggests the adaptability of specific racial identity statuses with higher levels of psychological functioning. Two narrative summaries have identified the limitations of the RIAS as well as the equivocal

evidence produced by the RIAS (e.g., Cokley, 2007; Ponterotto & Wise, 1987). Hence, the main purpose of the present study is to provide a quantitative summary of the RIAS literature to date and provide future directions for racial identity research; more concretely, the study proposes to quantitatively synthesize the extant racial identity literature using the RIAS on African American psychological functioning, examine measurement issues with the RIAS, and explore study factors that may moderate the RIAS and psychological functioning relationship.

No studies to date have examined the entire body of racial identity literature using the RIAS with respect to its internal consistency. It is within this inextricable context that the equivocal findings in the racial identity literature need to be interpreted, as the interpretation of statistical findings from an unreliable or invalid measure yields unreliable and invalid results. For an overview of the present study, please see Appendix F: Summary and Purpose of Study.

The two previous racial identity meta-analyses (i.e., Elmore, Mandara, & Gray, 2012; Lee & Ahn, 2013) included predominately published studies in their analysis; however, there is a surplus of African American racial identity dissertations conducted using the RIAS, which easily doubles the number of studies to include. Not only does this boost statistical power, but it also provides a more comprehensive and precise measure of the relationship between African American racial identity status and psychological functioning (i.e., not as biased to the file drawer effect). Furthermore, an important distinction in this study is the clear delineation between demographic/study variables that are hypothesized to influence racial identity levels and those that moderate the African American racial identity and psychological functioning relationship.

Addressing the critiques of the RIAS instrument. Over the past 30 years, multiple critiques of the RIAS as a measurement for African American racial identity have been presented

(e.g., Cokley, 2007; Ponteroto & Wise, 1987; Fischer et al., 1998; Sellers et al., 1998; Yanico et al., 1994). Not only has the RIAS been critiqued on psychometric grounds (e.g., Ponterotto & Wise, 1987), but it has also been critiqued on its accuracy in operationalizing Cross' theory of racial identity (e.g., Sellers, 1993). These identified limitations may account for some of the equivocal evidence apparent in the African American racial identity literature (Rowley & Sellers, 1998). Despite these critiques of the RIAS, it appears to be common practice even in recent studies (e.g., Davis et al., 2006; Hall & Carter, 2006; Johnson & Arbona, 2006; Pillay, 2005; Franklyn-Jackson & Carter, 2007; Mahalik, Pierre, & Wan, 2006) to continue to use the RIAS to measure African American racial identity. Furthermore, Cokley (2007) states that the RIAS remains the instrument of choice for many researchers, graduate students, and professionals, which shows the ways in which the RIAS has become the standard by which African American racial identity is measured.

On psychometric grounds, scholars have identified low reliability scores on the RIAS subscales (Tokar & Fischer, 1998; Yanico, Swanson, & Tokar, 1994; Cokley & Vandiver, 2011), especially on the Encounter scale, which Ponterotto and Wise (1987) stated should be dropped because it did not hold up in a factor analytic study (i.e., principal axis factoring and oblique rotation). According to theory, Helms and Parham (1996) suggest that an item on the RIAS should reflect its assigned stage and not contribute to multiple stages. However, Ponterotto and Wise found a three-factor solution that accounted for 23.3% of the variance in a sample of 186 African Americans. They found support for the Pre-Encounter, Immersion-Emersion, and Internalization statuses. In another factor analysis study, Yanico, Swanson, and Tokar (1994) applied principle axis factoring and orthogonal rotation, also finding support for a three-factor solution, which accounted for 20.1% of the variance. Moreover, Lott (2011) found that the

factor structure for African American men differed from African American women on the RIAS (short form), disconfirming gender factorial invariance. Especially on the Encounter status, four items loaded significantly for females, but only three items loaded significantly for males. Moreover, two out of the eight items on the I/E subscale did not load significantly on the status for males while all eight items loaded significantly for women. On the internalization status, one out of nine items did not load significantly for men and women, but the items that did not load were different for males and females.

Others (Fischer et al., 1998; Tokar & Fischer, 1998; Yanico et al., 1994) have reported alpha coefficients ranging across studies from .59 to .83 for the Pre-Encounter status, .34 to .45 for the Encounter status, .63 to .75 for the Immersion-Emersion status, and .37 to .70 for the Internalization status (see Cokley, 2007). The wide variation of internal consistency coefficients range from being acceptable to not being acceptable, using the minimally acceptable standard of .70 (Nunnally, 1978) with occasional calls for higher standards of .80 (Clark & Watson, 1995). Furthermore, the original RIAS instrument was developed on a sample of 58 Midwestern university African American students using item analysis (Helms, 1990), with alphas ranging from .67 to .76 for the Pre-Encounter stage, .50 to .72 for the Encounter stage, .66 to .69 for the Immersion– Emersion stage, and .71 to .80 for the Internalization stage (Helms & Parham, 1996). Drawing from Vacha-Hasse's (1998) work on reliability generalization, another consideration in the varying subscales' alpha levels is to examine for which populations is the RIAS instrument a reliable measure, as opposed to examining whether or not the RIAS instrument is reliable.

The number of RIAS psychometric critiques (Cokley & Vandiver, 2011; Fischer, Tokar, & Serna, 1998; Ponterotto & Wise, 1987; Swanson, Tokar, & Davis, 1994; Tokar & Fischer,

1998; Tokar & Swanson, 1991; Yanico, Swanson, & Tokar, 1994) indicates taking heed when using the RIAS as a measure for African American racial identity and warrants a further investigation into the internal consistency and validity of the RIAS subscales. Furthermore, Thompson and Snyder (1998) stated that score reliability affects "our ability to achieve statistical significance [and] attenuates the effect sizes for the studies we conduct" (p . 438). Hence, the first purpose of this study is to attain a quantitative summary of an estimate of the alpha coefficients on each of the RIAS subscales, explore the moderating effect of scale form (i.e., RIAS-Short 30-item form, RIAS-Long 50-item form, or RIAS-Revised 60-item form), and explore the moderating effects of demographic (percent female in the sample, cohort year of the sample) and study (n-size of the study, recruitment method utilized, percent of African Americans in the sampled context, date of the study, and RIAS form used in the study) variables on the RIAS subscales coefficient alphas.

Based on the properties of coefficient alpha (i.e., increasing items increases internal consistency; Crocker & Algina, 1986), it is hypothesized that the RIAS 60-item form (Pre-Encounter – 17 items, Post-Encounter – 8 items, Internalization – 13 items) will have the highest internal consistency, the RIAS 50-item form (Pre-Encounter – 14 items, Encounter – 4 items, Immersion/Emersion – 9 items, and Internalization – 12 items) will be in the middle, and the RIAS 30-item form (Pre-Encounter – 9 items, Encounter – 4 items, Immersion/Emersion – 8 items, and Internalization – 9 items) will have the lowest internal consistency. Since both the RIAS 30- and 50-item forms have the same number of Encounter items, it is hypothesized that there will be no difference in alpha levels for the Encounter subscale between the 30- and 50-item scale.

Percent of African Americans in the environmental context as moderator. Addressing these critiques of the RIAS, Helms (1989) identified the importance of the influence of local racial climates on individuals and group racial identity expressions. Moreover, Helms (1989) posits that the low scale reliability is most likely a consequence of these differing racial climates influencing racial identity levels of individuals. Corroborating this claim, Sellers (1993) highlights the importance of taking into account the situational context in which racial identity is measured. As a result, percent of African Americans in the sampled context is posited to moderate the alpha coefficients on each of the subscales.

Intercorrelation between non-adjacent RIAS statuses. The RIAS has also been critiqued on its operationalization of Cross' racial identity theory, such that there is evidence to suggest that there is a high intercorrelation among the RIAS' four subscales, most notably non-adjacent statuses (Sellers et al., 1998; Rowley & Sellers, 1998). For instance, a case can be made for an individual to score high on the Encounter status and the Immersion/Emersion status, as the individual could be said to be in transition between adjacent statuses; however, there is no theoretical explanation for an individual to have high scores on Pre-Encounter and Internalization scales because they are non-adjacent statuses and the highest level of racial identity is theoretically not supposed to be highly correlated with the lowest level of racial identity. Non-adjacent statuses that are highly correlated (i.e., $r > .30$) are deemed not theoretically accurate to the Cross' model of racial identity (cf. Ponterotto, 1989; Ponterotto & Wise, 1987; Grace, 1984 [cited in Helms, 1985a]; Parham & Helms, 1981; Rowley and Sellers, 1998; Sellers et al., 1997). This study seeks to obtain a quantitative estimate of the intercorrelations between the racial identity statuses on the RIAS to test the observational

critiques provided by other researchers. For a visual representation, please see (see Appendix G: Measurement Issues with the RIAS).

Intercorrelation between non-adjacent RIAS statuses moderated by RIAS form. Between the short and long form, Helms (1990) reported several discrepancies in status intercorrelations, such that the correlation between the Pre-Encounter and Immersion/Emersion statuses displayed a $r = .35$ on the short form and a $r = -.15$ on the long form as well as the correlation between the Pre-Encounter and Internalization statuses yielded a $r = -.58$ on the short form and $r = -.04$ on the long form. Given the varying RIAS subscale intercorrelations by RIAS long- and short- form as identified by Helms, RIAS form, as a moderator, will be tested to examine its effect on the intercorrelations between subscales.

Test of RIAS validity. The counseling psychology field has placed a great deal of emphasis on the importance of coefficient alpha standards (e.g., $\alpha = .70$; Nunnally, 1978), especially in areas in which it is inappropriate (Helms, Henze, Sass, & Mifsud, 2006). Although coefficient alpha is a measure of a scales internal consistency, Cronbach and Shavelson (2004) posit that it needs to be interpreted within the larger system of generalizability theory and is not the end all be all. In light of these cautions, the alpha coefficient is indeed the correct reliability coefficient for the RIAS subscales due to it the unidimenisonal nature of each subscale (Cokley, 2007). The complex nature of each of the racial identity statuses may yield lower reliability scores, as more comprehensive scales tend to be more heterogeneous in nature, and are therefore more likely to have lower reliability scores. Given these shortcomings of internal consistency, the RIAS also needs to be evaluated in light of its criterion validity. Hence, another purpose of this study is to quantitatively test the psychometric properties and theoretical accuracy of the RIAS.

Addressing equivocal evidence. The assumption behind racial identity is that various levels of racial identity attitudes exist across African Americans, that these attitudes are stable most of the time, and that different racial identity profiles are related to different functioning (Worrell et al., 2006). However, a narrative review of the extant published racial identity studies yields equivocal findings related to psychological functioning, which has been identified as an issue with the racial identity literature (Sellers & Shelton, 2003; Cokley, 2007). Meta-analysis is the method chosen for a further analysis of these discrepant findings, which quantitatively synthesizes results from a set of primary studies. Moreover, meta-analysis also enables the researcher to quantitatively examine the ways in which differences in study results may be related to study characteristics (Cooper, 2009). Therefore, the proposed meta-analysis aims to gain a quantitative summary by providing a more precise estimate of the relationship between racial identity statuses and psychological variables of interest, specifically psychological distress, psychological symptoms, self-esteem, and psychological well-being (see Appendix H: Predictive Validity of the RIAS).

Disaggregating psychological distress and well-being. There is debate over whether or not psychological distress and psychological well-being lie on a single continuum (Headey, Kelley, & Wearing, 1993; Keyes, 2005). Although previous researchers have found that psychological well-being and psychological distress are negatively correlated (Joseph et al., 1996; Joseph & Lewis, 1998; McGreal & Joseph, 1993), others have argued that treating psychological well-being and psychological distress as two different constructs may provide a more multifaceted perspective (e.g., Uusitalo-Malmivaara & Lehto, 2013). The rationale behind the latter is that the different factors that predict psychological well-being and psychological

distress may not be correlated with one another (e.g., Bradburn & Caplovitz, 1965; Cheng & Furnham, 2003; Diener & Emmons, 1984).

Psychological well-being. Additionally, psychological well-being and psychological distress stem from two different theories. The *eudaimonic* perspective, often referred to as optimal functioning or psychological well-being, has been conceptualized as the quest for human potential that stretches beyond personal happiness. It is focuses mainly on cognitions and behaviors and excludes the affective components of one's experience, thereby revolving around the development of life purpose as the basic means of achieving contentment in life (Lent, 2004; Ryff, 1989a; 1989b; Ryff & Singer 2008). Ryff (1989a) identified six dimensions of psychological well-being: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. Furthermore, it is posited that positive emotions, such as happiness and joy, are by-products of a well-lived life (Ryff & Singer, 1998).

Psychological distress. On the contrary, psychological distress is rooted in the *hedonic* tradition, also called subjective well-being. The theoretical tenets of subjective well-being focus on the feelings of happiness, positive emotions, and pleasure (Lent, 2004; Ryan & Deci, 2001); and by the same stroke, psychological distress focuses on feelings of sadness, negative emotions, and emotional distress. From this perspective, well-being is achieved by attaining emotional well-being, experiencing happiness, and decreasing negative emotions (Ryan & Deci, 2001). Due to the different groundings of psychological well-being and psychological distress, these outcome variables are examined in two separate meta-analyses in the present study.

Previous meta-analyses on racial identity. To date, two recent meta-analyses on racial identity have been conducted. In a book chapter, Elmore et al., (2012) meta-analyzed 38

published studies, yielding 143 effect sizes on the relationship between African American youth and the outcome of well being, which included psychological distress, well-being, and adjustment variables. In their analysis, they created a new conceptual framework by integrating racial identity statuses and dimensions based on thematic content across eight different models and measures of racial (k=24) and ethnic (k=14) identity, resulting in a proposed five dimensional model of racial identity (i.e., racial pride, mistrust, humanism/multicultural, salience, and exploration). They concluded that positive feelings towards one's racial group, that is having racial pride, (r = .21 to .61, p<.05 and p<.001, respectively) is associated with increased mental health and psychosocial adjustment.

These findings may be subject to some limitations, as the integration of disparate theories required a collapse of some of the meaningful constructs inherent in the theoretical assumptions behind each theory. Roughly 63% of the studies in their analysis were actually based in racial identity theories; the other studies were derived from ethnic identity, previously meta-analyzed by Smith and Silva (2011), whom found a small-to-medium relationships (r= .17, k=184 studies) between ethnic identity and well-being. Moreover, Elmore et al. (2012) included published studies, did not assess for publication bias, and tested only one moderating variable (i.e., gender). Lastly, the computation of the effect sizes are suspect, as the reported statistically significant correlations of .21, p<.05 for females and .61, p<.001 for males on the relationship between racial pride and well-being is presented simultaneously with the reported combined male and female effect size was statistically significant at a correlation of 0.20. These limitations highlight the need for a more thorough, theoretically consistent, and precise quantitative review of the racial identity literature.

A more recent meta-analysis by Lee and Ahn (2013) examined the mediating role of racial identity, ethnic identity, and racial socialization in the relationship between racial discrimination and psychological distress. They utilized 27 independent studies from 22 published studies and five dissertations from the years 1991 to 2010, extracting 129 effect sizes/correlation coefficients. They concluded that greater affiliation with Black Americans was significantly related to more instances of perceived discrimination (r=.20, p<.01), lower racial identity stages were related to increased discrimination-linked distress (r=.14, p<.01), public regard was negatively related to distress (r=-.11, p<.01), and the relationship between centrality/Afrocenticity and psychological distress was inconclusive. Moreover, several of these relationships were moderated by age and gender, but not measurement type.

In these previous racial identity meta-analyses, published studies accounted for 81.5% (Lee & Ahn, 2013) and 100% (Elmore et al., 2012) of the studies in the meta-analyses, which is alarming because half of the racial identity studies in PsycInfo alone are dissertations. Additionally, Lee and Ahn did not test for cohort effects in their analysis nor did they differentiate among the Short (30-items), Long (50-items), and Revised (60-items) forms of the RIAS. Hence, a unique quality of the present study is its focus on results interpreted solely from the RIAS instrument, its quantitative exploration of the internal consistency of the RIAS subscales, its examination of varying results between the RIAS subscales and psychological outcomes based on RIAS form/version used in the study, its incorporation of dissertations, its test of cohort, study date, and recruitment methods as moderators on the strength of the RIAS subscale and psychological outcomes relationships.

Demographic characteristics. The past forty years of racial identity research has identified many possible moderators that might account for the observed differences in the racial

identity status and psychological functioning relationship (Forsyth & Carter, 2010). Despite these attempts to explore the impact of moderators on the relationship between racial identity status and psychological functioning, there is limited theory used or cited to explain observed relationships. It is common practice in psychology to test for the moderating effects of demographic variables on established relationships (Baron & Kenny, 1986); however, not all demographic variables should theoretically be tested as moderators. Instead, a clear, a priori theoretical link is good practice in creating hypotheses, explaining observed relationships in the collected data, and allowing for an a priori hypothesis to be falsified (Popper, 1963). Hence, demographic characteristics in this study are understood to have two distinct functions in their relation to racial identity (i.e., main effects and moderating effects).

This meta analysis seeks not only to attain a quantitative summary of the extant racial identity literature, but also to make theory driven hypotheses in relation to varying levels of racial identity statuses based on demographic factors as well as the use of theoretical rationale to the reason for a possible moderating effect on the relationship between racial identity status and self-esteem, psychological well-being, psychological distress, and psychological symptoms (i.e., main effects vs. moderating effects). Hence, some of the hypotheses identify main effects between the demographic variables and the racial identity subscale means and other hypotheses identifying specific variables that are expected to moderate the observed relationship between racial identity status and self-esteem, psychological well-being, psychological distress, and psychological symptoms.

First, the level of racial identity may vary as a result of the main effect of demographic factors and their interaction, such that males and females may report different levels of racial identity and that African American males at a HBCU may report different levels of racial

identity than African American females in the community. Second, demographic factors may have a moderating effect on the relationship between racial identity level and psychological functioning, such that different racial identity levels for different demographic variables may have an impact on psychological functioning and may be more or less adaptive for different groups.

The hypotheses presented below are rooted in ego identity theory (Erickson, 1968), the socio-cognitive development of racial-ethnic identity (Alejandro-Wright, 1985; Quintana, 1998; Helms, 1995), developmental neurobiology (e.g., Sowell et al., 1999), hybridization of identity (Hermans & Kempen, 1998), Bronfenbrenner's (1977, 1979) ecological model, Tajfel and Turner's (1979) concept of in-group favoritism in social identity theory, and Phinney's (1992) other group orientation subscale. Hence, a unique contribution of this study is to tease out and test which demographic variables are expected to have a main effect on level of racial identity subscales and/or a moderating effect on the relationship between racial identity status and psychological functioning (see Appendix I: Moderating Variables).

The demographic and study variables explored in this analysis include: (a) gender affecting racial identity levels (i.e., main effect), (b) age affecting racial identity levels (i.e., main effect), (c) the interaction of gender and age affecting racial identity levels (i.e., main effect), (d) date of study moderating the relationship between racial identity status and psychological functioning (i.e., moderating effect), (e) cohort effects moderating the relationship between racial identity status and psychological functioning (i.e., moderating effect), (f) cohort effects affecting the level of racial identity levels (i.e., main effect), (g) percentage of African Americans in the sampled context moderating the relationship between racial identity and psychological functioning (i.e., moderating effect), (h) both cohort and percentage of African Americans in the

sampled context moderating the relationship between racial identity and psychological functioning (i.e., moderating effect), and (i) sampling methods that may pose threats to external validity as a moderator (i.e., moderating effect) (see Appendix J: Moderating Variables).

(a) Empirical research on gender influencing racial identity level. The aforementioned empirical studies illustrate implicit trends in the significant gender relationships that researchers tend to report and highlight in their studies. For instance, researchers often report significant findings with the Encounter and Immersion-Emersion subscales with African American male samples, while researchers tend to report significant relationships with the Pre-Encounter subscale when studying African American women. Additionally, significant relationships with the Internalization subscale are reported for both African American men and women. In a snapshot, this may highlight a phenomenon, in which gender influences the level of racial identity reported on certain stages/statuses.

Consequently, most of the literature has not examined differences in racial identity level based on gender, but rather uses gender as a moderator in the relationship between racial identity status and psychological functioning, for which there is no theoretical support (Gardner-Kitt & Worrell, 2007). If gender were a moderator in the relationship between racial identity status and psychological functioning, then the assumption would be that the nature and function of the racial identity statuses vary based on gender. Although there may be differences in the nature of racial identity statuses between African American males and females, the *nigrescence* model does not provide theoretical tenets to suggest that gender influences the nature or quality of the racial identity statuses. Hence, it makes more sense to study the ways in which gender has a main effect on racial identity subscale levels, as gender may influence one to adhering more to a certain status.

Contradictory explanations. Several studies have identified the impact of demographic factors on observed levels of racial identity statuses (e.g., Munford, 1994; Carter et al., 1997; Whiterspoon, Speight, & Thomas, 1997; Plummer, 1995). For instance, Munford (1994), Carter et al. (1997), and Plummer (1995) reported that African American men had higher Pre-Encounter scores than women. In one explanation, Carter et al. (1997) asserted that women suffered from multiple minority statuses (i.e., gender and race), which is more facilitative in the movement to higher racial identity statuses. However, in another explanation, Munford (1994) rationalized that the higher Pre-Encounter scores for African American men was most likely due to the higher level of racial stereotyping that African American males face on a daily basis. Both of these explanations speak to the effect of racial stereotyping on gender and its impact on racial identity development, but there is no substantial evidence in either of the studies to choose one explanation over the other. This is representative of explanations that are not necessarily linked to a priori hypotheses or literature.

Moreover, subsequent studies have found that African American male college students reported experiencing more racial discrimination experiences than female students (Banks & Kohn-Wood, 2007; Sellers & Shelton, 2003), which may suggest that African American males may experience more Encounter experiences that, according to Cross' theory, facilitate racial identity development beyond a Pre-Encounter status. If this is the case, then both Munford and Carter et al.'s explanations fall short as African American men had higher levels of Pre-Encounter attitudes in both studies. With respect to the I/E status, Whiterspoon, Speight, and Thomas (1997) reported that African American high school student males endorsed higher levels of I/E attitudes than their female counterparts, but did not explain these findings; instead, they took the higher level of I/E attitudes in African American males at face value.

Munford (1994) also reported that African American college student males had lower internalization scores, as compared to their female counterparts, which they stated was most likely due to an inability to produce a positive identity change in their lives. Although informative, this study may have overlooked some of the deeper the psychological processes associated with racial identity for African American males to account for these findings. Using the CRIS instrument, which measures different types of Internalization attitudes, Fhagen-Smith, Vandiver, Worrel, and Cross (2010) found that African American college men had higher Internalization-Afrocentric scores than females (d= 0.28), but females had higher Internalization Multicultural-Inclusive scores than males (d= -0.43), which may explain some of these previous findings by linking it to the limitations of the RIAS.

Further complicating matters, other findings found no significant differences in racial identity levels and attitudes between African American males and females at a HBCU (Wade, 2002) and an African American adult community sample (Parham and Williams, 1993). Wilson and Constantine (1999) with a sample size of 94 African American students at a PWI reported that they were unable to detect gender differences due to low power (p. 359). Furthermore, no significant gender differences were found in racial identity statuses in middle and high school students (Gardner-Kitt and Worrell, 2007) as well as college students at both a PWI and HBCU (Cokley, 1999). Hence, a more comprehensive and thorough examination of racial identity levels varying by gender is warranted, as there are equivocal results, is frequently not linked to informed a priori hypotheses, is often overlooked in the racial identity literature, and may be subject to limited statistical power.

Theory for gender affecting racial identity levels. As previously mentioned, African American males are more likely to report high levels of racial discrimination than African

American females in variety of settings (Banks & Kohn-Wood, 2007; Forman et al., 1997; Kessler et al., 1999). A higher level of perceived experiences of discrimination is connected to higher levels of racial identification (Sellers & Shelton, 2003). This suggests that African American men should have lower levels of Pre-Encounter attitudes because they are aware of and perceive racial discrimination, which is not characteristic of the color-blind and racially naïve descriptions of the Pre-Encounter status. Additionally, Encounter experiences that highlight the fact that societal resources are allocated differently based on racial groups are responsible for the initiation of racial identity development beyond the first status (Helms, 1995). Hence, the higher report of perceived racial discrimination by African American men indicates higher perceptions and awareness of Encounter experiences, thereby supporting the hypothesis that African American men are posited to have lower levels of Pre-Encounter attitudes and higher levels of Encounter attitudes as compared to their female counterparts.

I/E attitudes are associated with glorification of one's African heritage and a high level of hostility and externalizing behaviors in reaction towards majority white culture (Cross, 1991; Helms, 1995; Neville et al., 1997). There is empirical evidence to support that I/E attitudes are associated with the psychological defenses of turning against objects as well as projection (Nghe & Mahalik, 2001). I/E attitudes, by definition, are also highly related to Afrocentric cultural values (Carter & Helms, 1987) and the belief in the natural abilities of African Americans (Cokley, 2002).

Gender socialization. It is hypothesized that African American men are more likely to endorse higher levels of I/E attitudes. Although there are equivocal results on the level of Afrocentric scores between African American males and females in grade school (Belgrave, Brome, & Hampton, 2000), predominately white colleges (Fhagen-Smith, Vandiver, Worrell, &

Cross, 2013) and historically black colleges (Cokley & Williams, 2005), the tendency to use hostility and externalizing behaviors as a defense mechanism in males illuminates the possibility of higher I/E status scores (e.g., Cochran & Rabinowitz, 2003; Deaux, 1985; Dulmus & Hilarski, 2006; Levit, 1991; O'Neil, 2008; Wexler, 2009).

Classical psychoanalytic theory posited that there are gender differences in personality, such that females are more likely to have a passive orientation and males a more active orientation (Freud, 1933). This has been corroborated in Erikson's (1964) perspective on psychosocial development, such that women have a greater orientation towards internal space and men have a greater orientation towards the external space. Although these perspectives may be dated and historical relics, there is evidence to suggest that men, in general, behave more aggressively than women (Deaux, 1985). More recently, this notion has been understood as a function of gender role expectations and socialization, such that men are expected to be more aggressive, dominant, and outwardly strong than their female counterparts (i.e., Gender Role Conflict: David & Brannon, 1976; Levant et al., 1992; O'Neil, 2008). Even though African American men may not endorse higher levels of Afrocentricity, they are more likely to endorse higher levels of hostility and aggressive behavior than their female counterparts, which leads to the hypothesis that African American men are more likely to endorse higher levels of I/E attitudes.

Empirical studies examining the gender socialization for males reveal that men exhibit more externalizing behaviors. There were no significant differences in externalizing behaviors between African American children that were six to eight years of age; however, by nine years of age, African American males exhibited significantly more externalizing behaviors during times of emotional distress, while African American females showed more internalizing behaviors (Dulmus & Hilarski, 2006). Similarly, adolescent males are noted to have higher levels of

outward aggression in response to emotional distress in comparison to females (Cramer, 1979; Jacobson, Beardslee, Hauser, Noam, & Powers, 1982; Levit, 1991). And in adulthood, several studies have identified a similar pattern of men being more prone to externalizing behaviors in times of distress (Cochran & Rabinowitz, 2003; Wexler, 2009). Hence, it is hypothesized that African American males are more likely to demonstrate higher I/E attitudes due to gender role socialization and higher endorsement of items assessing for externalizing defense mechanisms.

Internalization attitudes are characterized by a calm, resolved, and secure demeanor that is linked to ideologically flexibility and openness in interpersonal exchanges that maintain a self-confidence in one's Blackness and honor differences between racial groups (Cross, 1991). This status is identified as a more complex cognitive ability to integrate multiple forms of information, including the strengths and weaknesses of one's racial group (Helms, 1995). Hence, African Americans with Afrocentric attitudes and openness to explore and connect with other racial/ethnic groups should have higher Internalization levels by definition.

Other group orientation. As presented in the previous paragraph, there is equivocal evidence on differing levels of Afrocentric attitudes between African men and women. However, another facet of an Internalized status is one's ability to explore and connect with other racial/ethnic groups, which may be demonstrated on the *Other Group Orientation* (OGO) subscale on Jean Phinney's (1992) Multiethnic Identity Measure. In the original construction of the Multiethnic Identity Measure (MEIM), the OGO scale was used to measure attitudes and openness to interacting with other ethnic-racial groups. In the newest revision of the MEIM (Phinney & Ong, 2007), the OGO scale has been dropped, as it was reported that the other group orientation (OGO) is conceptually distinct from ethnic attitudes; that is, how one feels about one's own group is not necessarily predictive of how one feels about other groups. Although there is

limited disaggregated OGO means for African Americans by gender, one study (i.e., Branch 2001) found no differences in OGO means by gender in a sample of 13 to 26 year old African American community participants. Therefore, it is hypothesized that African American men and women are just as likely to endorse Internalization attitudes. For a visual diagram, please see Appendix J: Gender Influencing RIAS Levels.

(b) Chronological age affecting racial identity level. Given the developmental tenets of racial identity, age of participants influencing racial identity attitudes is an intuitive demographic variable that has been examined in multiple studies. Most of the research conducted on the developmental trajectories of African American racial identity has focused mainly on the adolescent years within the ethnic identity research paradigm (e.g., French, Seidman, Allen, & Aber, 2000, 2006; Pahl & Way, 2006; Phinney, 1989). Longitudinal empirical research has identified that racial-ethnic identity exploration gradually increases during early and middle adolescence (Pahl & Way, 2006; Whitesell, Mitchell, Kaufman, & Spicer, 2006; Rotheram-Borus, Lightfoot, Moraes, Dopkins, & LaCour, 1998), gradually decelerates during high school years (French et al., 2000, 2006; Pahl & Way, 2006; Perron, Vondracek, Skorikov, Tremblay, & Corbière, 1998), and increases throughout college years and into young adulthood (Syed & Azmitia, 2009). These studies have explained observed increases in racial-ethnic identity development of adolescents in response to a combination of changes in environmental contexts, which increase exposure to greater ethnic and racial diversity, and advances in cognitive development during the adolescent years (French et al., 2000, 2006; Syed & Azmitia, 2009).

Ego identity theory. The main focus of the extant literature on adolescence is rooted in its theoretical assumptions. According to ego identity theory (Erikson, 1968), adolescence is considered a transitional period of "psychosocial moratorium" (p.156). This identity "crisis"

serves as a buffer between childhood and adulthood, which allows for a re-examination and reinterpretation one's childhood self to inform one's adult identity (p. 91). It is assumed that little racial-ethnic identity development occurs before adolescence (Erickson, 1968; Marcia, 1980; Phinney, 1989, 1990), and the observed development in racial-ethnic identity most likely reflects parental socialization (Cross, Jr. & Fhagen-Smith, 2001; Parham, 1989). Similarly, other theorists posit that most African Americans emerge from adolescence with an *achieved* identity (Cross & Fhagen-Smith, 1999; Tatum, 1997). Overall, most of the research findings suggest that racial identity attitudes are relatively stable among African American adults, but may fluctuate in response to novel discrimination experiences (Cross, 1991), which may lead African American adults to reenter previous stages of identity exploration across the lifespan (Cross & Fhagen-Smith, 2001; Parham, 1989).

Most of the extant literature on racial-ethnic identity and age has been conducted within the ethnic identity paradigm (Quintana, 2007; Cross & Cross, 2007). There are very few studies examining the relationship between African American racial identity attitudes and age. To date, there are only five studies that have examined the differing levels of racial identity attitudes across the lifespan using Cross' model of racial identity (i.e., Dartson, 1999; Gardner-Kitt & Worrell, 2007; Plummer, 1995; Plummer, 1996; Worrell, 2008).

Prior research on age affecting racial identity status. Using the RIAS measurement, Plummer (1995) found no relationship with age in a study of 285 African American adolescents aged 14 to 18. In a dissertation, Dartson (1999) concluded that there was no relationship between the RIAS subscales and age in a sample of 400 African American college students. On the contrary, Plummer (1996) found that adolescents (ages 14-20) and middle-aged adults (ages 40-65) had higher Internalization scores and lower Encounter scores as compared to young

adults (ages 21-39). Internalization attitudes were concluded to peak in middle adulthood. Plummer explains that the high Internalization attitudes among adolescents is actually a result of parenting socialization, which provides children with necessary skills for growing up in predominately white culture. Moreover, young adults (21-39) reported predominately Encounter attitudes, with slight increases in Pre-Encounter attitudes and slight decreases in Internalization attitudes. Plummer explains this observed pattern by stating that adolescents' internalized attitudes are tested during young adulthood years due to increased encounter experiences in work environments and personal lives. Lastly, Immersion/Emersion attitudes remained consistent for adolescents (ages 14-20), and consistently decreased through middle and older adulthood (ages 40-65). This gradual decline in Immersion-Emersion attitudes with age is posited to be a resolution of the nigrescence struggle, as increased age is linked with a greater degree of and opportunities for connection to African American culture. Overall, Plummer's (1996) study provides support for Parham's (1989) theory of *recycling* (i.e., reentering previous statuses throughout the lifespan).

Using the CRIS measure, Worrell (2008) found that adolescents (mean age of 14) had higher scores on the Pre-Encounter subscale than emerging adults (mean age of 20.7) or adults (mean age of 34.1); however, all three groups had comparable Immersion-Emersion and Internalization scores. Emerging adults, as opposed to adults as developmentally hypothesized, had the lowest Pre-Encounter scores. Overall, Worrell did not find three distinct patterns of attitudes, which would be posited by a developmental hypothesis, but instead concluded that there were very similar patterns among the three different age groups. Furthermore, Gardner-Kitt and Worrell (2007) found that middle school African American adolescents had higher Pre-Encounter Self-Hatred and Internalization - Afrocentric scores compared to their high school counterparts, and

African American high school students had higher Internalization - Multicultural Inclusive scores.

The extant research on African American racial identity development in relation to age is scarce and provides divergent and obscure results. In some instances, there is evidence for the theory of recycling (Plummer, 1996), which is consistent with empirical results in the ethnic identity literature (Seaton, Scottham, & Sellers, 2006; Yip, Seaton, & Sellers, 2006). The literature also presents a lack of relationship between age and racial identity attitudes (Dartson, 1999; Plummer, 1995; Worrell, 2008). Hence, research in the African American racial identity development is limited by the cross-sectional nature of the research designs, lack of variation in participant age, and possible measurement issues with the RIAS. Overall, the extant literature fails to support the notion that racial-ethnic identity is developmental, as the stages are not hierarchical nor do individuals progress through a linear trajectory throughout the life span (Quintana, 2007; Worrell, 2008). Due to the sparse number of observations used to falsify the developmental nature of racial identity, another purpose of this study is to further test the developmental tenants of racial identity in the context of African American racial identity operationalized by the RIAS.

Based on Cross' (1991) model of racial identity development, it is hypothesized that as chronological age increases levels of Immersion/Emersion and Internalization will also increase with the oldest participants having the highest Internalization attitude levels. Immersion/Emersion levels are hypothesized to increase from late adolescents through young adulthood and slowly decrease around 30 years of age. Additionally, developmental theory posits that as chronological age increases levels of Pre-Encounter and Encounter attitudes will decrease.

Cognitive development affecting racial identity status. There is evidence to suggest that the developmental processes connected to racial identity are highly related to aspects of cognitive development (Helms, 1995; Quintana, 1998). Helms (1995) posits that higher levels of racial identity are associated with more sophisticated cognitive abilities that allow individuals to integrate disparate pieces of information about one's racial group. Additionally, children form cognitive schemas to inform expectations about the behavior and motives of members of social groups (Aboud & Skerry, 1984). As children get older and gather more information regarding the power dynamics associated with social categories, schemas become more complex and provide greater implications for future interactions with others (Quintana, 1994). Hence, lower levels of cognitive development and life experiences limit one's racial identity development.

Research has identified that children become aware of racial differences as early as three to four years of age (Gimenez & Harris, 2002; Alejandro-Wright, 1985), with consistent racial classification abilities based on concrete features emerging around five to six years of age, and by ages seven to eight children are able to understand that racial and ethnic differences are also based on biological features (i.e., heredity; Alejandro-Wright, 1985). This is around the time (i.e., seven to eight years of age) that the cognitive skills thought to be precursors to a mature understanding of discrimination (i.e., social comparison, perspective-taking skills, multiple classifications skills, etc.) are reported to develop (Quintana, 1998, 2008; Rowley et al., 2008; Spencer & Dornbusch, 1990). By age ten, children have relatively sophisticated views about racial discrimination and prejudice, as they have a clearer understanding of connections between social categories and the related allocation of resources (Cooper, Garcia Coll, Thorne, & Orellana, 2005; Quintana, 1998). Children in early adolescence (i.e., 10-14 years of age) begin to process more sophisticated societal messages related to racial stereotypes (Murray &

Mandara, 2001). Based on the research presented above, it is hypothesized that African American children at the ages of seven to eight have developed the cognitive facilities to process more sophisticated and more nuanced race based information, which is linked to perceptions of discrimination and most likely related to higher Encounter attitudes and lower Pre-Encounter attitudes.

Longitudinal research has shown that as minority youth matriculate in high school (ages 13-17) their perceptions of racial discrimination tend to increase (Fisher, Wallace, & Fenton, 2000; Romero & Roberts, 1998) and then level off towards the last years of high school (Pahl & Way, 2006; Seaton, Yip, & Sellers, 2009). This has been posited as a function of navigating new, unfamiliar contexts (e.g., employment), in which African American youth tend to report an increase in perceived racial discrimination from adults (Greene, Way, & Pahl, 2006). Hence, adolescents in high school (i.e., 13 to 17 years of age) are more likely to have more Encounter experiences, which supports the hypothesis that adolescents (13 to 17 years of age) are more likely to have lower Pre-Encounter attitude scores than younger African American children, and older adolescents (17 years of age) will have higher Encounter scores than their younger high school peers due to increased perception of racial discrimination.

In a three-year longitudinal study, young African American adults (college aged students 18 to 21 years of age) displayed increased levels of group membership exploration (Syed & Azmitia, 2009), which is indicative of greater affiliation with other African Americans and a deeper exploration of one's cultural roots. In addition, increased levels of group membership exploration have been identified in early adolescence (e.g., Whitesell et al, 2006; Rotheram-Borus et al., 1998), and middle to late adolescence (15-18 years of age; Pahl & Way, 2006). These findings suggest that African American adolescents and African American young adults

are expected to have higher Immersion/Emersion attitudes than their younger counterparts. However, I/E subscale levels may fluctuate due to the transitional, crisis, and exploratory nature of the adolescent years (Erikson, 1968). For instance, Worrell (2008) found that African American middle school students had higher Internalization - Afrocentric levels as compared to their high school counterparts.

Internalization racial identity attitudes have been linked to more complex cognitive processes of integrating and balancing disparate information about one's racial group (Helms, 1995). This ability is linked to the development of the pre-frontal cortex of the human brain (PFC), which is the last of the cortical territories to develop. Not only is the PFC dedicated to the memory, planning, and organization/schemas of actions, but it is also responsible for emotional regulation, response inhibition, and control of basic drives (Fuster, 2001). Imaging studies indicate that the human PFC does not fully mature until adulthood (Chugani et al. 1987; Paus et al. 1999; Sowell et al., 1999).

In a comparison imaging study between adolescents (12-16 years old) and young adults (23-30 years old), Sowell et al. (1999) identified no changes in the temporal or occipital lobes, which are responsible for spatial and sensory functions; however, the dorsal, medial, and lateral regions of the PFC demonstrated large, statistically significant group differences. Additionally, increased myelination in the PFC was noted in young adults as compared to adolescents, which is linked to improved cognitive processing abilities. This has been confirmed in post-mortem (Benes, Turtle, Khan, & Farol, 1994; Yakovlev & Lecours, 1967), electrophysiological (Hudspeth & Pribram, 1990), positron-emission tomography (Chugani, Phelps, & Mazziotta, 1987), and neuropsychological (Levin, Culhane, Hartmann, Evankovitch, Martson, et al., 1991) studies. Hence, the complex cognitive processing abilities necessary for higher levels on the

Internalization subscale are hypothesized to mature in young adulthood (23-30 years of age), which suggests that young adult African Americans (23-30 years of age) are more likely to have higher Internalization attitude levels as compared to their younger counterparts.

Other group orientation. To further bolster this hypothesis, data from the *Other Group Orientation* (OGO) scale on the *Multiethnic Identity Measure* (MEIM: Phinney, 1992) is presented to further tease out age-based differences in Internalization scores. The Internalization status is characterized by more comfort, openness, and value for relationships with members of other races (Cross, 1991). Hence, it is hypothesized that individuals that have higher OGO scores will report higher Internalization attitudes on the RIAS. In further corroboration, Worrell and Garnder-Kitt (2009) reported that OGO scores were positively related to Internalized - Multicultural scores on the CRIS and negatively related to Immersion – Emersion scores.

Although the OGO scale has been removed from the most recent revision of the MEIM (Phinney & Ong, 2007), there are some studies with African American participants (approx. 30 studies), mostly limited to adolescent and college samples that have reported OGO mean scores. Studies that included African American participants, ranging in age from 15 to 22.95 years, reported OGO means from 3.12 to 3.56 on a five-point (i.e., 1= Strongly Disagree to 5 = Strongly Agree) Likert scale (James, Kim, & Armijo, 2000; Worrell, 2007; Gloria & Hird, 1999; Goodstein & Ponterotto, 1997; Bisaga et al., 2005; Cheng et al., 2013; O'Dougherty et al., 2002; Byars-Winston et al., 2010). There was a statistically significant difference between African American young adult (20-23 years of age) scores and middle adolescent (15 years of age) scores (d= .30, p<.0014). With higher OGO mean scores, it is hypothesized that African American young adults (20-23 years of age) are more likely to have higher Internalization attitude levels than their younger counterparts.

Almost all of the extant literature on African American identity development has been conducted on the childhood, adolescent, and young adult years, which limits the possibility of making informed hypotheses for differing levels of racial identity statuses in middle and older adulthood. However, a recent study by Ayalon and Gum (2011) concluded that older African American adults (65-85 years of age) perceived more discrimination based on age as opposed to race. This may highlight a strongly established and effective regimen of racial discrimination coping strategies in older African American adults. Although there is limited research, race may become less central for older African American adults. This study seeks to explore the developmental tenets proposed by Cross' racial identity model as well as the research presented above on the developmental trajectory of cognitive processing abilities.

There is a dearth of racial identity research exploring middle and older adulthood in African Americans. Based in Parham's (1989) Lifespan Developmental Model of Racial Identity, middle adulthood is characterized by increased responsibility and opportunities, which manifests in concerns around the racial composition of the organizations and advocating for African American representation. This reflects a high degree of OGO as well as a strong belief in the abilities and rights of African Americans, which is characteristic of an Internalization status. Hence, it is hypothesized that African Americans in middle adulthood will have high levels of Internalization attitudes. For a visual diagram, please see Appendix K: Age Influencing RIAS Levels.

(c) Gender and age together affecting racial identity level. The nature of varying racial identity attitudes by gender and age yield equivocal and obscure results. Most of the studies have focused mainly on the developmental nature of racial identity development due to its clear developmental theoretical assumptions. However, not much of literature has examined the

contribution of age, gender, and the interaction effect between age and gender on racial identity levels (e.g., French et al., 2000; Fuller-Rowell, Burrow, & Ong, 2011; Seaton, Scottham, & Sellers, 2006; Seaton, Yip, Morgan-Lopez, & Sellers, 2012; Whitesell et al., 2006), and the instances in which gender and age interaction effects are tested there are no significant results (e.g., Altschul et al., 2006; French et al., 2006; Gardner-Kitt & Worrell, 2007; Pahl & Way, 2006; Rowley et al., 2008; Syed & Azmitia, 2009; Yip, Seaton, & Sellers, 2006). In one study, Smith et al. (2009) conducted a three-year longitudinal study on African American students in grade school and concluded that African American girls show faster growth in racial identity, but lower overall levels of racial identity. Illuminating the dearth of this literature, Phinney (2008) calls for more empirical studies that contextualize how racial-ethnic identity is dependent on, and yet distinct from, identity development related to gender, social class, birth cohort, and other contextual influences. Hence, this study examines the contributions of age, gender, and the interaction between age and gender on racial identity levels.

Racial identity clusters and comparison across statuses. Responses on the racial identity subscales tend to be neither symmetrical nor centered around the midpoint of the 5-point Likert scale. Thus, it is difficult to compare across RIAS statuses and accurately create racial identity clusters because determining what exactly is a high or low response is relatively ambiguous. To assist future researchers, this study provides reference data from a larger population of studies on the average item means for each of the RIAS subscales (i.e., raw scores on subscales converted to percentile scores) along with regression coefficients to adjust for significant demographic variables that may shift the average item mean on each of the subscales. The reference data will allow for researchers to more accurately and efficiently compare scores

across statuses, which will assist with general interpretation of single subscale scores as well as profile scores.

Potential Moderating Variables.

(d) Date of study as a moderator. As presented in the beginning of the literature review, racial identity models emerged in response to the self-hate paradigm used to understand African Americans, important legislation (e.g., *Brown v. Board of Education*), and social movements of the time (e.g., Civil Rights Movement, Black Power Movement, etc.). Since the creation of Cross' (1971) original theory of nigrescence, there has been an explosion in racial identity theories and the operationalization of those theories over the past 40 years. Despite the large number of choices for racial identity researchers today, many scholars and graduate students still choose to use the original RIAS (Cokley, 2007), which was created in 1981. Not only has the RIAS instrument been critiqued, but the theory of nigrescence has also been stated to imbue historical bias representative of the turbulent 1960s (Quintana, 2007). With this limitation in mind, racial identity researchers have reformulated their conceptualizations of racial identity towards a *racial-ethnic-cultural* identity perspective (Cross & Cross, 2007; Vandiver et al., 2002) and *socio-racial* identity perspective (Helms, 1995). Despite these changes and critiques, recent studies have been published using the RIAS (e.g., Carter & Reynolds, 2011; Forsyth & Carter, 2012; Pieterse & Carter, 2010; Sanchez, 2013) and used in recently completed dissertations (e.g., Bazelais, 2011; Mu'mim, 2010; Porter, 2012).

RIAS as a relevant measure. Cross (1991, 1995) has explicitly identified that the RIAS instrument is dated in its wording, and, to address some of these limitations, multiple scholars have created newer measures and models for the 21st century (e.g., Sellers et al., 1997; Vandiver et al., 2002). Due to the dated item wording on the RIAS (Cokley & Vandiver, 2011), it is

posited to be less predictive of psychological outcomes in more recent studies due to its lack of temporal relevance. Hence, study date is hypothesized to moderate the racial identity status and psychological functioning relationship, such that the strength of the relationship between racial identity statuses and psychological functioning will decrease with more recent studies.

Proposing an exception to this prediction, the I/E racial identity status is hypothesized to be more adaptive than other statuses in earlier studies (i.e., more positively related to psychological functioning). This rationale is based on situating the I/E status within its temporal proximity to and congruity with major African American ideologies of the time. I/E statuses are hypothesized to be more congruent with ideologies linked to the Black Power movement of the 1970's, which experienced a resurgence of Afrocentricity and Black Nationalism (e.g., Black Panther's Movement). It is conceptualized that the I/E racial identity status is more adaptive than the other statuses in earlier studies as vigilance towards discrimination is matched to the context (Quintana, 2007). Therefore, the decrease in strength of the relationship between the I/E racial identity status and psychological functioning is likely influenced by both measurement obsolescence and the adapativeness of the I/E status given the historical context.

(e) Moderator of cohort effects. Given the temporal and historical setting of the emergence of racial identity, cohort effects are expected to play a role in the relationship between racial identity statuses and psychological functioning. Consideration of cohort effects accounts for the socioecological systems of interaction at the time, which is consistent with Bronfenbrenner's (1977, 1979) ecological model. Rooted in the works of Kurt Lewin (1935, 1936, 1948, 1951), who provided a framework for the ecology of human development (i.e., Field Theory) by conceptualizing human development as the interaction between the person and the environment. Bronfenbrenner built off of Lewin's theory and identified multiple hierarchical systems that

influence human development, positing that exposure to different settings influences human development in a synergistic manner.

Ecological factors. Within the context of racial identity development, broader ecological factors including neighborhoods, schools, and the structure of the larger society are identified to have an impact on racial identity and ethnic-racial socialization (Bennett, 2007, Chavous et al., 2008; Stevenson, McNeill, Herrero-Taylor, & Davis, 2005; Hurd et al., 2012; Plummer, 1996; Sellers et al., 1998). Additionally, changes over time are also a component of this broader ecological context (Lesane-Brown, 2006) and relationships between racial identity and psychological health outcomes are posited to differ as a function of the ecological context (Sellers et al., 1998). More recently, Hurd et al. (2012) identified neighborhood racial composition moderating the association between African American racial identity and symptoms of depression over time for emerging adults. Hence, testing for cohort effects that may potentially moderate the relationship between racial identity statuses and psychological functioning is warranted by theory and previous empirical research.

Based in the ecological model, Quintana (2007) posited that differing levels of racial identification might be more adaptive depending on the context. For instance, empirical research identifies individuals, who claim a more central racial identity, were more strongly affected by discrimination than their less racially self-identified counterparts (Sellers et al., 1998). Additionally, adolescents with strong racial identification reported lower levels of well-being in the context of discrimination; therefore, racial identification made adolescents more vulnerable to the effects of discrimination as compared to their peers that reported lower racial identification levels (Greene, Way, & Pahl, 2006). Hence, Quintana (2007) concluded that there is a need to

"tailor [one's] level of vigilance for discrimination to the level of discrimination to which [s/he is] expose" (p. 265).

Given the long-standing history of slavery and racial discrimination in the United States, there is a higher likelihood of overt discrimination for earlier cohorts and more inadvertent, subtle forms of discrimination in latter cohorts, which manifest in the form of microaggresions (Sue, Capodilupo, Torino, Bucceri, Holder, Nadal, & Esquilin, 2007). The notion of tailoring one's level of vigilance for discrimination to the context suggests that an I/E racial identity status, which is a strong rejection of dominant white culture and strong adherence to African American culture, would be more congruent with the discrimination experienced by earlier cohorts. In earlier cohorts, an Internalization status may facilitate racial interactions that foster more discrimination, thereby making an Internalization attitude less adaptive in earlier cohorts; however, in latter cohorts, the Internalization attitude may be the most adaptive as cross-cultural dialogue has received more encouragement with the terms, such as *celebrate diversity* and *multiculturalism*, which have permeated the American lexicon. Moreover, Pre-Encounter attitudes, characterized by a naivety and denial that devalues one's African American culture and idealizes everything white, might be more adaptive with earlier cohorts given the level of overt racial discrimination of the context. Pre-Encounter attitudes might allow African Americans in earlier cohorts to assimilate to dominant culture, sidestepping the negative effects of racial discrimination, and aligning themselves with white culture. See Appendix L: Date of Study and Cohort as Moderators.

(f) Cohort affecting racial identity levels. Based on globalization theory, Hermans and Kempen (1998) posit that the processes of globalization are continuously drawing people from different cultural origins into closer relationships and spaces, making the past conception of

independent, coherent, and stable cultures obsolete. Wolf (1982) identified increasing *ecological, demographic, economic,* and *political connections*, which have resulted in a single, global civilization (Wilkinson, 1995). For instance, new technologies (i.e., transportation, advances in computers, media communication, etc.), the expansion of tourism, flourishing multinational corporations, and new geographic unities (e.g., the European Community, the Association of Southeast Asian Nations, etc.) have decreased or even removed spatial distances. Due to the increased globalization, Hermans and Kempen posited that dichotomous distinctions in cultural differences "[no longer] meet the challenges of globalization and its implications for a psychology of culture and self" (p. 1112).

Hybridization. Not only does globalization create increasing interconnection between different parts of the world, but it also results in the complexities of social positions, increased "hybridization" of cultures, and greater cultural complexity in the 21st century (Hermans, 2001; Hermans & Kempen, 1998). The phenomenon of "hybridization" is based on the notion that intercultural processes lead to the recombination of existing forms and practices into new forms and practices (Pieterse, 1995). In response to the phenomenon of globalization, the racial-ethnic identity literature has moved towards a focus on *racial-ethnic-cultural* identity (Cross & Cross, 2008). Hence, it is hypothesized that participants in younger cohorts will endorse lower levels on all of the racial identity attitudes subscales, as individuals are more likely to have a hybridization of culture as well as multiple salient identities, not solely captured by race. Older cohorts are hypothesized to show higher levels of I/E attitudes based on the historical proximity to and congruity with the Black Power Movement of the 1970's. Additionally, older cohorts are expected to have higher Encounter levels as racial discrimination manifested in more overt and

explicit forms, which is in contrast to the advent of microaggressions today (Sue et al., 2007). See Appendix L: Date of Study and Cohort as Moderators.

(g) Percentage of African Americans in the sampled context as moderator. Building off of the ecological model, researchers posit that ethnic and racial identity reflects broader acculturation processes, which are present in schools, neighborhoods, and communities (Cross & Fhagen-Smith, 2001; Erickson, 1968; Marcia, 1980; Parham, 1989), and shift over time in response to features of the social context (Cross, 1991; Oyserman, Bybee, & Terry, 2003). With this in mind, researchers have highlighted the need to consider the importance of context when interpreting the relationship between racial-ethnic identity and psychological health (e.g., Cross, 1991; Hurd et al., 2012; Quintana, 2007; Sellers, Morgan, & Brown, 2001).

Research on social context. Theory and extant empirical literature illuminate the ways in which the racial and ethnic composition of the social context may shape and moderate racial identity development and its relationship to psychological functioning (Cokley, 1999; Seaton, Yip, & Sellers, 2009; Sellers, Rowley, Chavous, Shelton, & Smith, 1997). Individuals are posited to cycle between aschematic and schematic (i.e., a network of informational schemas that are situationally present or absent) for race-ethnicity depending on context; more specifically, when context makes awareness of being a member of one's racial-ethnic in-group imperative, individuals are like to be schematic for race-ethnicity, which leads to greater tendency to define the self in terms of race-ethnicity (Altschul, Oyserman, & Bybee, 2006). It may be that heightened awareness of one's race in a minority context makes it a more distinguishing feature; however, heightened awareness may also emerge from majority contexts as intergroup bias may permeate the context (Turner & Reynolds, 2001).

This is consistent with Sellers (1993) conclusion that a strong racial identity may be associated with more positive psychological outcomes in certain situations and a *lightening rod* for psychological distress in other situations. This distress is not a function of the identity but, instead, a consequence of having such an identity in a particularly hostile environment, which is less trait-like and more situational. Empirically, several studies concluded that racial identification is both a risk and a protective factor in the relationship between discrimination and psychological distress, such that racial identification has been found to increase perceptions of racial discrimination, but has a buffering effect on the relationship between discrimination and psychological distress (Miller & MacIntosh, 1999; Musler, 2012; Sellers et al., 2003). Furthermore, Thorton et al. (1990), using a nationally representative sample of African Americans in the United States, identified that adult women living in predominately Black neighborhoods were less likely than those who lived in predominately White neighborhoods to socialize their children to race. This is consistent with findings from Tatum (1987), who found that African American parents living in predominately White neighborhoods felt that it was imperative to racially socialize their children as compared to parents living in predominately Black neighborhoods, as racial socialization is thought to act as a buffer from negative messages received about being African American in a predominately White space. There is significant variation in the extant literature around the adaptability of certain racial identity statuses in different contexts.

Racial identity was found to be a significant predictor of social adjustment and academic success in both a predominately white environments as well as predominately Black environments (Sellers, Chavous, & Cooke, 1998). However, several scholars have also concluded that racial identity is independent of psychological distress on predominately Black

campuses, suggesting that African American student's racial identity predicts psychological distress only in settings in which they are the minorities (Gilbert, So, Russel, & Wessel, 2006). This was concluded to be a function of the supportive college milieu provided to African Americans at a HBCU, which assists them in coping with racial stimuli in the environment. In addition, Whittaker and Neville (2010) found no significant differences in the relationship between racial identity statuses and psychological distress or satisfaction with life between African American college students at a PWI and those at a HBCU. These studies suggest that racial identity is not related to psychological functioning in predominately Black environments, and racial identity does not facilitate better psychological adjustment in different majority or minority racial contexts.

Consequently, a more dominant trend in the literature findings suggests that African American college students in a predominately Black environment report higher levels of racial pride and tend to emphasize the uniqueness of the African American experience. This claim is consistent with Tajfel and Turner's (1979) concept of *in-group favoritism* based on social identity theory, which posits that in-group membership entails assimilation of the self to the in-group category resulting in trust, positive regard, cooperation, and empathy from the in-group. African Americans in a predominately White environment were more likely to emphasize the similarities between African Americans and other racial groups (Sellers, Rowley, Chavous, Shelton, & Smith, 1997). Similarly, African American students at PWIs reported higher assimilationist and humanist ideologies (Cokley, 1999) with higher Internalization attitudes (Spurgeon & Myers, 2008) and Pre-Encounter attitudes (Fhagen-Smith, Vandiver, Worrell, & Cross, 2013), whereas African American students at HBCUs reported higher levels of nationalist

ideology and African self-consciousness (Cokley, 1999) as well as higher Immersion-Emersion status levels (Pyant & Yanico, 1991).

Moreover, African American students, who adhered to Afrocentric beliefs in predominately White environments, experienced poorer overall college adjustment (Anglin & Wade, 2007), but students that had a more inclusive racial identity (i.e., de-emphasize African American group identification and integrate components of their traditional cultural beliefs as well as aspects of the majority culture) experienced more adaptive adjustment (Anglin & Wade, 2007; Watson, 2009). This is consistent with Tajfel and Turner's (1979) concept of in-group favoritism based on social identity theory, as African Americans, who strongly adhere to out-group values, do not receive the trust, positive regard, and cooperation in predominately White spaces (Brewer, 2001).

In explaining these findings, it may be that African Americans in predominately White environments are able to develop stronger friendships with other minority groups, thereby bolstering a stronger sense of racial identity, to cope in these environments (Fhagen-Smith, Vandiver, Worrell, & Cross, 2013). Furthermore, a more inclusive racial identity may allow African Americans in predominately White environments to feel more connected with a variety of other cultural groups, which facilitates a greater sense of belonging and attachment (Anglin & Wade, 2007). These findings from the dominant trend suggest that adherence to the unique experience of African Americans (i.e., Immersion-Emersion) may be more adaptive in a predominately Black environment. And, pride in being African American in conjunction with openness to connecting on similarities with other racial groups (i.e., Internalization) is hypothesized to be more adaptive in predominately White environments. Moreover, Pre-Encounter attitudes for African Americans in predominately White environments may facilitate more adaptive psychological functioning, as there is a lack of perceived racial discrimination,

and adherence to the majority cultures values, which leads to less race-based stressors and cognitive dissonance with competing values. See Appendix M: Percentage of African Americans in the Sampled Context as a Moderator.

(h) Cohort and percentage of African Americans in the sampled context moderating the relationship between racial identity and psychological functioning. Many racial identity studies have examined the contributing role of racial environmental context to the development of varying racial identity levels as well as its moderating effect on racial identity and psychological functioning variables (e.g., Anglin & Wade, 2007; Cokley, 1999; Hurd et al., 2012; Sellers et al., 1997). However, no studies to date have examined cohort effects moderating the racial identity and psychological functioning relationship, which is a unique feature of this study. Both cohort and racial environmental context will be tested as moderators concurrently on the relationship between racial identity status and psychological functioning in an exploratory analysis.

(i) Study recruitment method as a moderator. Rarely does racial identity research use random selection to draw inferences, which is one of the core assumptions in making statistical inferences. Instead, many of the published empirical studies use snowball and convenience sampling methods, which often results in samples that are unrepresentative of the intended population (Quintana, Chew, & Schell, 2012). Although Sue (2003) posited that external validity should not be a major focus in diversity research, it is concerning that most racial-ethnic identity researchers are drawing from biased samples, as they target contexts in which they are likely to find the desired type of participants, which often involves multicultural organizations or courses focused on ethnic and racial minority groups. Hence, it is important to take into account the systematic nature of these organizations, such that they are likely to attract participants with

particular characteristics that lead to biased sampling (Quintana et al., 2012). The present study attempts to test the moderating effect of the sampling context (i.e., African American specific recruitment vs. non-African American specific recruitment and college recruitment vs. community recruitment) on racial identity status and psychological functioning relationship. See Appendix N: Study Recruitment Method as a Moderators.

(j) RIAS form moderating the racial identity subscale and psychological outcomes relationship. Lastly, RIAS form (30-item, 50-item, or 60-item) will be examined as a moderator on the relationship between RIAS subscales and psychological distress as well as the relationship between RIAS subscales and psychological well-being. Given the varying psychometric qualities among the 60-item, 50-item, and 30-item forms, it is expected that RIAS form will influence the results from each of the studies included in the proposed meta-analyses. Hence, it is hypothesized that findings will be, in part, dependent on which RIAS version was used.

Summary of Purpose and Hypotheses

Study purpose. The ultimate purpose of the present study is to quantitatively examine the extant body of racial identity literature using the RIAS instrument, and provide future directions for the study of African American racial identity. Not only has the RIAS received numerous psychometric critiques on its operationalization of Cross' (1971, 1991) theory of nigrescence (e.g., Ponterotto & Wise, 1987), but it has also received questions on its theoretical accuracy (e.g., Fischer & Moradi, 2001). As a result, this study attempts to obtain an aggregate estimate of the internal consistency (i.e., coefficient alpha) of the RIAS subscales, examine the moderating effect of study and demographic variables on the alpha coefficients to identify for which populations and contexts the RIAS is most reliable, to provide a summary of the

intercorrelation between statues with a focus on non-adjacent statuses, and to identify the influence of RIAS version on the aggregated results.

The second purpose of the present study is to synthesize the extant racial identity literature using the RIAS to study African American psychological functioning by separating psychological distress from psychological well-being, as the two psychological functioning constructs are often found to be orthogonal. Moreover, two previous racial identity meta-analyses have primarily used published studies to derive their effect sizes and have ignored the large body of dissertation studies that roughly double the number of relevant studies. Hence, the present study attempts to obtain two sets of quantitative summaries, (1) the relationship between RIAS racial identity statuses and psychological well-being and (2) the relationship between RIAS racial identity statuses and psychological distress, utilizing both published studies and unpublished dissertations.

The third purpose of the present study is to delineate between the demographic and study factors that are hypothesized to have main effects (i.e., influence average item means) on the racial identity statuses and those that are hypothesized to have moderating effects on the strength of the relationship between racial identity statuses and psychological functioning. The present study attempts to root predictions of the effect of demographic and study variables in theory, and to test the effect of demographic/contextual variables of age, gender, and cohort on average item racial identity status means (i.e., main effects). Moreover, this study seeks to provide reference data on the RIAS subscales average item mean for future studies to compare across RIAS statuses, to interpret raw RIAS scores from a reference population, and to create more theoretically and empirically accurate RIAS profiles. Lastly, this study examines the moderating effect of cohort, percentage of African Americans in the sampled context, and recruitment

methods (i.e., recruitment from African American specific contexts and recruitment from college contexts) in the study on the relationship between racial identity statuses and psychological functioning. For an overall outline of the purposes of the present study, please see 2.7: Summary and Purpose of Study.

Research questions and hypotheses. The research questions of interest and hypotheses in the present study are listed below:

RIAS measurement critiques:

1. Given the psychometric and theoretical critiques of the RIAS, what is an aggregate estimate of the internal consistency of the RIAS subscales for African Americans? (See Appendix G: Measurement Issues with the RIAS)

   Hypothesis: Based on previous critiques on the internal consistency of the RIAS, it is hypothesized that the Encounter subscale will have the lowest alpha coefficient.

2. How do demographic (i.e., percent female in the sample, cohort of sample) and study variables (sample size of the study, recruitment method, percentage of African Americans in the sampled context, and date of study) independently moderate the RIAS subscale alpha coefficients for African Americans? (Exploratory)
3. How does the RIAS version used in the study moderate the alpha coefficients for African Americans?

   Hypothesis: Based on the properties of coefficient alpha, it is hypothesized that the 60-item RIAS instrument will have highest internal consistency on all subscales because it has the largest number of items per subscale, followed by the 50-item RIAS form, and then the 30-item RIAS instrument, which will have the

lowest internal consistency; however, given the shared items and same number of items for the Encounter subscale on the 30-item and 50-item scale, it is hypothesized that the Encounter scale coefficient alpha for both these versions will not be significantly different.

4. What is an aggregate estimate of the intercorrelation between different RIAS subscales, especially across non-adjacent statues?

   Hypothesis: Based on the theoretical tenets of Cross' (1991) model, it is hypothesized that non-adjacent subscales are either not correlated or negatively correlated (i.e., Pre-Encounter and Immersion/Emersion, Encounter and Internalization, and Pre-Encounter and Internalization).

5. How does the RIAS version moderate the aggregate estimate of the intercorrelations between different RIAS subscales? Which RIAS form is most consistent with theory based on these intercorrelations?

   Hypothesis: Based on the intercorrelations between statuses provided by Helms (1990), it is hypothesized that that the 30-item RIAS version will have the highest intercorrelations between the Pre-Encounter and Immersion/Emersion statuses and Pre-Encounter and Internalization statuses; whereas, the 50-item RIAS version will have the highest intercorrelations between the Pre-Encounter and Encounter and the Encounter and Immersion/Emersion statuses.

Equivocal evidence on the relationship between RIAS and psychological functioning:

(See Appendix H: Predictive Validity of the RIAS)

6. What is the aggregate relationship between RIAS subscales and psychological distress in light of equivocal evidence among African Americans? (Exploratory)

7. What is the aggregate relationship between RIAS subscales and psychological well-being in light of equivocal evidence among African Americans? (Exploratory)
8. How does RIAS version moderate the aggregate relationships between the RIAS subscales and psychological distress as well as RIAS subscales and psychological well-being? (Exploratory)

Demographic variables affecting racial identity level:

9. What are the average item means and standard deviations for each of the RIAS subscales? How do the raw average item mean subscale scores compare across subscales broken down by percentile?

    Hypothesis: It is hypothesized that the Internalization subscale will have the highest means and the Pre-Encounter scale to have the lowest means.

10. What are gender differences in the level of African American RIAS subscale levels (i.e., average item means)? (See Appendix J: Gender Influencing RIAS Level)

    Hypothesis: Based on extant literature and gender role socialization, it is hypothesized that African American males will have lower Pre-Encounter levels, higher Encounter levels, and higher Immersion/Emersion levels than their female counterparts. There will be no differences in Internalization levels between African American males and females.

11. Are there age differences in African American RIAS subscale levels (i.e., average item means)? Is there evidence for a developmental model of African American racial identity modeled by a quadratic age term on RIAS subscale levels (i.e., average item means)? (See Appendix K: Age Influencing RIAS Levels)

Hypothesis: Based on sociocognitive development of racial identity, the adolescent ethnic identity research, and developmental neurobiology, it is hypothesized that racial identity development is developmental in nature (i.e., as age increases Pre-Encounter attitudes decrease while Immersion/Emersion and Internalization attitudes increase). Hence, a negative, small quadratic relationship will be observed between the Pre-Encounter, Encounter, and Immersion/Emersion subscales as age increases through young adulthood, while a small, positive linear relationship will be observed with the Internalization subscale from young adulthood through adulthood, as it is a more cognitive sophisticated status.

12. How do gender, age, and the interaction effect between gender and age affect the level of African American RIAS subscale levels (i.e., average item means)? (Exploratory)
13. How does cohort year of the sample affect the level of African American RIAS subscales (i.e., average item means)?

    Hypothesis: Given the tenets proposed by globalization theory and hybridization of identity, it is hypothesized that more recent cohorts will endorse lower levels on all of the RIAS subscales.

Moderator analyses:

14. How does the date of the study moderate the relationship between RIAS subscale and psychological distress for African Americans? How does the date of the study moderate the relationship between RIAS subscale and psychological well-being for African Americans? (See Appendix L: Date of Study and Cohort as Moderators)

Hypothesis: Based on critiques that the RIAS is a dated instrument, it is hypothesized that older studies will have larger correlations with criterion variables.

15. How do cohort effects moderate the relationship between RIAS subscale and psychological distress for African Americans? How do cohort effects moderate the relationship between RIAS subscale and psychological well-being for African Americans? (See Appendix L: Date of Study and Cohort as Moderators)

    Hypothesis: Due to Quintana's (2007) claim that the most adaptive racial identity functioning is based on the appropriate tailoring of one's vigilance for discrimination to the context, it is hypothesized the relationship between the Immersion/Emersion status and psychological well-being will be stronger for earlier cohorts, and the relationship between the Immersion/Emersion status and psychological distress will be weaker for earlier cohorts.

    Hypothesis 2: Based on Quintana's (2007) claim, it is hypothesized that the relationship between the Internalization status and psychological well-being will be weaker in earlier cohorts, and that the relationship between Internalization status and psychological distress will be stronger for earlier cohorts.

    Hypothesis 3: Based on Quintana's (2007) claim, it is hypothesized that the relationship between the Pre-Encounter status and psychological health will be stronger for earlier cohorts, and the relationship between the Pre-Encounter status and psychological distress will be weaker for earlier cohorts.

16. How does percentage of African Americans in the environmental context sampled moderate the relationship between RIAS subscales and psychological distress? How

does percentage of African Americans in the environmental context sampled moderate the relationship between RIAS subscales and psychological well-being? (See Appendix M: Percentage of African Americans in the Sampled Context as a Moderator)

Hypothesis 1a: Based on tenets from Bronfenbrenner's (1977, 1979) ecological theory and Tajfel and Turner's (1979) concept of in-group favoritism, it is hypothesized that the relationship between a more inclusive racial identity (i.e., Internalization status) and psychological well-being will be stronger for African Americans in a racial minority context.

Hypothesis 1b: It is hypothesized that the relationship between the Internalization status and psychological distress will be weaker for African Americans in a racial minority context.

Hypothesis 2a: It is hypothesized that the relationship between the Immersion/Emersion status and psychological well-being will be stronger for African Americans in the racial majority.

Hypothesis 2b: It is hypothesized that the relationship between Immersion/Emersion status and psychological distress will be weaker for African Americans in the racial majority.

Hypothesis 3a: It is hypothesized that the relationship between the Pre-Encounter status and psychological well-being will be stronger for African Americans in the racial minority.

Hypothesis 3b: It is hypothesized that the relationship between Pre-Encounter status and psychological distress will be weaker for African Americans in the racial minority.

17. How do cohort effects and percentage of African Americans in the context sampled moderate the relationship between RIAS subscales and psychological distress? How do cohort effects and percentage of African Americans in the context sampled moderate the relationship between RIAS subscales and psychological well-beimg? (Exploratory)
18. How does the sampling context (i.e., African American specific recruitment vs. non-African American specific recruitment and college recruitment vs. community recruitment) moderate the relationship between RIAS subscale and psychological distress? How does the sampling context (i.e., African American specific recruitment vs. non-African American specific recruitment and college recruitment vs. community recruitment) moderate the relationship between RIAS subscale and psychological well-being? (Exploratory)

Chapter 3: Methods

Inclusion and Exclusion Criteria

Studies were required to include African American participants (studies that mixed and did not disaggregate African American and Black immigrant populations were excluded; however, in cases that African American and Black immigrant data was disaggregated, only the African American data was used), the Racial Identity Attitudes Scale (RIAS), and a construct of psychological functioning. Psychological functioning included two constructs of psychological distress (i.e., psychological symptoms and psychological distress) as well as two constructs of psychological well-being (i.e., self-esteem and psychological well-being). Studies were excluded if they did not use the RIAS or include a measure of psychological distress or psychological well-being.

Literature Search Procedures

Computerized searches were conducted to locate relevant studies in this meta-analysis. Studies were identified by searching, *ERIC, PsycINFO,* and *PROQUEST* online databases in May 2013. The key terms used in the search included *racial identity, racial identity attitudes scale,* and the *RIAS*, which were combined with *African American* and *Black American*. These terms were paired with *mental health, distress, psychological symptoms*, *self-esteem,* and *well-being*. Studies needed to be in English.

The search yielded a total of 432 published articles and 6,743 published dissertations, which was limited to 529 a total of studies based on content relevance, consisting of 194 published articles and 335 published dissertations. From the 529 studies, 326 studies were excluded for being conceptual pieces, 20 for only being qualitative studies, 115 for using different racial identity measurements, 1 for being experimental, 5 due to lack of reported

statistical information, 2 due to reused data sets, and 3 due to inaccessibility based on author's request (i.e., dissertations). Ultimately, 57 studies that pertained to African American racial identity and psychological functioning (i.e., psychological symptoms, psychological health, well-being, self-esteem, and psychological distress) were extracted. The final result was 27 published articles and 30 dissertations.

Out of the 57 selected studies, 18 studies did not report intercorrelations among RIAS statuses, 8 did not report a correlation matrix between RIAS statuses and psychological functioning, 19 did not report RIAS subscale alpha coefficients, and 3 did not report RIAS subscale means. Hence, 39 studies included intercorrelation between RIAS subscales, 38 studies included RIAS subscale alpha coefficients, 54 studies included RIAS subscale means, and 49 included the Pearson's correlation coefficients between RIAS subscale and psychological functioning. From the 57 appropriate studies, dated from 1985 to 2012, a total 39 psychological distress and 53 psychological health effect sizes were extracted. The average age of the samples ranged from 15 to 74.4 years, and 31 studies used the RIAS (Long Form), 22 studies used the RIAS (Short Form), and 4 studies used the Revised RIAS (60-item Form). For coding sheet please see Appendix O: RIAS Meta-Analysis Coding Sheet.

Alpha Coefficients. Variables of particular interest in this study were coded. From the extracted studies the alpha coefficients for each of the subscales on the Racial Identity Attitudes Scale (RIAS) were recorded along with whether the study used the 30-item, 50-item, or 60-item RIAS scale. Alpha coefficient is the most frequently used, and most appropriate, internal consistency reliability coefficient for the RIAS instrument (Cokley, 2007). Some of the selected studies reported no reliability coefficient (k = 21 studies), all four of the RIAS subscale alpha

coefficients (k = 31 studies), or alpha coefficients on one or more of the subscales (k = 5 studies); none of the studies reported the observed variance of the alpha coefficient.

Intercorrelation between RIAS statuses. The Pearson's correlation coefficient (i.e., r) among the RIAS subscales is frequently reported in the empirical studies using the RIAS instrument. These correlation coefficients were extracted and recorded to estimate the relationship between Pre-Encounter and Encounter statuses, Pre-Encounter and Immersion-Emersion statuses, Pre-Encounter and Internalization statuses, Encounter and Immersion-Emersion statuses, Encounter and Internalization statuses, and Immersion-Emersion and Internalization statuses.

RIAS subscale and psychological functioning. The effect size between RIAS subscales and psychological functioning (i.e., psychological distress and psychological health) is reported in terms of Pearson's correlation coefficient (i.e., r), which were extracted from the selected studies. In addition, the specific psychological constructs used in the studies were coded (i.e., 0 = psychological distress/symptoms, 1 = self-esteem/well-being). To avoid confounding well-being with the absence of distress, two separate meta-analyses are conducted, one with psychological symptoms and distress and the other with well-being and self-esteem.

RIAS subscale means. To examine level of racial identity statuses varying by contextual variables, the mean or summed RIAS subscale scores were recorded. Most the selected empirical studies do not present disaggregated RIAS mean subscale scores by gender; however, if disaggregated RIAS mean or summed scores are reported by gender both aggregated and disaggregated scores were recorded. Once the RIAS average item subscale means were aggregated, the data was converted to reference data (by raw subscale score and percentile) to inform future studies using the RIAS.

Contextual variables. (1) The date of study was recorded as the year in which the study was published, or the year that the study was finished and presented in front of a dissertation or master's thesis committee. (2) The mean age and (3) percentage female of the samples were extracted from study demographics/methods. If percentage female and mean age was not overtly presented, they were computed through demographic reports of the sample, if and when possible. (4) The cohort year of the study was calculated by subtracting the mean age of the sample from the study's date to yield the average birth date of the sample. Given that cohort year is partly dependent and determined by the date of study, cohort year and date of study were not entered into the same meta-analytic regression model to reduce the chances of multicollinearity. (5) The percentage of African Americans in the sampled environment was recorded. This is not the percentage of African Americans in the sample because all of the samples included in the present study had 100% African American participants. If the study did not overtly present the percentage of African Americans in the sampled context, then this information was based on the African American population (i.e., %) in the most specific ecological-level provided by the study (e.g., the city, U.S. region, or specific university/college sampled) and was looked up in the U.S. Census or university data for the year of the study. (6) Study recruitment methods in terms of six sample recruitment strategies were recorded to test for potential moderating effects that may account for sampling bias. The codes were: 0 = non-specific school/college/university; 1 = African American studies courses, African American serving organizations, African American churches, and African American barbershops; 2 = Historically Black Colleges/Universities (HBCUs); 3 = Predominately White Institutions/Colleges (PWIs); 4 = combination of HBCU and PWI; and 5 = non-specific African American serving community organization. Due to the limited number of observations in some of the original recruitment codes, recruitment was

recoded in terms of two recruitment variables. Recruitment – community/college was coded 0 for community sampling, 1 for a combination of community and college sampling, and 2 for college sampling. Recruitment – African American specific recruitment was coded 0 for non-African American specific organization recruitment (e.g., general college recruitment, the NYC or DC metro area), 1 for a combination of non-African American specific and specific African American organization recruitment (e.g., PWI and HBCU), and 2 for African American specific organization recruitment (e.g., HBCU, Black student union, African American studies courses, African American churches, African American barbershops).

Interrater reliability. All study variables were coded by two researchers (i.e., the primary researchers and another doctoral-level counseling psychology student). For the continuous variables, intraclass correlations between variables range from 0.91 to 1.00, with most of the disagreement in the perceived differences in the smallest ecological context reported by the selected studies and recording the percent of African Americans in the sampled context. For categorical variables, kappas ranged from 0.94 to 1.00. All disagreements were discussed between the two coders and resolved until 100% agreement was reached, ensuring the accuracy of the data.

Dependency

Aggregating within studies. When multiple effect sizes (i.e., correlations from multiple measures) were extracted from the same study (i.e., the same sample of participants), the issue of dependency in meta-analyses emerges (Becker, 2000). Some studies reported two correlations between racial identity statuses and two constructs of psychological well-being (i.e., self-esteem and psychological well-being), or two correlations between racial identity statuses and two constructs of psychological symptoms (i.e., depression and anxiety). During these instances, the

effect sizes were aggregated within studies prior to aggregating between studies to produce an average between the reported correlations to represent the relationship of interest as a safeguard against dependency and losing information.

Additionally, some studies reported both a correlation between racial identity statuses and a construct of psychological well-being as well as a correlation between racial identity statuses and a construct of psychological distress. In this case, the study was included in the two separate meta-analyses (i.e., one to meta-analyze the relationship between racial identity status and psychological well-being and one to meta-analyze the relationship between racial identity status and psychological distress), as there were no dependency issues given the two separate analyses.

Effect Sizes

Coefficient Alpha. The primary index of effect size used to examine the RIAS subscales' internal consistency is the alpha coefficient. Because alpha coefficients is not be normally distributed, Feldt (1965) and Kristof (1963) developed a sampling theory for coefficient alpha (r_α) as an estimate for the true parameter (ϱ_α) for scores from n participants on J items, demonstrated that the ratio $(1 - r_\alpha)/(1 - \varrho_\alpha)$ is distributed as F with $dfs = (n - 1)$ and $(J - 1)$. Hakstian and Whalen (1976) used the normalizing transformation for the F statistic ($F^{[1/3]}$) to obtain a nonlinear monotonic normalizing transformation of the sample coefficient alpha: $(1 - r_\alpha)^{[1/3]}$. Although the transformation is biased, the bias in estimates of coefficient alpha was less than that of Fisher's Z, which is usually ignored (Hakstian & Whalen, 1976). The extracted alpha coefficients were transformed using $T_i = (1 - r_\alpha)^{1/3}$, with a variance in study i of $v_i = [18J_i (n_i - 1)(1 - r_\alpha)^{2/3}] / [(J_i - 1)(9n_i - 11)^2]$ (Shadish & Haddock, 1994). The weighted mean transformed alpha is $T. = [(\sum wT)/(\sum w_i)]$, where the weight is $w_i = 1/v_i$ with a variance of $v. = 1/(\sum w_i)$, standard error of the mean = $(v.)^{1/2}$, and a 95% confidence interval computed by $T. = \pm$

1.96*SE($T.$). After the effect sizes were calculated, they were transformed back to coefficient alpha using $\hat{\rho}_{\alpha} = |\, 1 - T. \,|^3$, which can be interpreted as the alpha coefficient of internal consistency.

Only 4 studies used the 60-item RIAS form. Due to the limited number of studies, the alpha coefficient meta-analysis was not conducted on the disaggregated Immersion and Emersion subscales for the 60-item form. The original RIAS 60-item unpublished manuscript and item loadings were unattainable. However, due to the example provided by Warren (2004) on the item content of the RIAS 60-item Post Encounter subscale ("I feel guilty and/or anxious about some of the things that I believe about Black people"), which is one of the same items on the RIAS Encounter subscale, it was assumed that the Post-Encounter and Encounter subscales assess disorientation about one's racial group in a similar manner. And as a result, the Encounter and Post-Encounter alpha coefficients were aggregated together in the coefficient alpha meta-analysis.

Intercorrelation between statuses and relationship between racial identity statuses and psychological functioning. The effect size used to examine the relationship between non-adjacent RIAS subscales as well as the relationship between the RIAS subscales and psychological distress and psychological health is the Pearson's product-moment correlation coefficients (r). Because correlation coefficients would not be normally distributed when the true correlation is not zero (Hedges & Olkin, 1985), the extracted correlation coefficients were transformed to Fischer's Z via $z_{ri} = .5*\ln((1+r_i)/(1-r_i))$, where ln is the natural logarithm (Borenstein, 2009), with a conditional within-study variance of $v_i = (n_i - 3)^{-1}$, where n_i is the sample size. The transformed effect sizes z_{ri} were used to compute the average effect ($\bar{z}_r$), using the corresponding $1/v_i$ as the weight for each study. Then, the estimated mean ($\bar{z}_r$) and its 95%

confidence interval were transformed back to the *r* metric via $r(\bar{z}_r) = (e^{2\bar{z}} - 1)/(e^{2\bar{z}} + 1)$, which is interpreted as a correlation coefficient (Cohen, 1988).

Racial identity levels varying as a function of demographic variables. The effect size used to examine the racial identity status levels is the average item mean ($\bar{x}$), unstandarized, on each of the RIAS subscales. If subscale sums were presented, they were converted to mean responses by dividing the sum by the number of items on the specific subscale prior to aggregating via statistical methods outlined by Borenstein (2009).

Based on the initial increase and latter decrease of the Pre-Encounter, Encounter, Immersion/Emersion, and Internalization levels by age, a quadratic term was added in the regression model to account for this theoretically rooted phenomenon. Accounting for the high likelihood of confounding variables, cohort year and date of study were not entered into the same regression models, as cohort year was derived from the study date.

To explain the size of the effect sizes in the present study, *r* can be converted (i.e., r^2) into the percentage of variance the predictor variable explains in the criterion variable, with $r^2 = .01$, .09, and .25 (or $r = .1$, .3, and .5), representing small, medium, and large effects, respectively (Cohen, 1988).

Statistical Methods

The present study estimated a total of 22 omnibus effect sizes via five separate meta-analyses; four aggregate effect sizes (i.e., one for each of RIAS subscale) for the meta-analysis of alpha coefficients, six aggregate effect sizes for the intercorrelation between RIAS subscales, four aggregate effect sizes (i.e., one for each RIAS subscale) for the meta-analysis of RIAS statuses and psychological distress, four aggregate effect sizes (i.e., one for each RIAS subscale)

for the meta-analysis of RIAS statuses and psychological well-being, and four aggregate effect sizes (i.e., one for each RIAS subscale) for RIAS subscale mean scores.

The meta-analyses were conducted using statistical methods proposed by Hedges and Olkin (1985) and Shadish and Haddock (1994). Primary study contributions were weighted by the inverse of the study's variance, estimated using $w^*_I = 1/(v_i + \hat{\tau}^2_T)$ (i.e., methods-of-moments; Raudenbush, 2009), where $\hat{\tau}^2_T = [Q\text{- (k-1)}]/[\Sigma w_i - (\Sigma w_i^2/\Sigma w_i)]$ is the amount of variability among a population of effect sizes. This gives more weight to larger samples when computing the omnibus effect sizes. The omnibus effect size is calculated by $\hat{\mu} = \Sigma\ [(w^*_i)y_i]/(w^*_i)$, where y_i are the observed effect sizes per study i (Viechtbauer, 2007). Furthermore, the 95% confidence intervals for the aggregated effect sizes were calculated to test for statistical significance (i.e., if 0 is included it is not statistically significant), using $\hat{\mu} \pm 1.96\sqrt{(\Sigma(w^*_i)}$. These calculations were implemented both through the MAc and metafor R packages as well as excel spreadsheets calculations to corroborate results. Moreover, effect sizes were aggregated within studies and prior to being aggregated across studies, in the event that multiple effect sizes were reported per study.

Fixed versus random effects. In a fixed-effect analysis, each effect size's variance is assumed to only reflect sampling error (i.e., variation due to differences among participants) around a common effect size mean. On the contrary, a random effects analysis assumes a random error component accounting for random variation in effect sizes due to the assumption that observed effect sizes are sampled from a population of effect sizes (Hedges & Vevea, 1998). Hence, a random effects model accounts for two sources of variation, sampling error (i.e., participant differences) and random variation in effect sizes (i.e., differences in the manner that studies were conducted), which actually assigns less weight to larger studies as compared to a

fixed effect analysis. Fixed effect models yield means only applicable to the studies sampled in the meta-analysis, whereas random effects models generalize to a larger population of studies that are not included in the meta-analysis (Borenstein, Hedges, Higgins, & Rothstein, 2010). The random-effects model is indicated because the purpose of the study is to generalize study findings to the broader population of studies (e.g., Cooper, 2009; Quintana & Minami, 2006; Raudenbush, 2009).

In a fixed effect analysis, it is important to note that the *Q* statistic is used for significance testing to indicate whether the effect sizes among studies in the analysis are homogenous. The heterogeneity of effect sizes was tested using $Q_{total} = \Sigma\, w_i (T_i - T.)^2$, which has chi-squared distribution (χ) with a k – 1 degree of freedoms (*df*) and k as the number of effect sizes (Hedges & Olkin, 1985). When calculating the *Q* statistic from a random effects model, the *Q* statistic is interpreted differently, such that it tests the significance of the study sampling variance and estimates its magnitude (Hedges & Vevea, 1998). If it is significant, in a random effects model, it means that the study sampling variance is significantly different from zero and that this variance needs to be incorporated throughout the analysis (Quintana & Minami, 2006).

Mixed effects model. The main research questions of interest in the present study focus on the ability to generalize results to a larger population of studies as well as test for potential moderating effects of study level characteristics. Hence, a mixed effects analysis, which includes structural variability (i.e., moderators) and random variability in effect sizes as well as sampling error, was conducted to examine differences in effect sizes by demographic and study characteristics. Mixed effects procedures, as outlined by Viechtbauer (2007), were used.

Moderator analyses. The first set of meta-analytic regressions tested the effect of study variable moderators (i.e., RIAS version, study size, percent of African Americans in the sampled

context, recruitment context, study date) and demographic variable moderators (i.e., percent female in the sample, cohort year of the sample) on the alpha coefficients of the RIAS subscales. The potential moderator of RIAS version was tested in the second set of meta-analytic regressions examining the effect of RIAS version on the intercorrelation between RIAS subscales. The third set of meta-analytic regressions examined the effect of four moderators (i.e., cohort, date of study, percent of African Americans in the sampled environmental context, and study recruitment context methods) along with an interaction effect between percent of African Americans in the sampled environmental context and the study date on the relationship between RIAS subscales and psychological functioning. The fourth set of meta-analytic regressions examined the relationship between RIAS subscale mean scores and the moderating effect of demographic variables (i.e., percent of female in the sample, mean age, and year of cohort) as well as potential interactions between these demographic variables.

Significant $Q_{between}$ statistics indicate that significant differences in effect sizes differ between groups, which suggests that group means can be compared. It is important to note that the $Q^*_{between}$ statistic for the random effects model is harder to reject, suggesting that there are no significant differences between groups, because the random effects model accounts for more within group variability than the $Q_{between}$ statistic in the fixed effects model.

In all of the proposed potential moderators of interest a meta-regression analysis will be used to explore systematic variability in the omnibus effect sizes. Weighted least squares (WLS) regression was used to compute regression parameters and standard errors with $w^*_i = 1/(v_i + \hat{\tau}^2_R)$, where $\hat{\tau}^2_R$ is the amount of residual heterogeneity in the effect sizes (Viechtbauer, 2007). To test if a particular moderator significantly influences the effect size, the regression parameter of

that moderator are divided by its standard error and compared to the criterion value of a standardized normal distribution (i.e., ± 1.96 for $\alpha = .05$, two-tailed).

For the meta-analytic regression on coefficient alpha as a the dependent variable, WLS was also implemented (Hedges, 1994; Raudenbush, 1994; Shadish & Haddock, 1994) and adjusted WLS GLM estimate of standard error (S_j for parameter estimate j) were computed by dividing the SE_j (from R output) by the square root mean squared error ($S_j = SE_j / \sqrt{MSE}$) (Rodriguez & Maeda, 2006). This is required because the weighting yields incorrect standard errors from statistical software due to WLS GLM interpreting the weight for each transformed alpha as a sampling weight. Regression parameter significance was tested by using $z = b_j / S_j$, where b_j is the parameter estimate and S_j is the adjusted WLS GLM estimate of standard error. Furthermore, a confidence interval was computed by using $b_j \pm 1.96 * S_j$ ($\alpha = .05$, two-tailed) (Hedges, 1994). None of the selected studies reported the standard deviation in the observed alpha levels, and as a result the restriction of range with alpha was unable to be corrected.

Multicollinearity. Multicollinearity is a statistical phenomenon that affects the validity of the effect sizes derived from statistical analysis in the event that two or more predictor variables are highly correlated. To ensure that multicollinearity did not influence the results of the present study, the correlation matricies with the variables in the proposed analyses were checked for high correlations and the variance inflation factor (VIF) was calculated using the R^2 from each of the analyses ($1/(1- R^2)$). The VIF has a lower bound of 1, which occurs when two predictors are orthogonal, and the square root of the VIF indicates how many times the standard error for the coefficient of a predictor variable is inflated compared to if it was uncorrelated with the other predictor variable. Although there is no agreed upon standard, VIFs that were above 5 were considered high and the correlation matrix for variables with VIFs above 2.5 were double

checked. There was only one set of predictor variables (i.e., African American specific recruitment and college/community sampling context) that displayed issues of multicollinearity; to correct for multicollinearity, both recruitment context variables were not included within the same analyses.

IV. Results

The results section corresponds systematically to the eighteen research questions outlined on pages 102 to 108; the research question number heading is linked to each of the subsequently presented results.

Research Question # 1: Given the psychometric and theoretical critiques of the RIAS, what is an aggregate estimate of the internal consistency of the RIAS subscales for African Americans?

Based on the psychometric and theoretical critiques of the RIAS subscales, RIAS subscale alpha coefficients from the selected studies were aggregated into omnibus effect sizes via fixed- and random-effects procedures, as outlined by Rodriguez and Maeda (2006). The selected studies resulted in 34 alpha coefficients for the Pre-Encounter subscale, which yielded a fixed aggregate effect size of $\varrho^{\wedge} = 0.745$ with a 95% confidence interval of [0.735, 0.755]. The Pre-Encounter subscale fixed omnibus effect size produced the highest internal consistency as compared to the other subscales, not supporting the hypothesis that the Internalization subscale would have the highest alpha coefficient. The Encounter subscale yielded 32 alpha coefficients from the selected studies and a fixed omnibus effect size of $\varrho^{\wedge} = 0.522$ with a 95% confidence interval of [0.501, 0.541], supporting the hypothesis that the Encounter subscale would have the lowest alpha coefficient out of the four RIAS subscales. The Immersion-Emersion subscale yielded 31 alpha coefficients from the selected studies and a fixed omnibus effect size of $\varrho^{\wedge} = 0.701$ with a 95% confidence interval of [0.689, 0.714]. The Internalization subscale yielded 34 alpha coefficients and a fixed omnibus effect size of $\varrho^{\wedge} = 0.697$ with a 95% confidence interval of [0.685, 0.714]. The heterogeneity coefficients for all of the RIAS subscale omnibus effect sizes were significant, indicating the high likelihood of potential moderators accounting for

systematic variance in the effect sizes (see Figure 4.1: Internal Consistency Aggregate Effect Size*s*).

Figure 4.1: Internal Consistency Aggregate Effect Sizes

Alpha MA		**PE**	**EN**	**I/E**	**INT**
Fixed Effects	*k*	34	32	31	34
	var.	0.000019	0.000031	0.000023	0.000021
	Std Error	0.0044	0.0056	0.0047	0.0046
	T.	0.6339	0.7821	0.6685	0.6714
	95%Lower	0.6424	0.7930	0.6778	0.6805
	95%Upper	0.6253	0.7712	0.6592	0.6624
	*P^* Alpha	0.745	0.522	0.701	0.697
	*P^* Upper	0.755	0.541	0.714	0.709
	*P^* Lower	0.735	0.501	0.689	0.685
	Fixed *Q*	204.67	206.30	79.29	161.52
	p-value	0**	0**	0**	0**
Random Effects					
	var.	0.0006	0.0007	0.0002	0.0005
	T.	0.645	0.798	0.678	0.678
	Std Error	0.0252	0.0265	0.0148	0.0220
	95%Upper	0.6942	0.8502	0.7068	0.7209
	95%Lower	0.5956	0.7464	0.6487	0.6348
	ρ^ Alpha	0.732	0.491	0.689	0.688
	ρ^ Lower	0.666	0.386	0.647	0.625
	ρ^ Upper	0.789	0.584	0.727	0.744

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

The purpose of aggregating the alpha effect sizes across studies is to generalize to a larger population of RIAS studies, including those that were not in the present meta-analysis; as a result, random effects omnibus alpha effect sizes were conducted for each RIAS subscale. Procedures outlined by Rodriguez and Maeda (2006), utilizing methods-of-moments to estimate the random-effects variance component from Hedges and Vevea (1998, p. 492) were used. The random-effects results yielded aggregate alpha effect sizes of $\varrho^{\wedge} = 0.732$ with a 95% confidence interval of [0.666, 0.789] for the Pre-Encounter scale, $\varrho^{\wedge} = 0.491$ with a 95% confidence interval

of [0.386, 0.584] for the Encounter scale, $\varrho^{\wedge} = 0.689$ with a 95% confidence interval of [0.647, 0.727] for the Immersion/Emersion scale, and $\varrho^{\wedge} = 0.688$ with a 95% confidence interval of [0.625, 0.744] for the Internalization scale. The random effects results are relatively consistent with the fixed-effects results with respect to magnitude of the alpha coefficients as well as the order of alpha coefficients by RIAS subscale (See Figure 4.1: Internal Consistency Aggregate Effect Sizes).

Research Question #2: How do demographic (i.e., percent female in the sample, cohort of sample) and study variables (sample size of the study, study recruitment context, percentage of African Americans in the sampled context, and date of study) independently moderate the RIAS subscale alpha coefficients for African Americans?

From an exploratory perspective, several variables were tested as potential moderators on the RIAS subscale alpha coefficients. According to the reliability generalization literature (Vacha-Haase, 1998), it is important to identify which scores, not instruments, are reliable. As a result, sample specific moderators (i.e., percent African American in the sampled context, percent female in the sample, cohort of sample) were tested via weighted WLS regression accounting for observed score variance (i.e., random effects).

Out of these identified potential moderators, percentage of African Americans in the environmental context sampled, percentage of females in the sample, college recruitment sampling, African American organizations specific recruitment, and sample size of the study were not significant for any of the RIAS subscale T-Transformed Coefficient Alphas under a random effects model (See Figure 4.2: Random Effects Weighted Least Squares Regression for T-Transformed Coefficient Alpha (including observed score variance)). However, cohort year of the sample was a significant moderator for the Encounter subscale T-Transformed coefficient

alpha under the random effects model, such that every year increase in cohort year produced an observed increased alpha by 0.0036 T-Transformed coefficient alpha units (i.e., linear relationship). When back transformed to an interpretable alpha coefficient, the mean cohort year (1975.9) yielded an alpha coefficient of 0.596, cohorts born in 1957 (2 sds below the mean) displayed an alpha coefficient of 0.716, cohorts born in 1966.4 (1 sd below the mean) resulted in an alpha coefficient of 0.651, and cohorts born in 1985.3 (1 sd above the mean) displayed an alpha coefficient of 0.491 (See Figure 4.3: Encounter Subscale Alpha Moderated by Cohort Year (60-Item form omitted)). Hence, more recent cohorts demonstrated lower Encounter subscale alpha coefficients compared to earlier cohorts, which speaks to the importance of the historical context and its possible influence on the creation of the Encounter subscale. Please see Figures 4.4-4.7 for T-Transformed alphas QQ plot and distribution.

Figure 4.2: Random Effects WLS Bivariate Regression for T-Transformed Alpha ($S_j = SE_j / \sqrt{MSE}$)

Independent Moderators				
Pre-Encounter:	*b*	S_j	*95% CI*	*p-value*
Form				
50-Item	-.064*	0.0101	[-.110, -.019]	0.001**
60-Item	-.019	0.0185	[-.055, 0.017]	0.152
Recruit 1:				
Community&Coll.	0.067	0.075	[-.08, 0.214]	0.186
College	0.027	0.058	[-.087, 0.141]	0.321
Recruit 2:				
Combination	-.0176	0.094	[-.202, 0.167]	0.426
AfAm Specific	-.0247	0.051	[-.125, 0.075]	0.314
% AfAm	-.002	0.083	[-.035, 0.023]	0.490
% Female	-.015	0.069	[-.150, 0.120]	0.472
N size	0.00006	0.0004	[-.0003, .0005]	0.414
Cohort	-.0008	0.0005	[-.002, 0.0002]	0.055
Date	-.005	0.005	[-.015, .0048]	0.159
Encounter:	*b*	S_j	*95% CI*	*p-value*
Form				
50-Item	-.0006	0.059	[-.116, 0.115]	0.496
60-Item	-.143	0.098	[-.310, 0.024]	0.072
Recruit 1:				
Combination	-.049	0.077	[-.200, 0.102]	0.262
College	0.041	0.085	[-.126, 0.208]	0.314
Recruit 2:				
Combination	-.064	0.060	[-.182, 0.054]	0.143
AfAm Specific	-.011	0.029	[-.068, 0.046]	0.352
% AfAm	0.023	0.085	[-.144, 0.190]	0.489
% Female	0.0456	0.075	[-.101, 0.193]	0.276
N size	0.00004	0.0004	[-.0007, .0008]	0.460
Cohort	0.005*	0.0005	[0.004, 0.006]	0.04*
Date	-.0041	0.0059	[-.016, 0.007]	0.244
Immersion:	*b*	S_j	*95% CI*	*p-value*
Form				
50-Item	-.037	0.022	[-.080, 0.006]	0.046*
No 60-Item	-	-	-	-
Recruit 1:				
Combination	0.010	0.046	[-.080, 0.100]	0.414
College	0.023	0.034	[-.044, 0.090]	0.249
Recruit 2:				
Combination	0.013	0.053	[-.092, 0.118]	0.404
AfAm Specific	-.027	0.032	[-.094, 0.040]	0.249
% AfAm	-.0174	0.047	[-.110, 0.075]	0.356
% Female	0.0059	0.040	[-.073, 0.084]	0.441
N size	-.00019	0.0002	[-.0006, 0.0002]	0.171
Cohort	-.0007	0.003	[-.005, 0.003]	0.363
Date	-.0051**	0.002	[-.009, -.002]	0.005**

Internalization:	*b*	*SE*	*95% CI*	*p-value*
Form				
50-Item	-.0055	0.047	[-.098, 0.087]	0.453
60-Item	-.0315	0.083	[-.194, 0.131]	0.352
Recruit 1:				
Combination	-.0300	0.066	[-.160, 0.099]	0.325
College	-.0170	0.050	[-.115, 0.081]	0.367
Recruit 2:				
Combination	-.0886	0.081	[-.247, 0.070]	0.137
AfAm Specific	-.0313	0.047	[-.123, 0.061]	0.253
% AfAm	-0.0007	0.061	[-.120, 0.119]	0.495
% Female	0.015	0.030	[-.044, 0.074]	0.621
N size	0.00013	0.002	[-.004, 0.004]	0.464
Cohort	-.00004	0.002	[-.004, 0.004]	0.492
Date	-.0011	0.005	[-.011, 0.009]	0.413

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

Skewness and Kurtosis or T-Transformed Alphas

Subscale	**Skew**	**Level of Skew**	**Excess Kurtosis**	**Level of Kurtosis**	**Range**
T-Pre-Encounter	0.836	Moderately Skewed (R)	0.947	Platykurtic	[0.519, 0.857]
T-Encounter	-.685	Moderately Skewed (L)	0.019	Mesokurtic	[0.613, 0.924]
T-Immersion/Emersion	-.006	Approximately Symmetric	1.031	Platykurtic	[0.565, 0.804]
T-Internalization	0.089	Approximately Symmetric	-.242	Platykurtic	[0.554, 0.814]

Figure 4.3: Encounter Subscale Alpha Moderated by Cohort Year

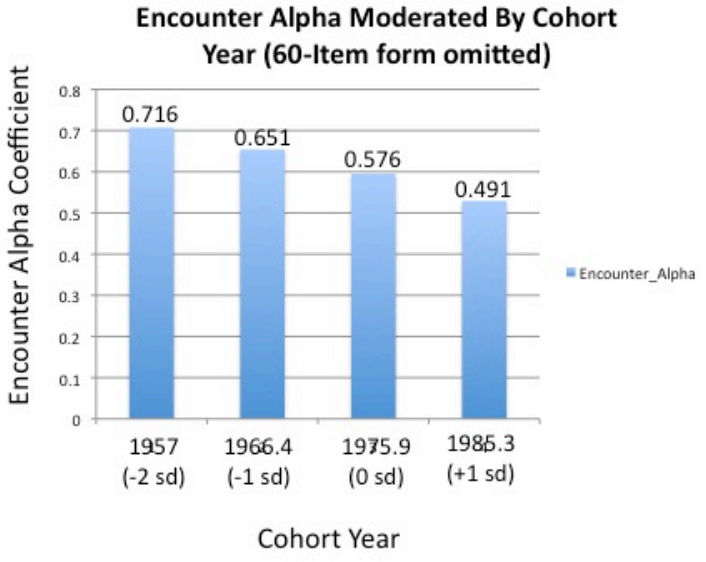


Figure 4.4: T-Transformed Pre-Encounter Alpha Distribution

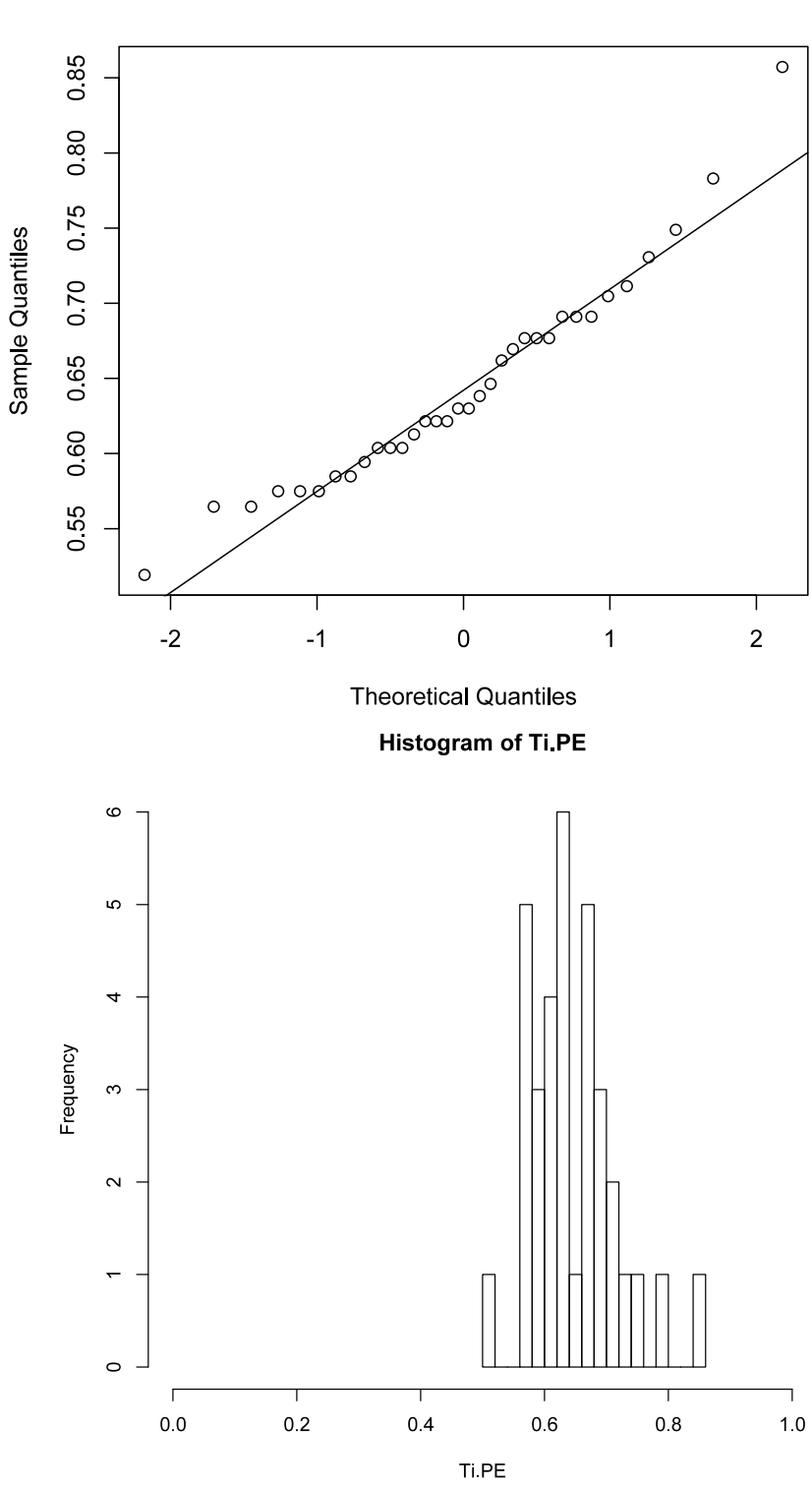


Figure 4.5: T-Transformed Encounter Alpha Distribution

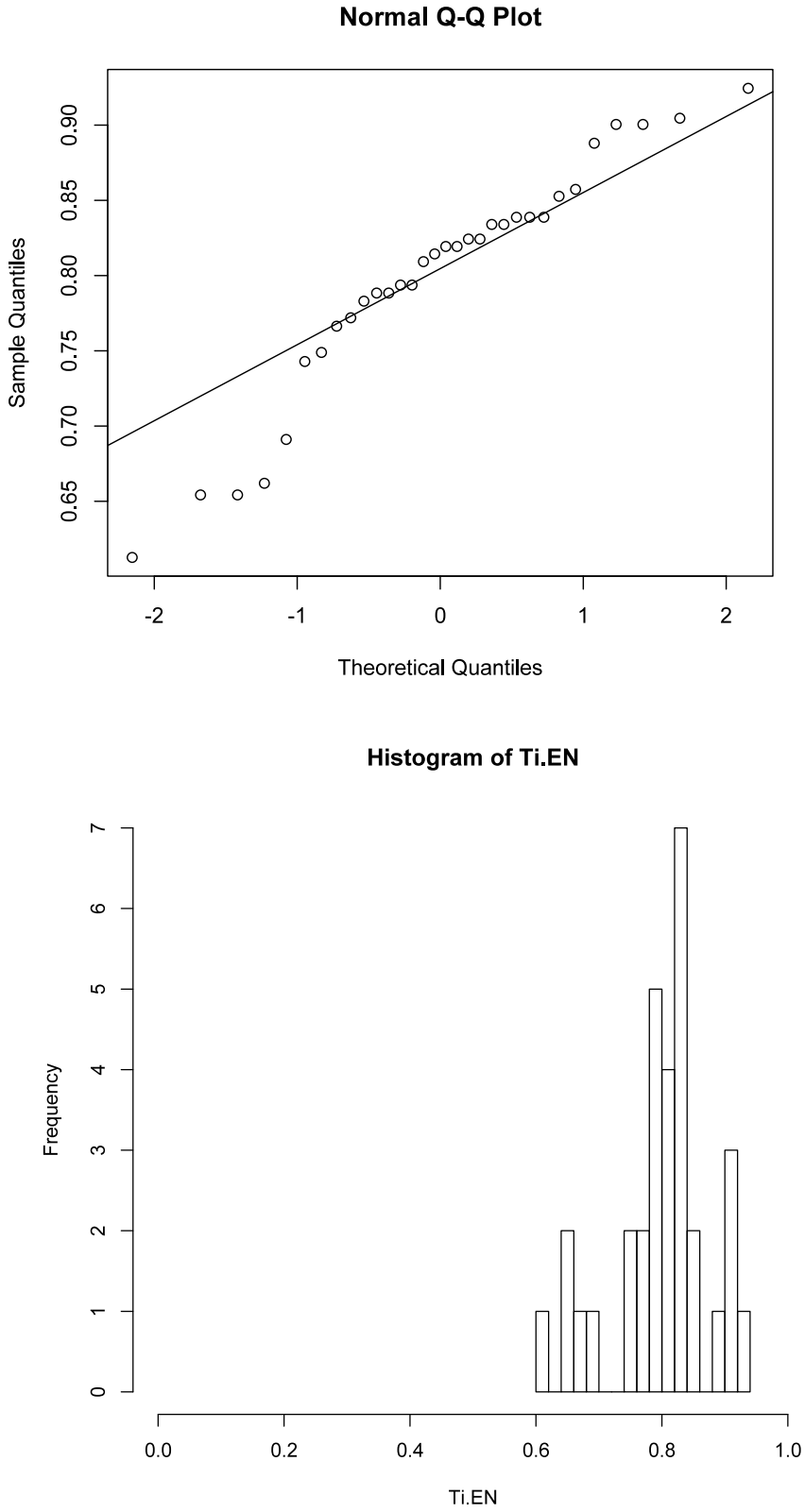
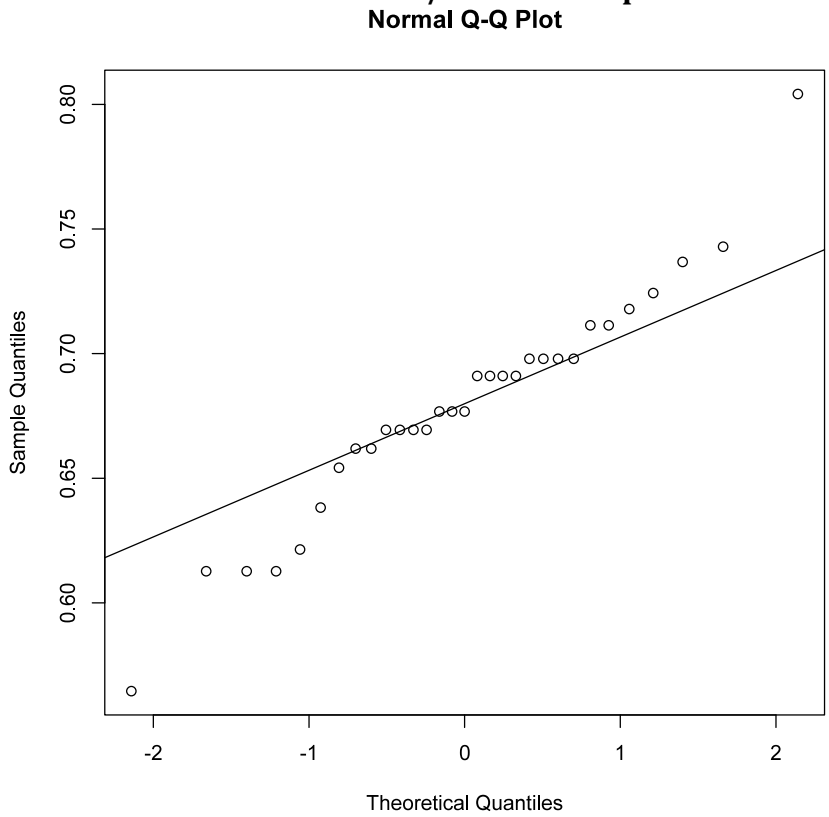


Figure 4.6: T-Transformed Immersion/Emersion Alpha Distribution



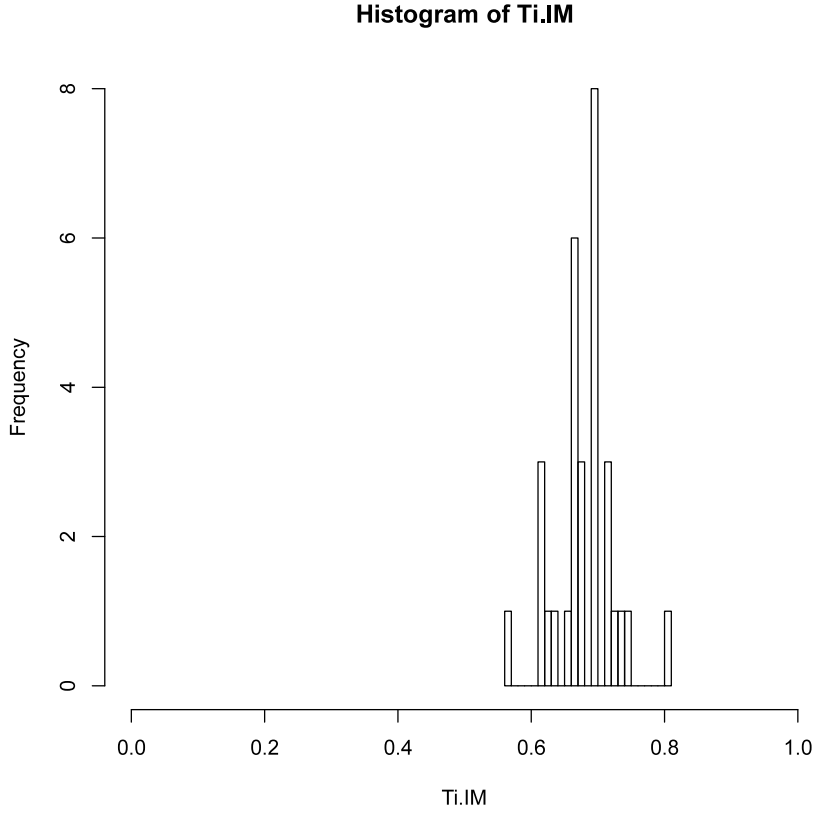
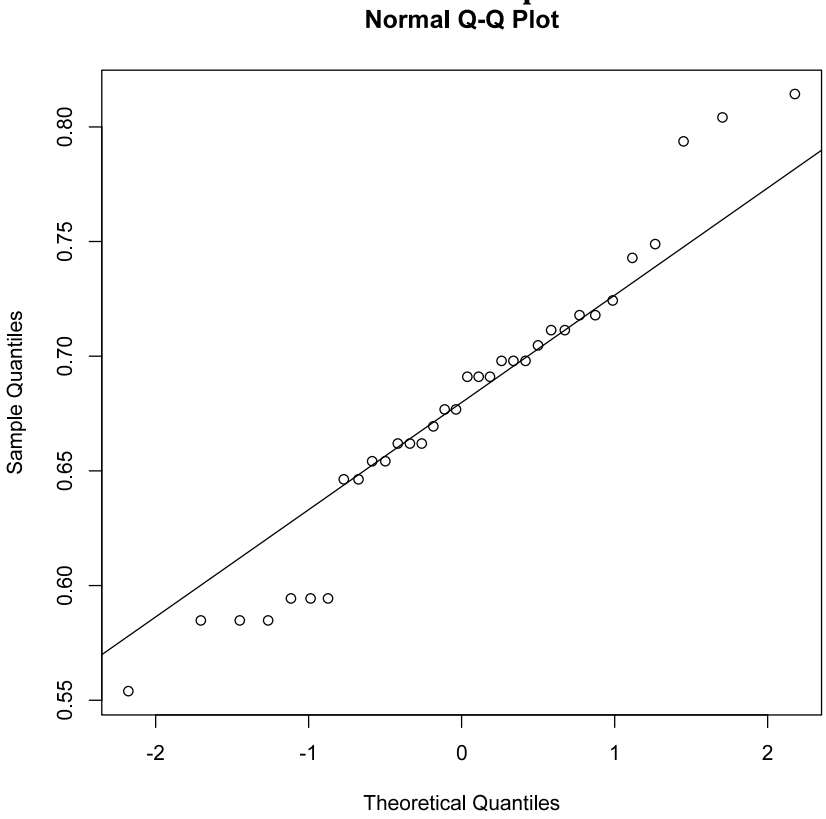
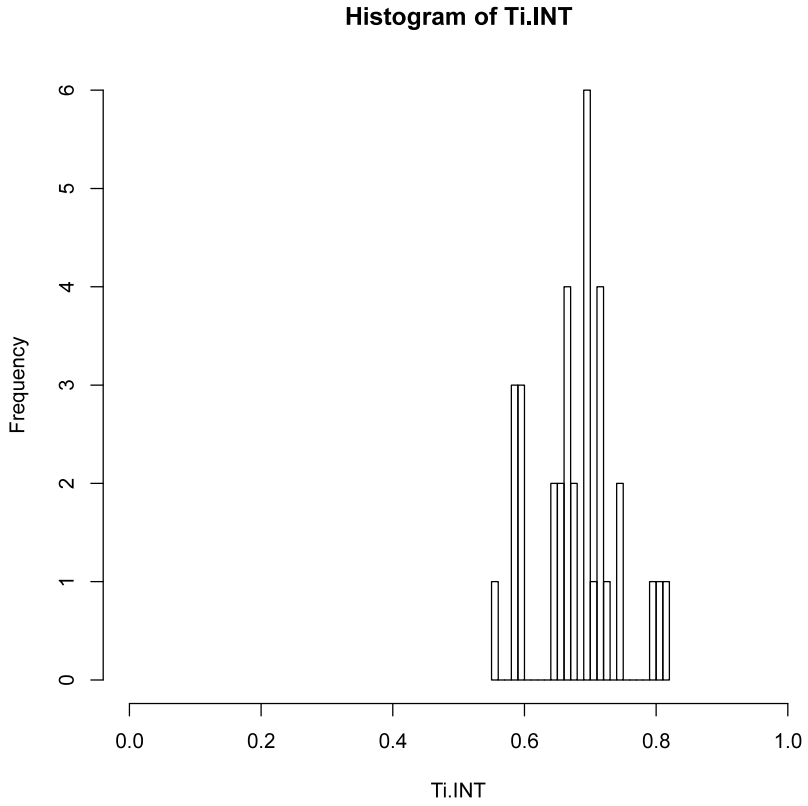


Figure 4.7: T-Transformed Internalization Alpha Distribution

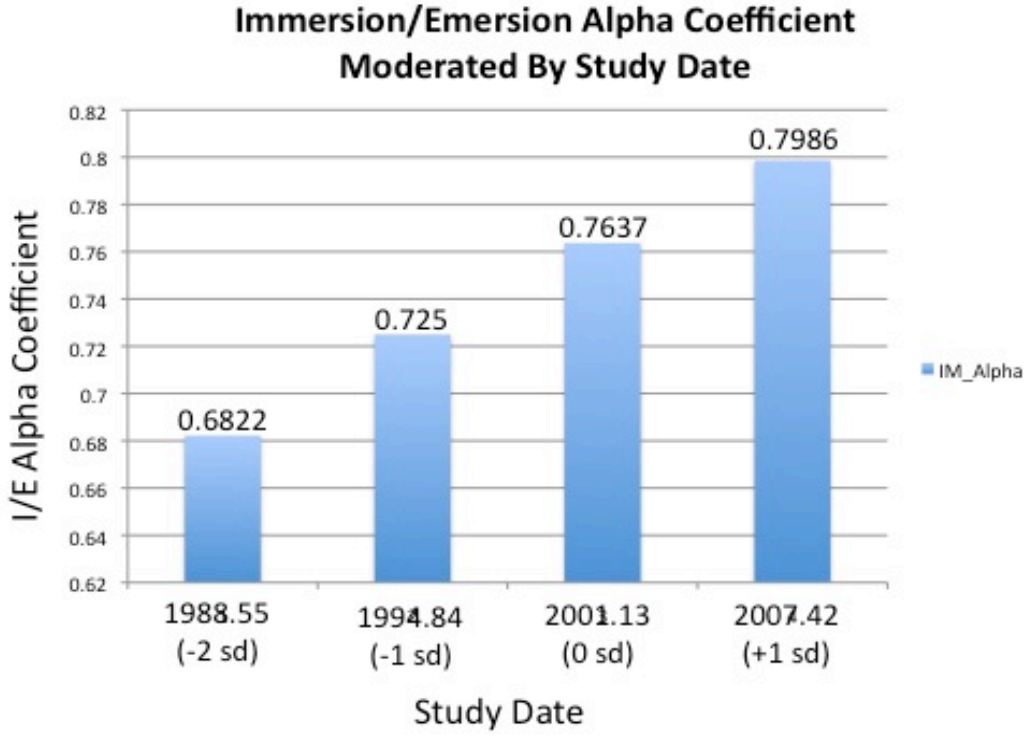




Given the subcritical significance ($p<.07$) of RIAS form on the Encounter subscale in the subsequent analysis, the effect of cohort year on the Encounter alpha coefficient controlling for the effect of RIAS form displayed non-significant results. However, another analysis was conducted omitting all of the four 60-item observations due to the correlation between the 60-item form and younger cohorts (i.e., multicollinearity). These results demonstrated a significant cohort moderator, such that every year increase in cohort year produced an observed increased in alpha by 0.005 T-Transformed coefficient alpha units on the Encounter subscale. When back transformed to an interpretable alpha coefficient, the mean cohort year (1975.9) yielded an alpha coefficient of 0.705, cohorts born in 1957 (2 sds below the mean) displayed an Encounter alpha coefficient of 0.814, cohorts born in 1966.4 (1 sd below the mean) displayed an Encounter alpha coefficient of 0.764, and cohorts bon in 1985.3 (1 sd above the mean) displayed an Encounter alpha coefficient of 0.638.

Moreover, the Immersion/Emersion subscale alpha was significantly moderated by study date. Specifically, the mean study date of 2001.13 yielded an I/E alpha of 0.7637, a study date of 1994.84 (1 *sd* below the mean) resulted in an I/E alpha of 0.725, a study date of 1988.55 (2 *sd*s below the mean) displayed an I/E alpha of 0.6822, and a study date of 2007.42 (1 *sd* above the mean) yielded an I/E alpha of 0.7986. Therefore, more recent studies demonstrated a significant linear increase in I/E subscale alpha levels as compared to older studies (See Figure 4.8: Immersion/Emersion Subscale Alpha Moderated by Study Date).

Figure 4.8: Immersion/Emersion Subscale Alpha Moderated by Study Date



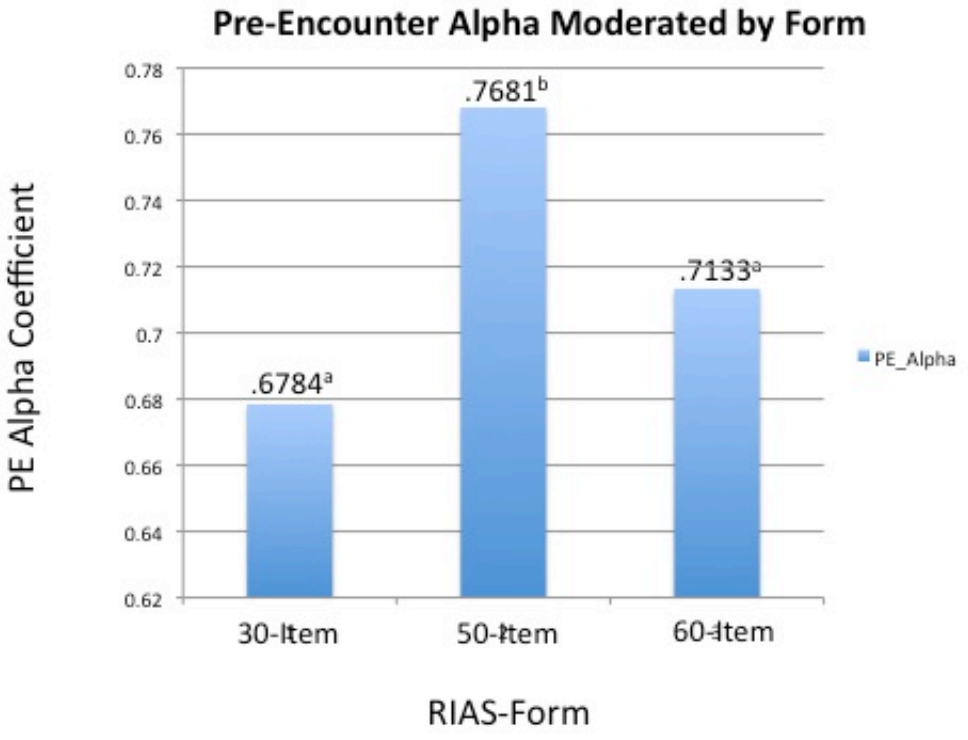
Research Question #3: How does the RIAS form/version used in the study moderate the alpha coefficients for African Americans?

Based on the nature of alpha (i.e., alpha increases with increased scale item length), it was hypothesized that the form or version (30 item, 50 item, 60 item) of the RIAS would moderate all of the RIAS subscale alpha coefficients. One exception to this hypothesis is that the Encounter subscale between the 30-item and 50-item forms would be non-significant, as they both consist of four items and share three of the same exact items, verbatim. The results of the analysis demonstrated that RIAS form moderated the Pre-Encounter and Immersion/Emersion RIAS subscales.

The Pre-Encounter subscale T-transformed alpha demonstrated significant differences when moderated by RIAS form (See Figure 4.2: Random Effects WLS Bivariate Regression for T-Transformed Alphas). The differences in Pre-Encounter alpha coefficients among RIAS forms

were interpreted by back-transforming the reliability generalization meta-regression to interpretable alpha coefficients. The results indicated that the 50-item Pre-Encounter subscale coefficient alpha (i.e., $\alpha = 0.7681$) was significantly different from both the 30-item and 60-item versions; however, the 30-item and 60-item forms were not significantly different from one another (i.e., $\alpha = 0.6784$ & 0.7133, respectively) (See Figure 4.9: Pre-Encounter Subscale Alpha Moderated by RIAS Form). As a note, the 30-item form Pre-Encounter subscale has nine items, the 50-item form Pre-Encounter subscale has fourteen items, and the 60-item Pre-Encounter subscale has seventeen items.

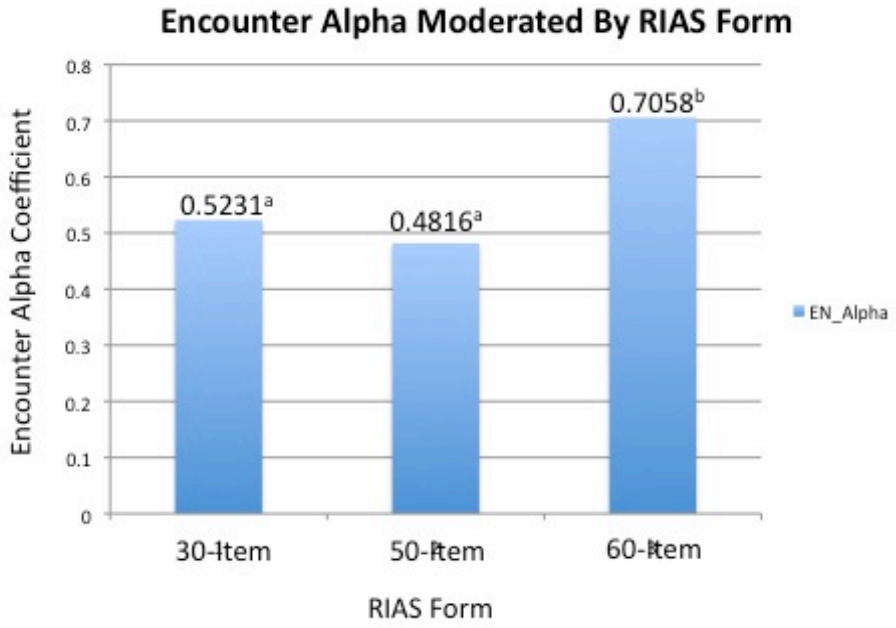
Figure 4.9: Pre-Encounter Subscale Alpha Moderated by RIAS Form



The Encounter subscale coefficient alpha yielded a subcritically statistically significant difference between the 30-item and 60-item form (i.e., $\alpha = 0.5231$ & 0.7058, respectively) as well as the 50-item and 60-item form ($\alpha = 0.4816$ & 0.7058, respectively), but not between the 30-item and 50-item form (i.e., $\alpha = 0.5231$ & 0.4816, respectively) (See Figure 4.10: Encounter

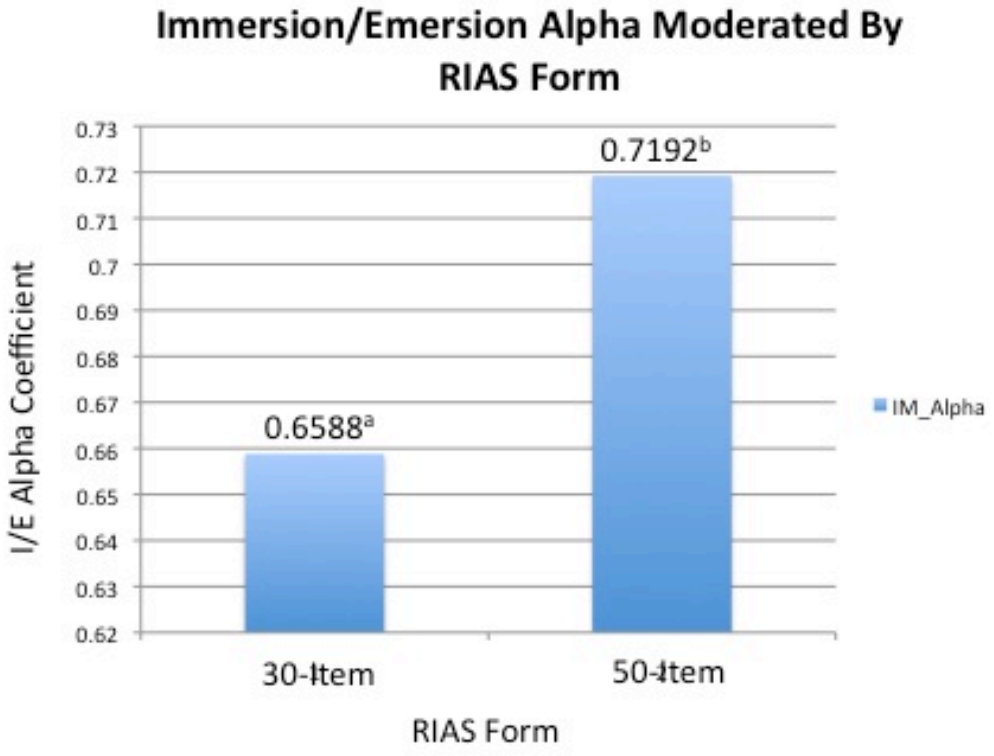
Subscale Alpha Moderated by RIAS Form). As a note, the 60-item RIAS form has eight Encounter subscale items as compared to four items on both the 30- and 50-item forms, which may most likely account for the increase in coefficient alpha.

Figure 4.10: Encounter Subscale Alpha Subcritically Moderated by RIAS Form (subcritical significance)



Lastly, the Immersion/Emersion subscale coefficient alpha yielded statistically significant differences between the 30-item and 50-item forms (i.e., $\alpha = 0.6588$ & 0.7192, respectively) (See Figure 4.11: Immersion/Emersion Subscale Alpha Moderated by RIAS Form). The 60-item form was not included as a factor in the RIAS form moderator analysis on the Immersion/Emersion scale because the 60-item form does not have an Immersion/Emersion subscale, but rather two distinct subscales in place of the Immersion/Emersion scale that measures the Immersion and Emersion subscales independently of one another. As a note, the 30-item form Immersion/Emersion subscale has eight items and the 50-item form has nine items.

Figure 4.11: Immersion/Emersion Subscale Alpha Moderated by RIAS Form



Research Question #4: What is an aggregate estimate of the intercorrelation between different RIAS subscales, especially across non-adjacent statuses?

The aggregate estimates of the intercorrelations among adjacent and non-adjacent statuses were estimated by both fixed- and random-effects models. All of the aggregate intercorrelations among RIAS subscales were statistically significant in both models. The largest intercorrelations were among non-adjacent statuses with several exceptions.

The selected studies yielded 35 bivariate correlation coefficients for the relationship between the Pre-Encounter and Encounter statuses. The Pre-Encounter and Encounter statuses' intercorrelation displayed a significant fixed effects omnibus effect size (Pearson's r) of r = 0.143 with a 95% confidence interval of [0.115, 0.172], and a significant random effects omnibus effect size of r = 0.140 with a 95% confidence interval of [0.079, 0.201].

The selected studies yielded 33 bivariate correlation coefficients for the relationship between the Pre-Encounter and Immersion/Emersion statuses. The Pre-Encounter and Immersion/Emersion statuses' intercorrelation displayed a significant fixed effects omnibus effect size of $r = 0.078$ with a 95% confidence interval of [0.049, 0.106], and a significant random effects omnibus effect size of $r = 0.0586$ with a 95% confidence interval of [0.029, 0.088].

The selected studies yielded 37 bivariate correlation coefficients for the relationship between the Pre-Encounter and Internalization statuses. The Pre-Encounter and Internalization statuses' intercorrelation displayed a significant fixed effects omnibus effect size of $r = -.117$ with a 95% confidence interval of [-.146, -.089], and a significant random effects omnibus effect size of $r = -.0786$ with a 95% confidence interval of [-.127, -.030].

The selected studies yielded 31 bivariate correlation coefficients for the relationship between the Encounter and Immersion/Emersion statuses. The Encounter and Immersion/Emersion statuses' intercorrelation displayed a significant fixed effects omnibus effect size of $r = 0.246$ with a 95% confidence interval of [0.218, 0.274], and a significant random effects omnibus effect size of $r = 0.214$ with a 95% confidence interval of [0.156, 0.271]. This result replicates Helm's (1990) observed intercorrelations between the Encounter and Immersion/Emersion subscales as well as her theory that these two statuses would be the most highly correlated given their similarity and quick transition from one to the other.

The selected studies yielded 34 bivariate correlation coefficients for the relationship between the Encounter and Internalization statuses. The Encounter and Internalization statuses' intercorrelation displayed a significant fixed effects omnibus effect size of $r = 0.102$ with a 95%

confidence interval of [0.074, 0.131], and a significant random effects omnibus effect size of r = 0.116 with a 95% confidence interval of [0.074, 0.159].

The selected studies yielded 36 bivariate correlation coefficients for the relationship between the Immersion/Emersion and Internalization statuses. The Immersion/Emersion and Internalization statuses' intercorrelation displayed a significant fixed effects omnibus effect size of r = 0.119 with a 95% confidence interval of [0.090, 0.147], and a significant random effects omnibus effect size of r = 0.115 with a 95% confidence interval of [0.069, 0.160].

Overall, the largest Pearson's correlation coefficient omnibus effect sizes between RIAS statuses were among adjacent statuses, ranging from r = 0.115 to 0.214. On the contrary, the weakest relationship was between the non-adjacent Pre-Encounter and Immersion-Emersion statuses (r = 0.059), which is consistent with theory. The only negative relationship among RIAS statuses was the intercorrelation between the non-adjacent Pre-Encounter and Internalization statues (r = -.079), which is consistent with theory. All of these observed results confirm the low intercorrelation between non-adjacent statuses, except for the intercorrelation between the Encounter and Internalization statuses (r = 0.116), which was not only the third largest correlation between statuses but also stronger than the relationship between the adjacent Pre-Encounter and Encounter statuses (See Figure 4.12: Aggregate Intercorrelations Between RIAS Subscales – Random effects).

Figure 4.12: Aggregate Intercorrelations Among RIAS Subscales

	PE r EN	PE r I/E	PE r INT	EN r I/E	EN r INT	I/E r INT
k	35	33	37	31	34	36
Fixed Effects:						
$ES_+(r)$	0.143**	0.078**	-0.117**	0.246**	0.102**	0.119**
var(r)	0.00021	0.00021	0.00020	0.00023	0.00022	0.00021
95%CI Upper	0.172	0.106	-0.089	0.274	0.131	0.147
95%CI Lower	0.115	0.049	-0.146	0.218	0.074	0.090
Q	728.822	306.309	507.170	678.050	425.411	470.139
I^2	95.335	89.553	92.902	95.576	92.243	92.556
Df	34	32	36	30	33	35
p-value	0**	0**	0**	0**	0**	0**
Random Effects						
$ES_+(r)$	0.1442**	0.0748**	-.0902**	0.223**	0.119**	0.121**
var(r)	0.0013	0.0006	0.001	0.0013	0.0008	0.0009
SE(r)	0.0365	0.0248	0.0308	0.0354	0.0286	0.0298
95%CI Upper	0.2135	0.1229	-0.031	0.288	0.1742	0.1782
95%CI Lower	0.0735	0.0265	-0.150	0.156	0.0639	0.0631

* p <.05 ** p < .01

Research Question #5: How does the RIAS form/version moderate the aggregate estimate of the intercorrelations between different RIAS subscales? Which RIAS form is most consistent with theory based on these intercorrelations?

As the three RIAS forms have different psychometric qualities, differences in intercorrelations between subscales were suspected and examined among RIAS forms (See Figure 4.13: RIAS Intercorrelations moderated by RIAS-Form). The Pre-Encounter and Encounter intercorrelation was significantly moderated by the 60-item form (b = 0.828, 95%CI [0.626, 0.926], p<.001), using the 30-item form as the reference (See Figure 4.14: Form Moderating Intercorrelations Between RIAS subscales & Figure 4.15: Pre-Encounter and Encounter intercorrelation Moderated by RIAS Form). After calculating the magnitude of the Pre-Encounter and Encounter intercorrelation from the regression equation (i.e., coefficients and intercept), the 60-item form displayed a large intercorrelation of r = 0.98 between the Pre-

Encounter and Encounter subscale and the 30- and 50-item forms displayed no significant differences in Pearson's correlation ($r = 0.17$ and 0.25, respectively).

Figure 4.13: RIAS Intercorrelations moderated by RIAS-Form (only significant differences shown)

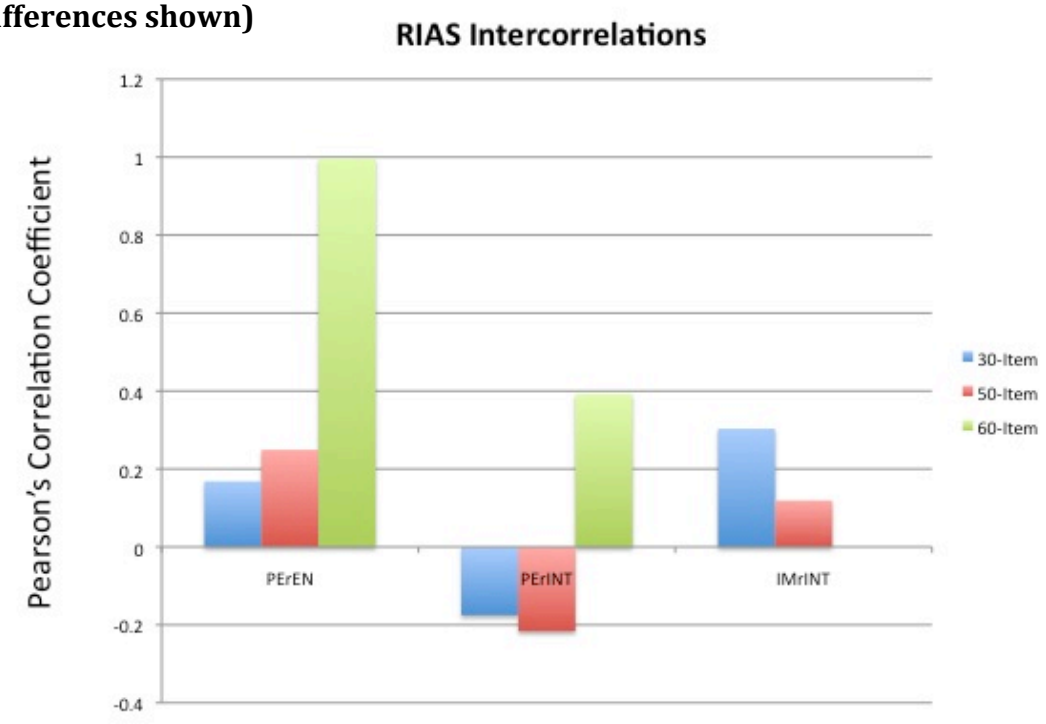
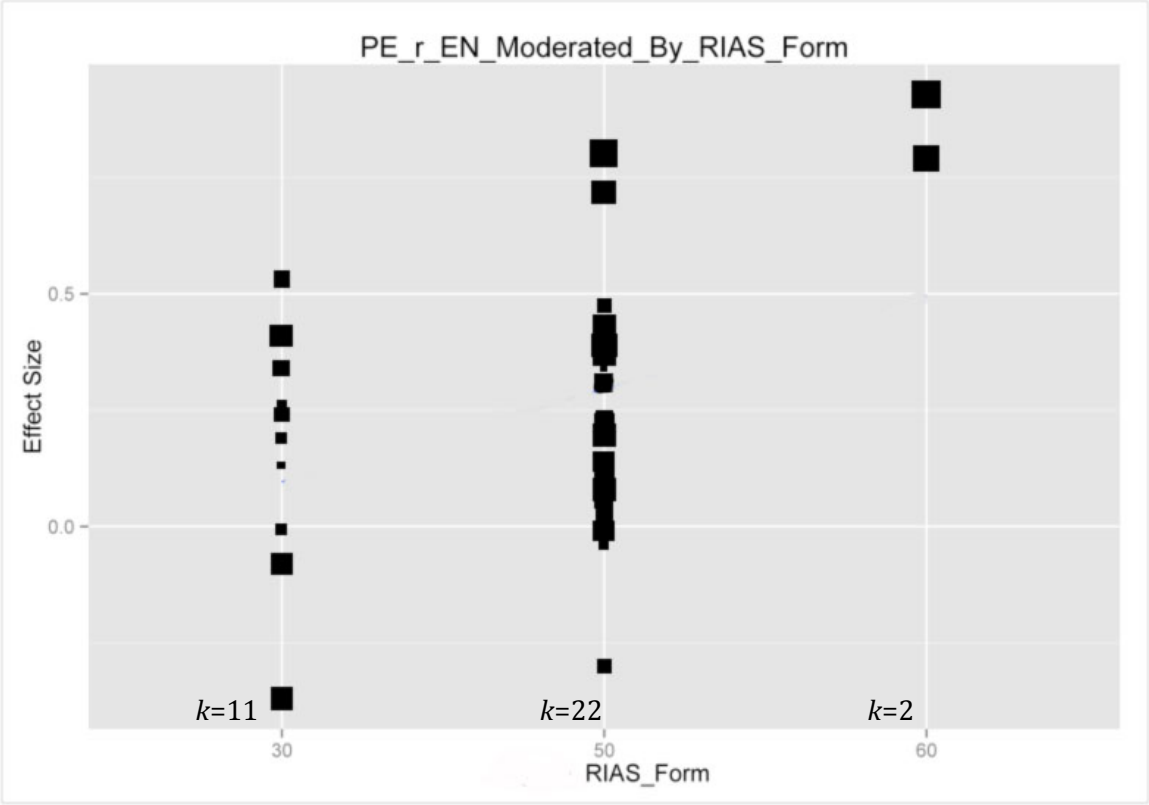


Figure 4.14: Form Moderating Intercorrelations Among RIAS subscales (30-Item as Reference)

Form Moderator	*b*	*SE b*	*95% CI*	*p-value*
PErEN				
50-Item	0.081[a]	0.110	[-.134, 0.289]	0.429
60-Item	0.828[b]**	0.229	[0.626, 0.926]	0.0001**
PErI/E				
50-Item	0.126	0.092	[-.054, 0.299]	0.167
No 60-Item	-	-	-	-
PErINT				
50-Item	-.041[a]	0.107	[-.246, 0.167]	0.605
60-Item	0.567[b]**	0.229	[0.190, 0.797]	0.005**
ENrI/E				
50-Item	-.060	0.079	[-.211, 0.095]	0.421
No 60-Item	-	-	-	-
ENrINT				
50-Item	-.118	0.114	[-.330, 0.105]	0.291
60-Item	0.179	0.231	[-.266, 0.562]	0.701
I/ErINT				
50-Item	-.184[b]**	0.063	[-.301, -.062]	0.003**
No 60-Item	-	-	-	-

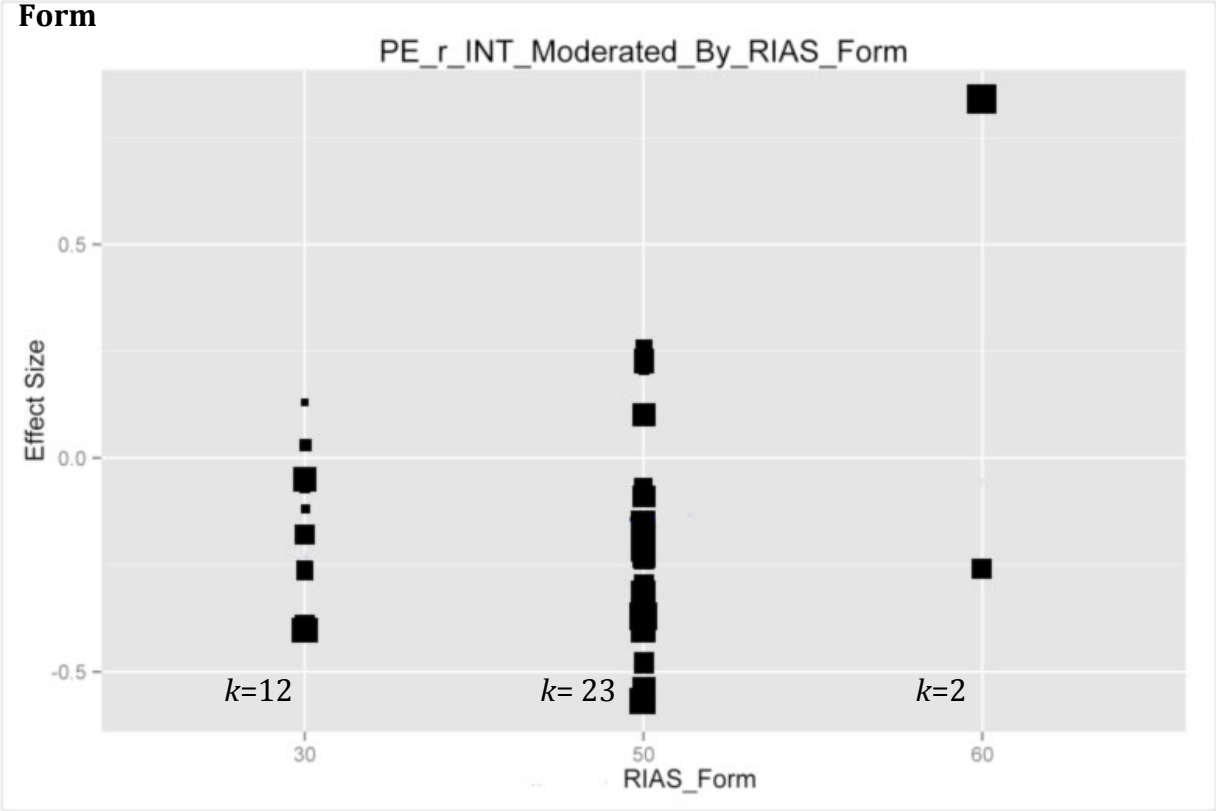
* p <.05 ** p < .01

Figure 4.15: Pre-Encounter and Encounter Intercorrelation Moderated by RIAS Form



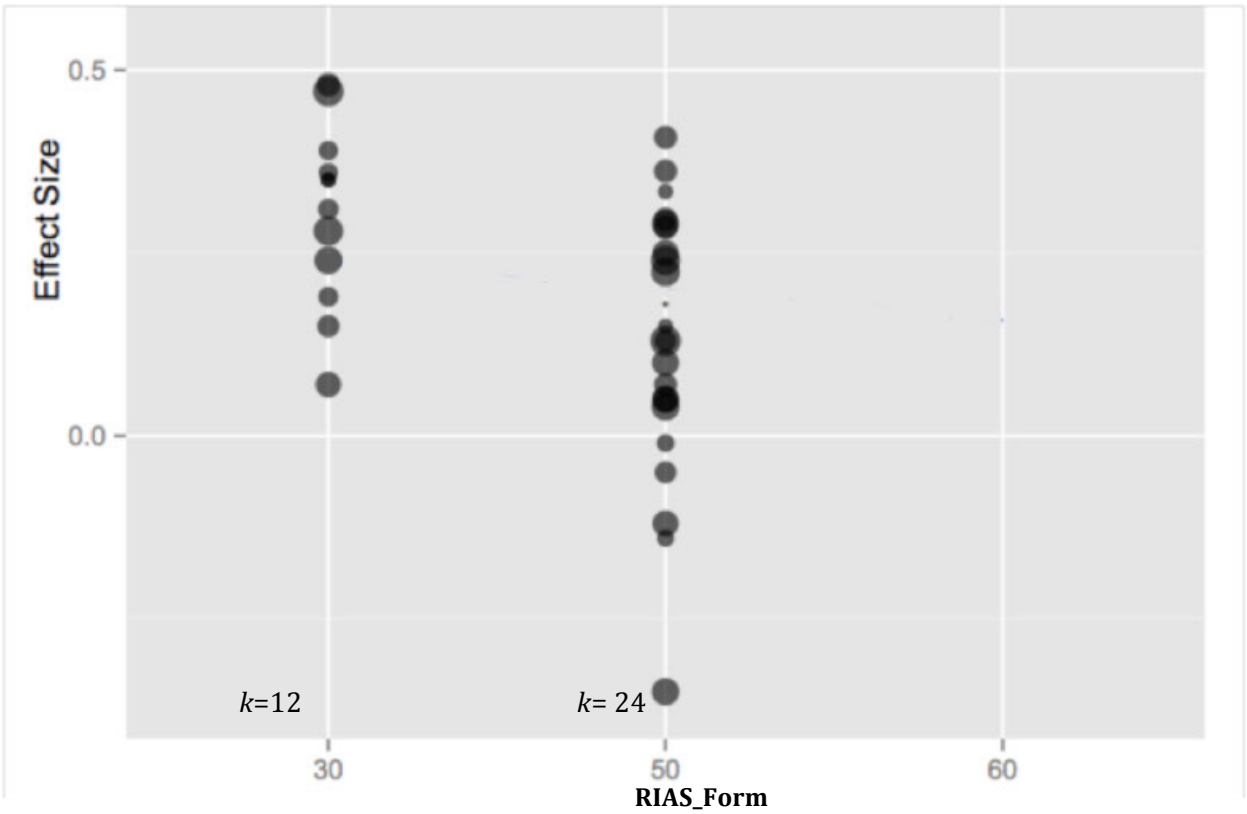
The Pre-Encounter and Internalization intercorrelation was significantly moderated by the 60-item form ($b = 0.567$, 95%CI [0.190, 0.797], $p<.01$), using the 30-item form as the reference (See Figure 4.14: Form Moderating Intercorrelations Between RIAS subscales). After calculating the magnitude of the Pre-Encounter and Internalization intercorrelation from the regression equation, the 60-item form displayed an intercorrelation of $r = 0.39$, while there were no significant differences between the Pre-Encounter and Internalization intercorrelations between the 30-item and 50-item forms (r = -.18 and -.21, respectively) (See Figure 4.16: Pre-Encounter and Internalization Intercorrelation Moderated by RIAS Form).

Figure 4.16: Pre-Encounter and Internalization Intercorrelation Moderated by RIAS Form



Furthermore, the Immersion/Emersion and Internalization intercorrelation was significantly moderated by the 50-item form (b = -.184, 95%CI [-.301, -.062], p<.01), using the 30-item form as the reference (See Figure 4.14: Form Moderating Intercorrelations Between RIAS subscales). After calculating the magnitude of the intercorrelation between the Immersion/Emersion and Internalization from the regression equation, the 30-item form yielded an r = 0.30, and the 50-item form displayed an r = 0.12 between the Immersion/Emersion and Internalization subscales (See Figure 4.17: Immersion/Emersion and Internalization Intercorrelation Moderated by RIAS Form).

Figure 4.17: Immersion/Emersion and Internalization Intercorrelation Moderated By RIAS Form



Research Question #6: What is the aggregate relationship between RIAS subscales and psychological distress in light of equivocal evidence among African Americans?

In light of the equivocal evidence produced by the RIAS subscales and criterion variables, the aggregate relationship between RIAS subscales and two psychological criterion variables (i.e., psychological distress and psychological well-being) were examined.

The RIAS subscale and psychological distress criterion yielded all significant fixed-effects effect sizes (k = 24 to 28 per *ES*) ranging from r = -.1064 to r = .2484. The fixed omnibus effect size for the Pre-Encounter subscale was r = .2484 with a 95% CI [.2184, .278], the Encounter subscale fixed omnibus effect size was r = .172 with a 95% CI [.139, .2047], the Immersion/Emersion subscale fixed omnibus effect size was r = .1594 with a 95% CI [.126,

.1924], and the Internalization subscale fixed omnibus effect size was *r* = -.1064 with a 95% CI [-.1375, -.0451] (See Figure 4.18: Fixed and Random Effects RIAS-Psychological Distress Effect Sizes). The Internalization subscale was the only negatively correlated subscale with psychological distress. Moreover, the test of heterogeneity (i.e., Q-statistic) was significant for all of the RIAS-B subscales' fixed-effects sizes, indicating the possibility of moderators and systematic variance (See Figure 4.18).

Figure 4.18: Fixed and Random Effects Omnibus RIAS-Psychology Distress Effect Sizes

Fixed Effects Omnibus ES (r)	*k*	*Psych. Distress*	*SE*	*95% CI*	*Q*	Q_p	I^2
PE	27	0.248**	0.0162	[0.2184, 0.278]	128.06	0**	79.70%
EN	24	0.172**	0.0173	[0.139, 0.2047]	120.02	0**	80.86%
I/E	24	0.159**	0.0174	[0.126, 0.1924]	91.03	0**	74.73%
INT	28	-0.106**	0.0161	[-0.1375, -0.0451]	110.17	0**	75.49%
Random Effects Omnibus ES (r)	*k*	*Psych. Distress*	*SE*	*95% CI*	*Q*		
PE	27	0.251**	0.0369	[0.1826, 0.3178]	128.06	0	
EN	24	0.155**	0.0408	[0.0759, 0.2316]	120.02	0	
I/E	24	0.185**	0.036	[0.1156, 0.2517]	91.03	0	
INT	28	-0.089**	0.0334	[-0.153, -0.0235]	110.16	0	

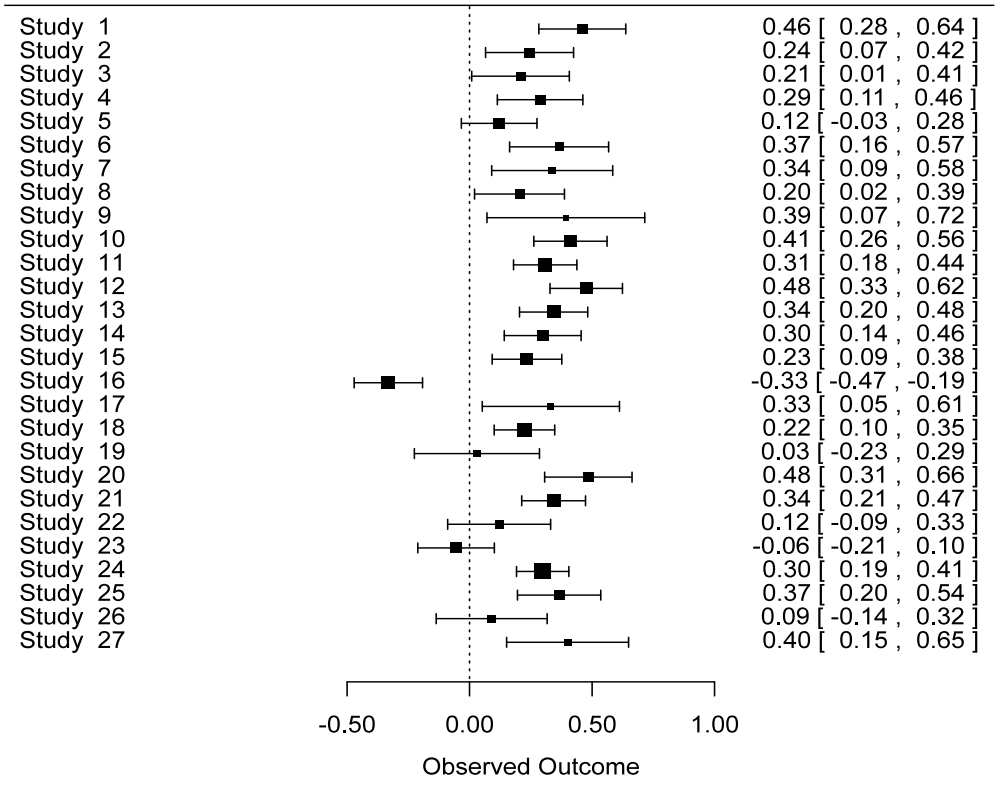
*$p < .05$ **$p < .01$

Similar to the fixed effects models, the random effects model accounted for additional variation in sampling error (i.e., participant differences), however, the random effects model also accounted for random variation in effect sizes (i.e., differences in studies), assigning less weight to larger studies. Overall, the random effects RIAS relationship to the psychological distress criterion omnibus effect sizes ranged from *r* = .2514 to *r* = -.0886. The random effects omnibus analysis for the Pre-Encounter subscale was *r* = .2514 with a 95% CI [.1826, .3178], the Encounter subscale random effects omnibus effect size was *r* = .1547 with a 95% CI [.0759, .2316], the Immersion/Emersion subscale random effects omnibus effect size was *r* = .1845 with

a 95% CI [.1156, .2517], and the Internalization subscale random effects omnibus effect size was r = -.0886 with a 95% CI [-.153, -.0235] (See Figure 4.18). Again, the only RIAS subscale that was negatively correlated with psychological distress was the Internalization subscale.

To test the file drawer effect due to possible publication bias, funnel plots of each of the random omnibus effect sizes mentioned above were examined (See Figures 4.19, 4.20, 4.21, 4.22). Results indicate that the effect sizes were not influenced by publication bias. In addition to the data on Figure 4.18, random effects omnibus effect sizes are graphically displayed in forest plots (See Figures 4.19, 4.20, 4.21, 4.22).

Figure 4.19: Pre-Encounter-Psychological Distress Effect Size Forest and Funnel Plot (Random Effects)



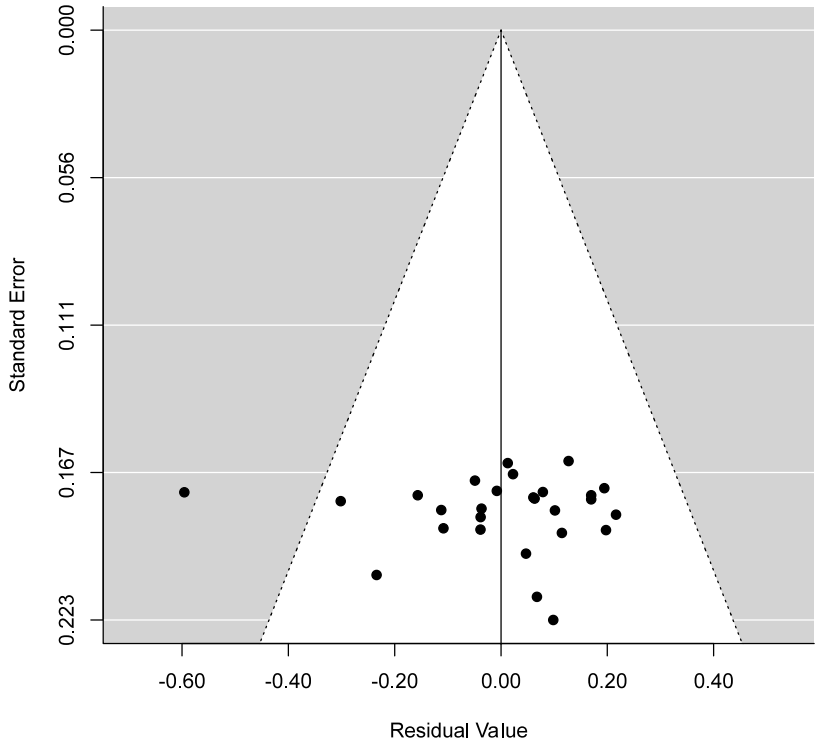
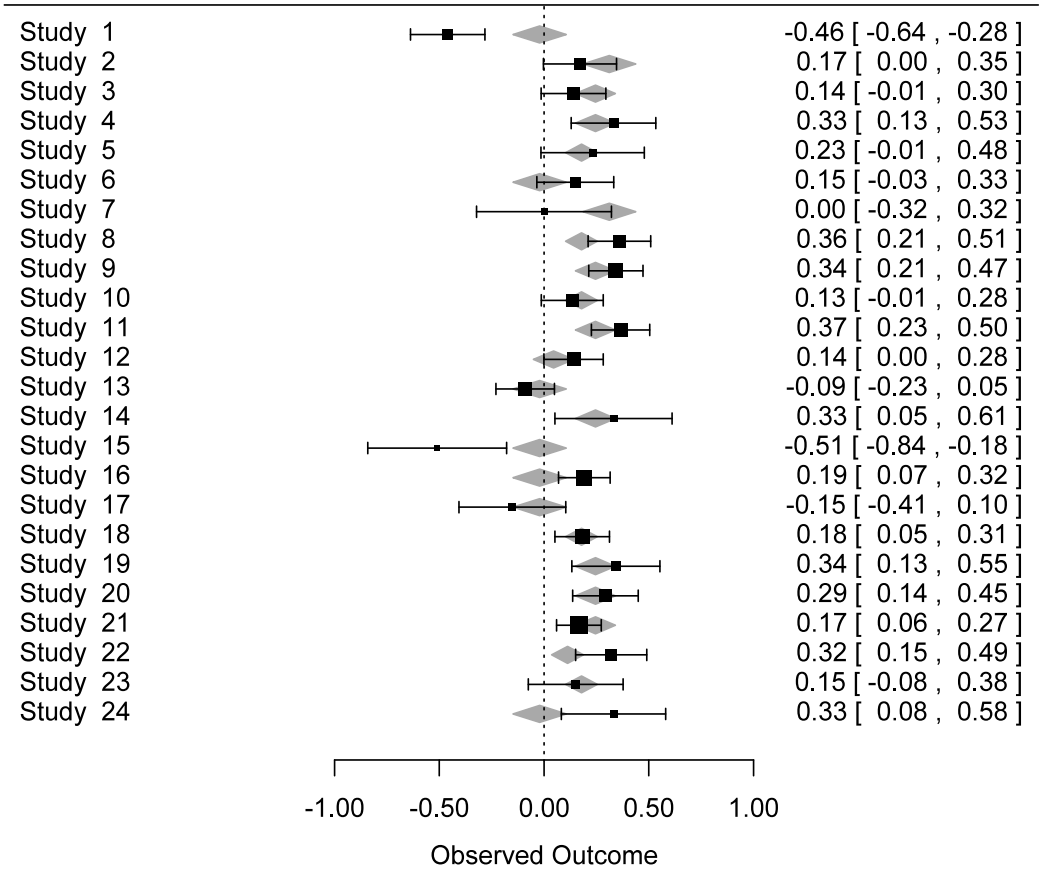


Figure 4.20: Encounter – Psychological Distress Effect Size Forest and Funnel Plot (Random Effects)



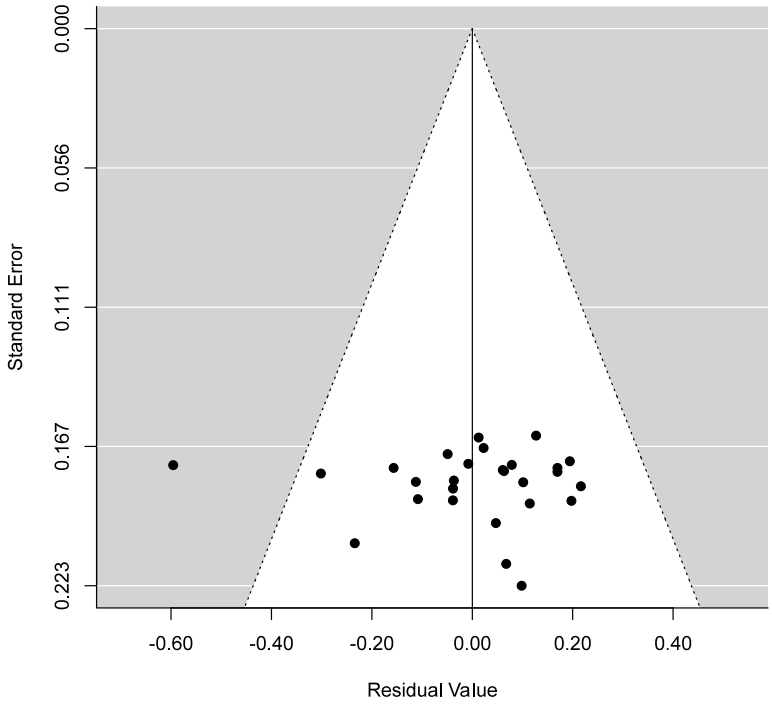
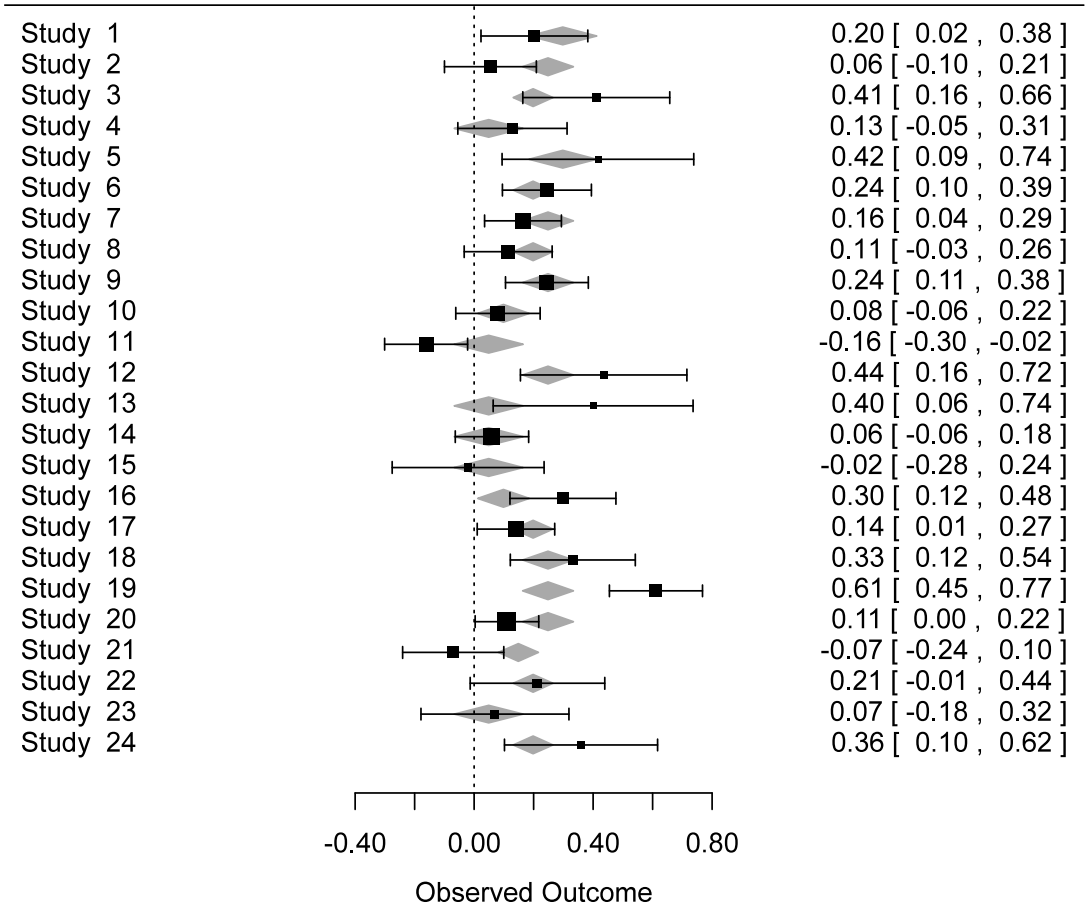


Figure 4.21: Immersion/Emersion – Psychological Distress Effect Size Forest and Funnel Plot (Random Effects)



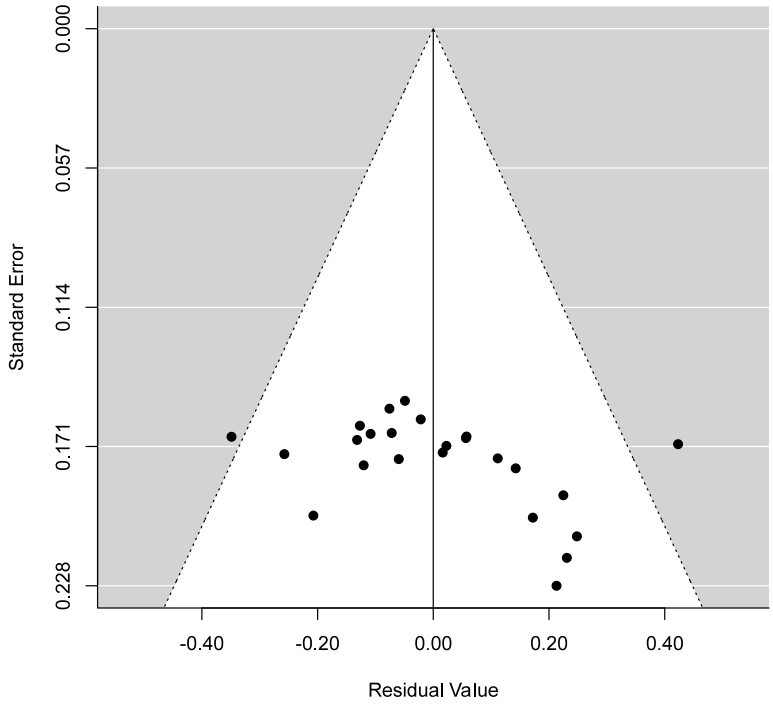
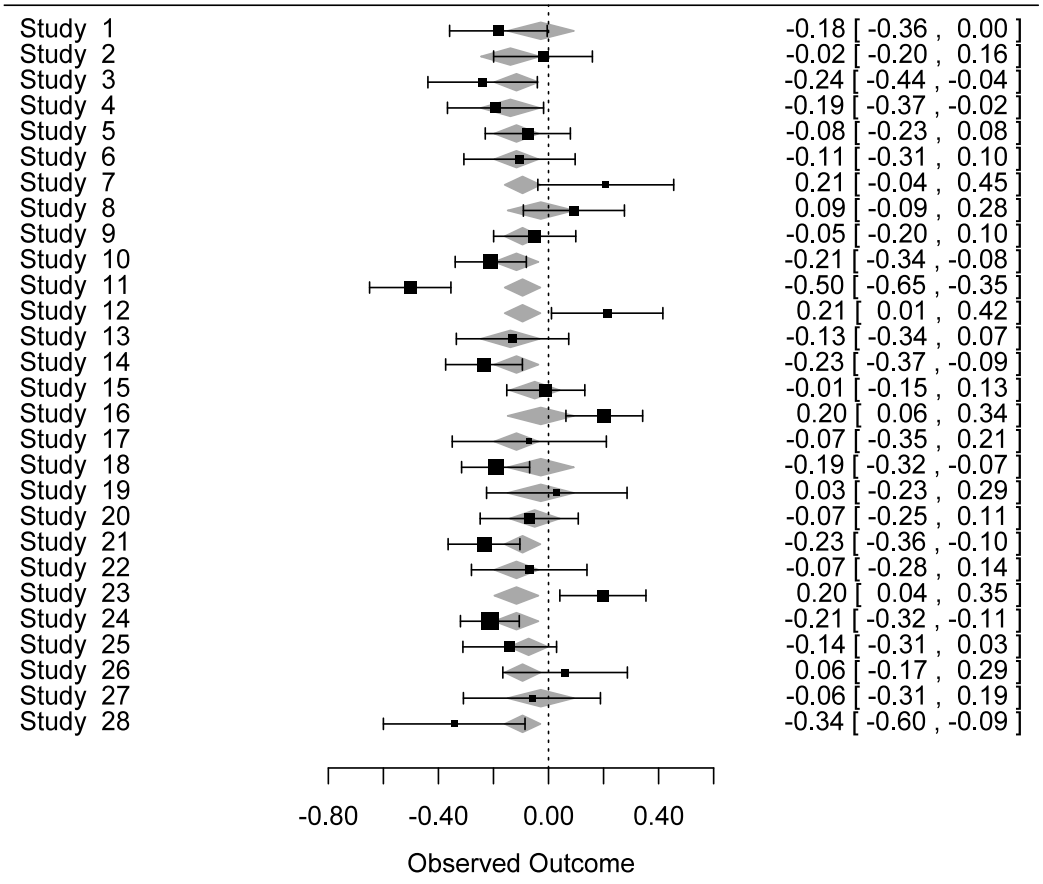
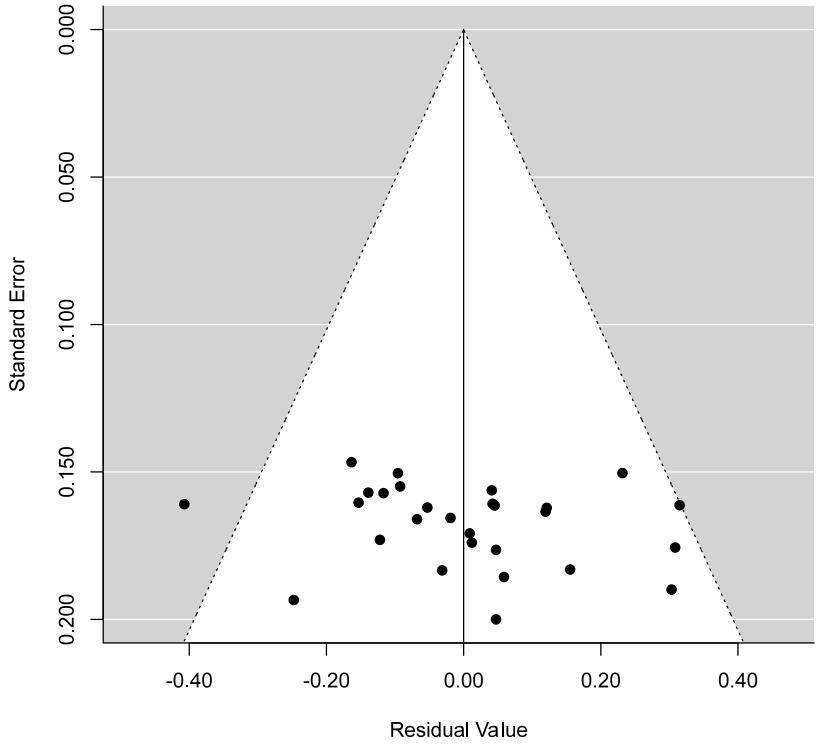


Figure 4.22: Internalization – Psychological Distress Effect Size Forest and Funnel Plot (Random Effects)





Research Question #7: What is the aggregate relationship between RIAS subscales and psychological well-being in light of equivocal evidence among African Americans?

The aggregate relationship between RIAS subscales and psychological well-being criterion yielded all significant fixed omnibus effect sizes ranging from r = -.177 to r = .2001 with k ranging from 29 to 36 studies per effect size. The Pre-Encounter subscale and psychological well-being relationship fixed omnibus effect size yielded an r = -.177 with a 95% CI [-.2045, -.1493], the Encounter-psychological well-being relationship fixed omnibus effect size yielded an r = -.0702 with a 95% CI [-.1011, -.0392], the Immersion/Emersion subscale and psychological well-being relationship fixed omnibus effect size yielded an r = -.0378 with a 95% CI [-.0683, -.0073], and the Internalization subscale and psychological well-being relationship fixed omnibus effect size yielded an r = .2001 with a 95% CI [.1726, .2273]. The Internalization subscale was the only positively correlated RIAS subscale with psychological well-being. All of the Q-statistics were significant, indicating significant heterogeneity beyond that of random error in the omnibus effect sizes (See Figure 4.23: Fixed & Random Effects Omnibus RIAS-P.Well-Being).

Figure 4.23: Fixed & Random Effects Omnibus RIAS-Psych. Well-Being Effect Sizes

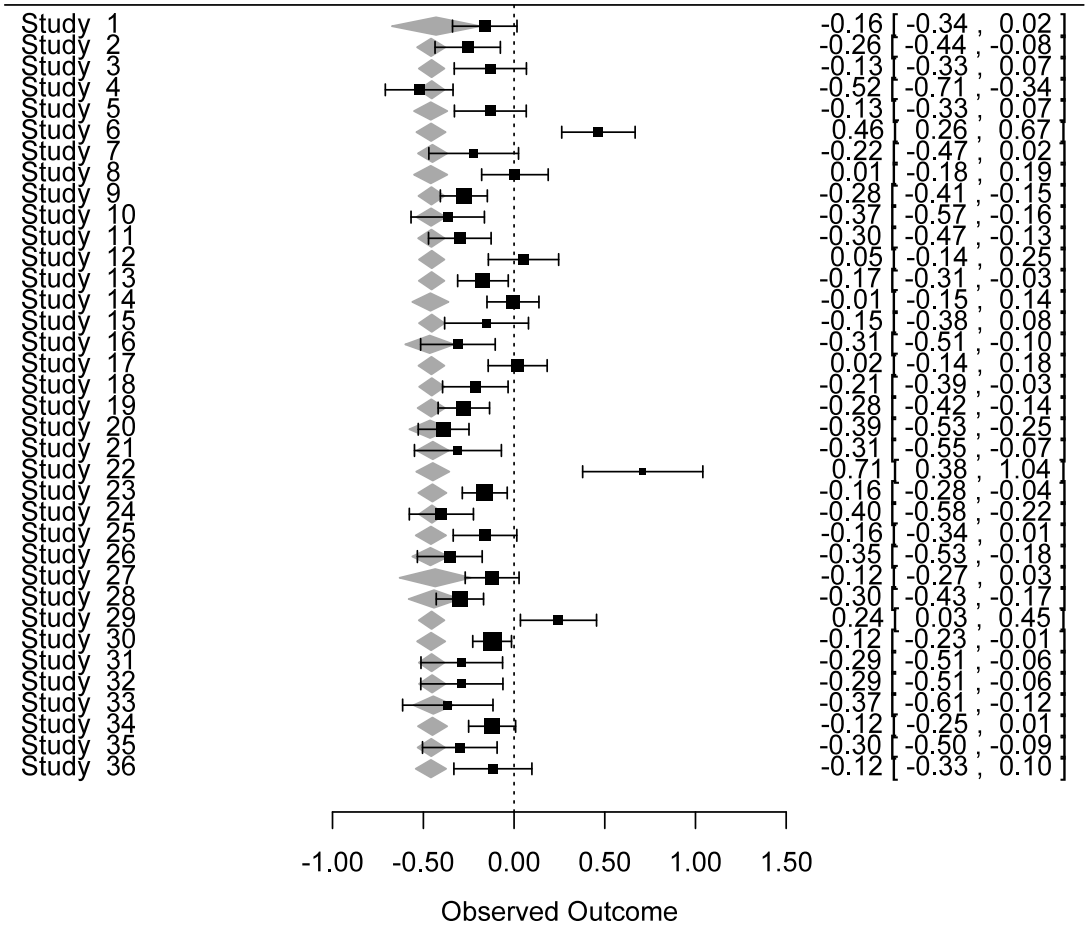
Fixed Effects Omnibus ES (r)	*k*	*P. Well-Being*	*SE*	*95% CI*	*Q*	Q_p	I^2
PE	36	-0.177**	0.0145	[-0.2045, -0.1493]	158.99	0**	77.99%
EN	30	-0.070**	0.0159	[-0.1011, -0.0392]	116.33	0**	75.07%
I/E	29	-0.037**	0.0156	[-0.0683, -0.0073]	59.63	0**	53.05%
INT	35	0.200**	0.0145	[0.1726, 0.2273]	146.38	0**	76.77%
Random Effects Omnibus ES (r)	*k*	*P. Well-Being*	*SE*	*95% CI*	*Q*		
PE	36	-0.1676**	0.0317	[-0.2272, -0.1067]	158.99	0	
EN	30	-0.0608	0.0327	[-0.1243, 0.0032]	116.33	0	
I/E	29	-0.0404	0.0234	[-0.086, 0.0054]	59.63	0	
INT	35	0.1936**	0.0308	[0.1348, 0.2509]	146.38	0	

*p<.05 ** p < .01

The random effects model between RIAS subscales and psychological well-being resulted in only two statistically significant omnibus effects sizes. Specifically, the Pre-Encounter subscale's correlation with psychological well-being, which yielded an r = -.1676 with a 95%CI [-.2272, -.1067], and the Internalization subscale's correlation with psychological well-being, which yielded an r = .1936 with a 95% CI [.1348, .2509]. The Encounter and Immersion/Emersion subscales both displayed an omnibus effect sizes that became non-significant under the random effects condition (See Figure 4.23: Fixed and Random Effects Omnibus RIAS-Psychological Well-Being Effect Sizes).

To test the file drawer effect due to possible publication bias, funnel plots of each of the random omnibus effect sizes mentioned above were examined (See Figures 4.24, 4.25, 4.26, 4.27). Results indicate that the effect sizes were not influenced by publication bias. In addition to the data on Table 6, random effects omnibus effect sizes are graphically displayed in forest plots (See Figures 4.24, 4.25, 4.26, 4.27).

Figure 4.24: Pre-Encounter – Psychological Well-Being Effect Size Forest and Funnel Plot (Random Effects)



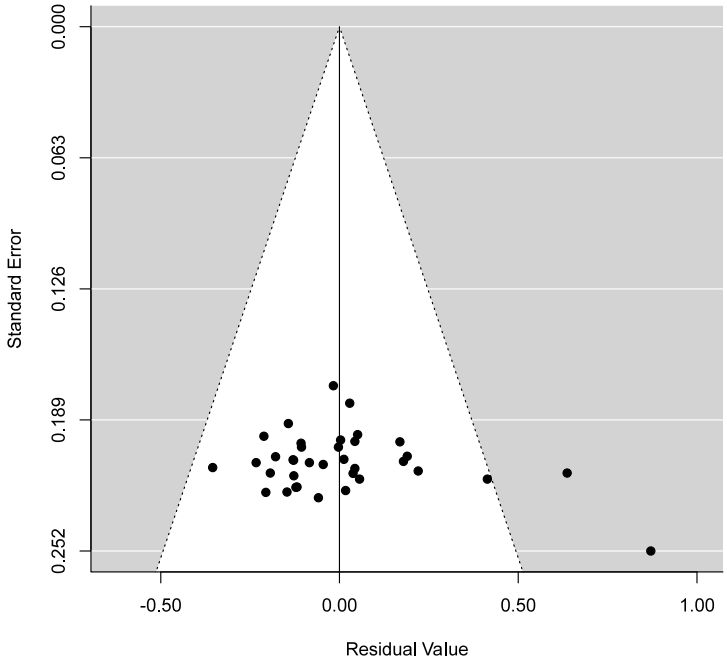
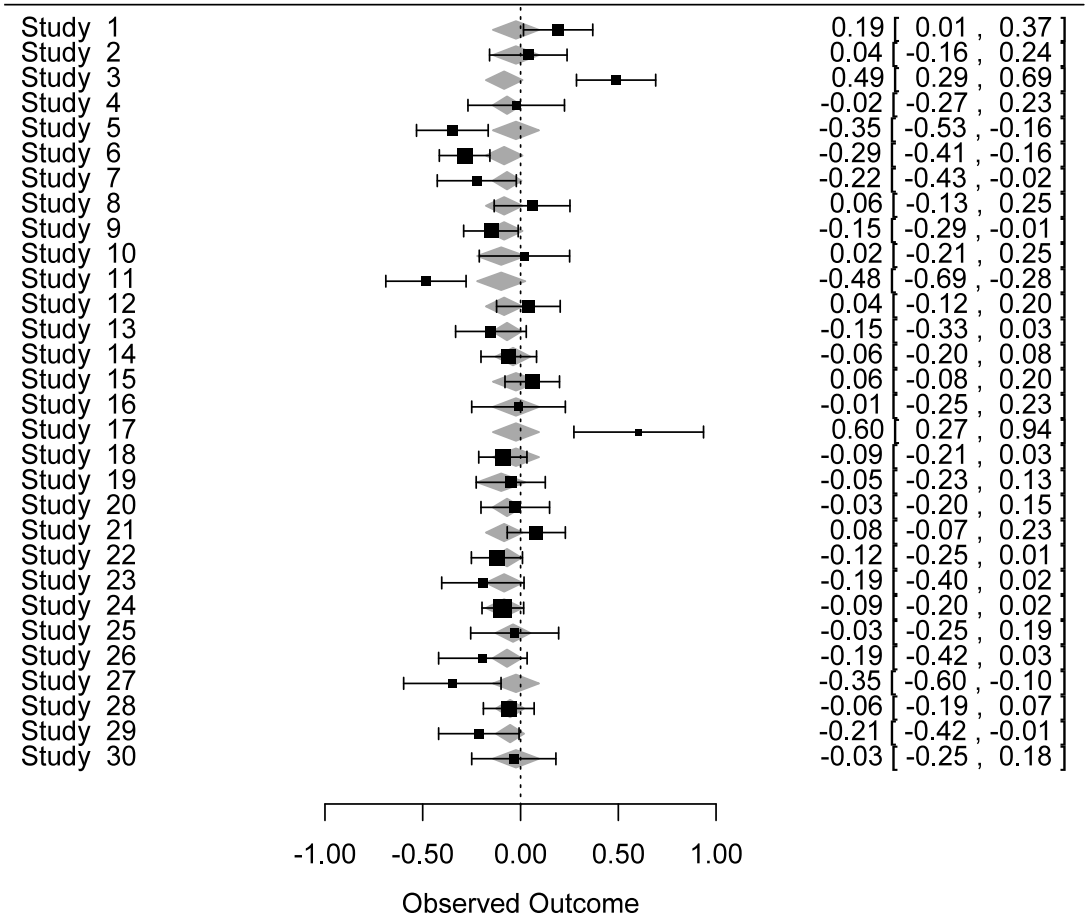


Figure 4.25: Encounter – Psychological Well-Being Effect Size Forest and Funnel Plot (Random Effects)



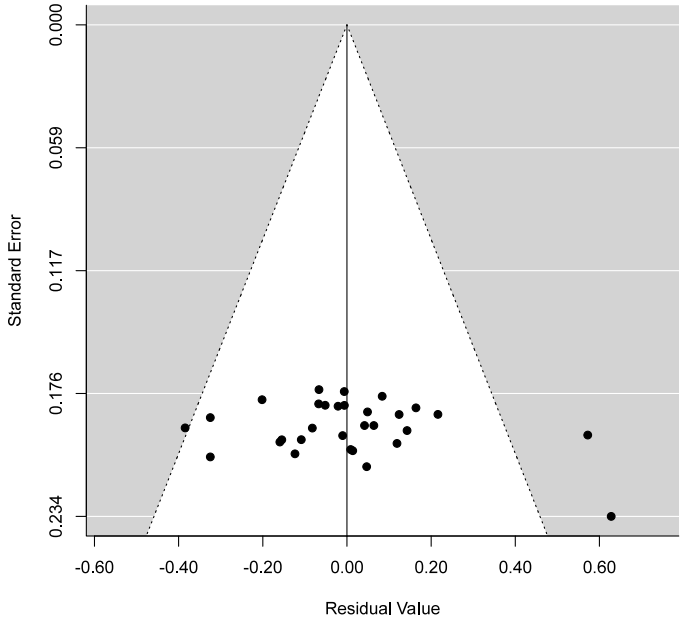
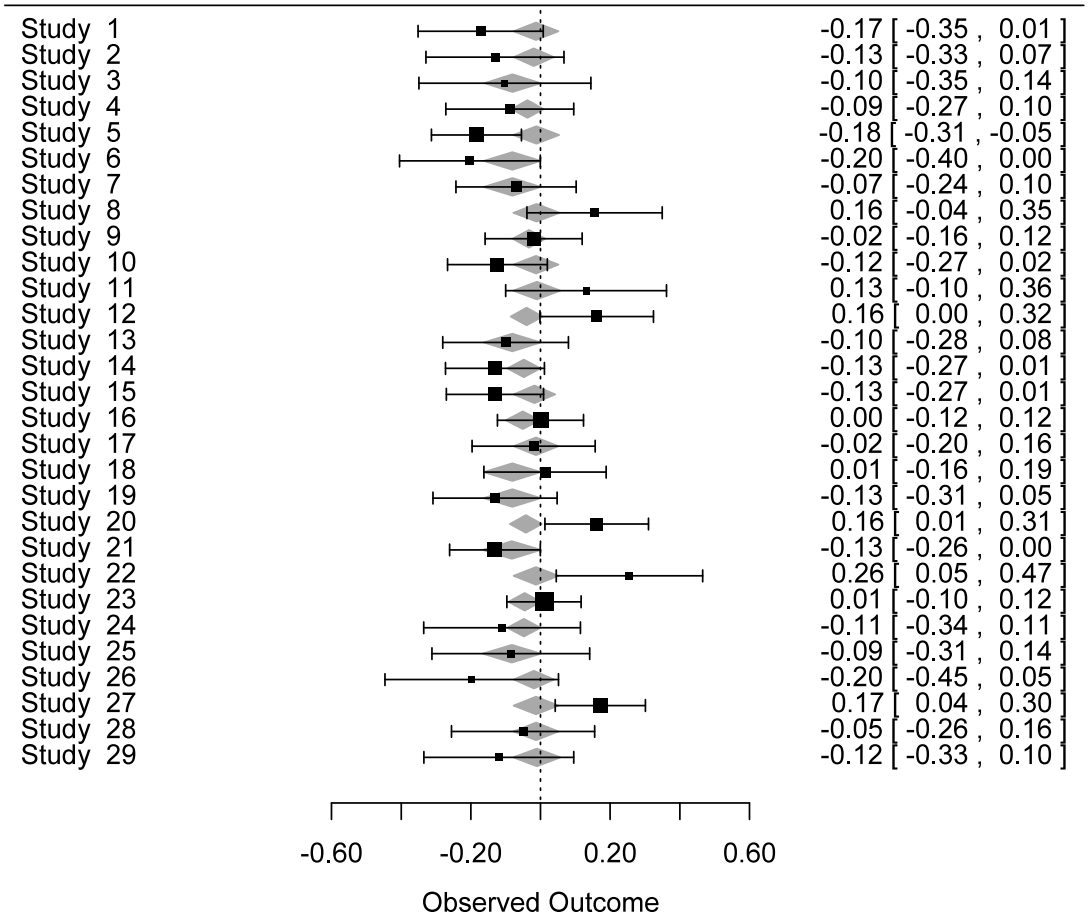
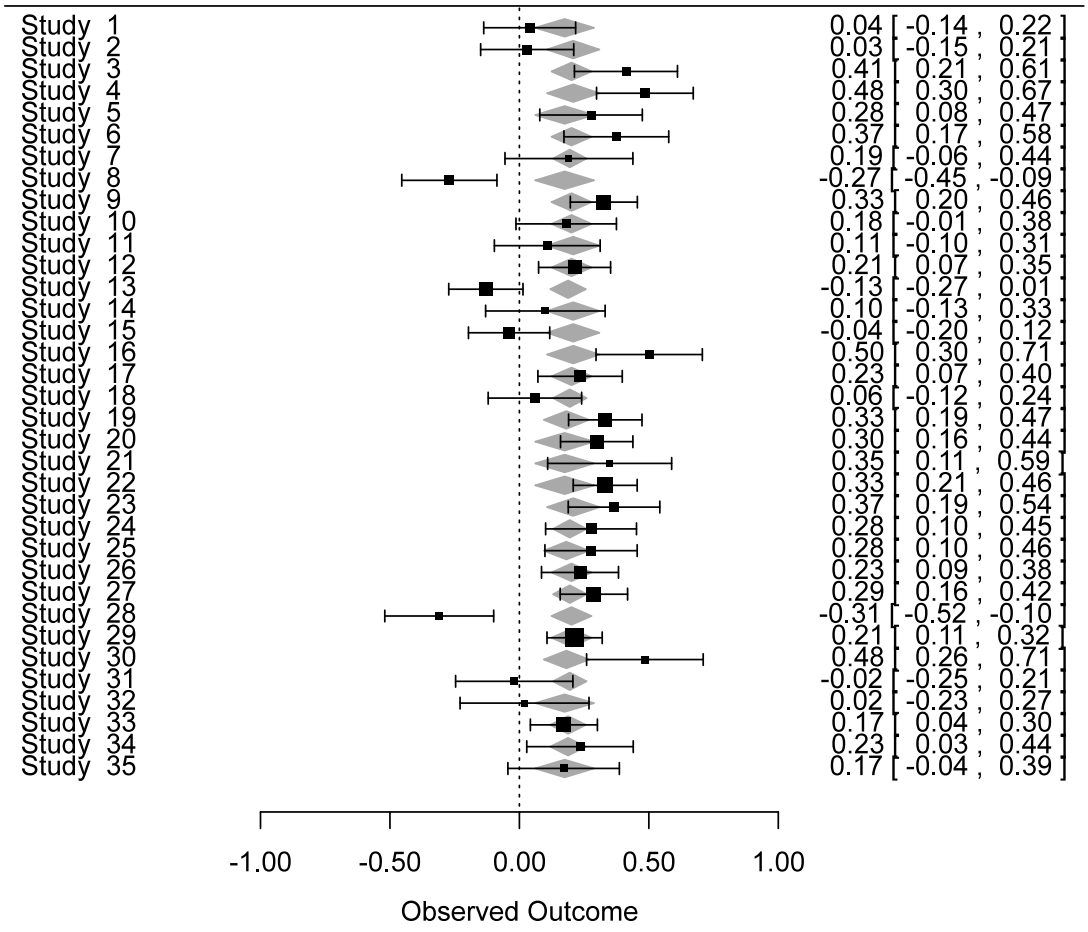
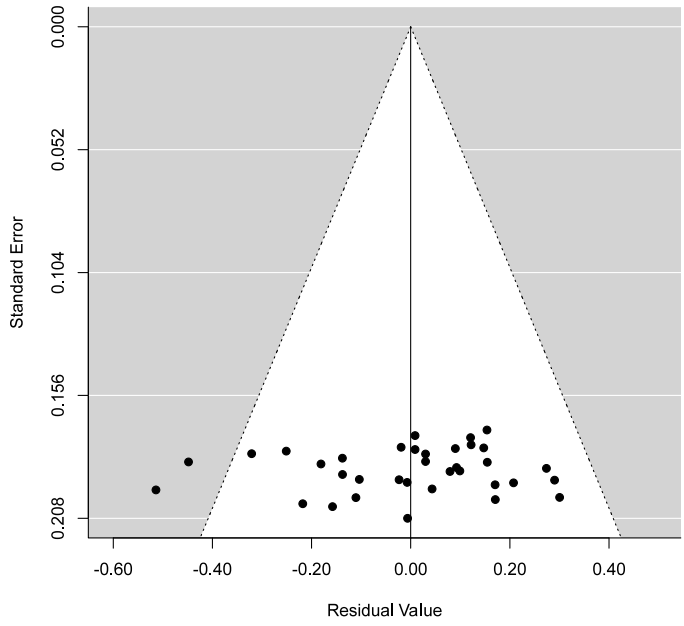


Figure 4.26: Immersion/Emersion – Psychological Well-Being Effect Size Forest and Funnel Plot (Random Effects)



Graph 4.27: Internalization – Psychological Well-Being Effect Size Forest and Funnel Plot (Random Effects)





Research Question #8: How does RIAS form moderate the aggregate relationships between the RIAS subscales and psychological distress as well as RIAS subscales and psychological well-being?

Due to the psychometric inconsistency between RIAS forms, the moderating effect of RIAS form on the random effects omnibus sizes with both the criterions of psychological distress and psychological well-being were tested. The results displayed that only the Encounter subscale and psychological distress criterion effect size was influenced by RIAS form. The three RIAS forms demonstrated significantly different Encounter and psychological distress criterion effect sizes, such that the 30-item form ($k = 5$) yielded an Encounter and psychological distress effect size of $r = 0.039$, the 50-item form ($k = 18$) yielded an Encounter and psychological distress effect size of $r = 0.219$, and the 60-item form ($k = 1$) yielded an Encounter and psychological distress effect size of $r = -.422$ (See Figure 4.28: Random Omnibus Effect Omnibus Effect Sizes Moderated by RIAS Form (30-Item Form as Reference).

Figure 4.28: Random Effects Omnibus Effect Sizes Moderated by RIAS Form (30-Item Form as Reference)

	b	*SE*	*95%CI*	*p-value*
PE r Distress				
50-Item	0.039	0.0911	[-.14, 0.21]	0.5855
60-Item	0.116	0.1581	[-.19, 0.40]	0.4301
PE r Well-Being				
50-Item	-0.001	0.079	[-.15, 0.15]	0.7561
60-Item	0.028	0.1252	[-.21, 0.27]	0.6763
EN r Distress				
50-Item	0.180[b]*	0.0837	[0.02, 0.33]	0.0294*
60-Item	-0.461[c]**	0.169	[-.68, -.17]	0.003**
EN r Well-Being				
50-Item	-0.026	0.0805	[-.18, 0.13]	0.6326
60-Item	-0.032	0.1326	[-.28, 0.22]	0.6707
I/E r Distress				
50-Item	0.017	0.0859	[-.15, 0.18]	0.6865
No 60-Item				
I/E r Well-Being				
50-Item	0.019	0.0487	[-.08, 0.11]	0.6011
No 60-Item				
INT r Distress				
50-Item	-0.023	0.0812	[-.18, 0.14]	0.6533
60-Item	-0.146	0.145	[-.41, 0.14]	0.3006
INT r Well-Being				
50-Item	0.078	0.0684	[-.06, 0.21]	0.2457
60-Item	0.15	0.1081	[-.06, 0.35]	0.4301

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

As a result, the subsequent meta-analytic regressions for the Encounter and psychological distress criterion were also conducted controlling for RIAS form and dropping the one study that used the 60-item form to eliminate that outlier and increase statistical power. Although decreasing the *k*-size by one study in the analysis decreases statistically power, it does not decrease as much statistical power as adding another predictor variable in the meta-analytic

regression (See Figure 4.44: MA Regressions on Encounter and Psychological Distress Controlling for Form Compared to Not Controlling for Form).

Research Question #9: What are the average item means and standard deviations for each of the RIAS subscales? How do the raw average item mean subscale scores compare across subscales broken down by percentile?

RIAS subscale individual item means were aggregated across studies, ranging from $k = 61$ to 66 studies per subscale. The results yielded an omnibus fixed effects mean of 1.88 or an omnibus random effects mean of 1.81 with a standard deviation of 0.366 for the average item on the Pre-Encounter subscale, an omnibus fixed effects mean of 2.90 or an omnibus random effects mean of 2.89 with a standard deviation of 0.931 for the average item on the Encounter subscale, an omnibus fixed effects mean of 2.47 or an omnibus random effects mean of 2.35 with a standard deviation of 0.448 for the average item on the Immersion/Emersion subscale, and an omnibus fixed effects mean of 3.90 or omnibus random effects mean of 3.81 with a standard deviation of 0.407 for the average item on the Internalization subscale. The average Pre-Encounter item was answered with a "Disagree," the average Encounter item was answered between "Neither Agree or Disagree," the average Immersion/Emersion item was answered with "Disagree," and the average Internalization item was answered with an "Agree." (See Figure 4.29: RIAS Subscale Aggregate Individual Item Means)

Figure 4.29: RIAS Subscale Aggregate Individual Item Mean

Fixed Effects	*PE*	*EN*	*I/E*	*INT*
k	64	61	61	66
sd	0.366	0.931	0.448	0.407
Mean	1.88	2.90	2.47	3.90
SE	0.011	0.011	0.011	0.011
95% CI	[1.86, 1.90]	[2.88, 2.93]	[2.45, 2.49]	[3.88, 3.92]
Q	4205.726	17674.77	9028.179	10181.5
I^2	98.26%	99.59%	99.19%	99.28%
p-value	0**	0**	0**	0**
Random Effects	*PE*	*EN*	*I/E*	*INT*
k	64	61	61	66
Mean	1.81	2.89	2.35	3.81
SE	0.0849	0.174	0.124	0.132
95% CI	[1.64, 1.97]	[2.55, 3.23]	[2.11, 2.60]	[3.55, 4.07]

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

For future reference and studies, normalization data on the RIAS subscales individual item mean is provided on Figure 4.30 with regression coefficients to adjust the norms based on percent female in the sample and RIAS Form utilized. Given the non-symmetrical nature of the RIAS subscales distribution as well as the non-centered, skewed means of the RIAS subscale data, future studies are able to compare observed data to a larger population. This will allow researchers to assign standardized scores to their sample and more accurately interpret RIAS clusters and profiles. Moreover, there is much difficulty comparing across statuses, and the provided normalization data will offer an indication of higher or lower ratings based on a norming population, thereby allowing for more accurate comparison across statuses. QQ normal plots are provided for each of the RIAS subscales (See Figures 4.31-4.34) as well as regression coefficients for percent female in the future sample.

Figure 4.30: RIAS Subscales Average Item Mean per Percentile (Total subscale scales score/# of items on subscale) Reference Normalization Data – Male & Female

RIAS Mean	5%	15%	20%	25%	30%	40%	45%	50%	55%	60%	70%	75%	80%	85%	95%
PE	1.28	1.50	1.57	1.63	1.69	1.78	1.83	1.81	1.93	1.98	2.07	2.13	2.19	2.26	2.48
EN	1.36	1.92	2.11	2.26	2.40	2.65	2.77	2.89	3.01	3.13	3.38	3.52	3.67	3.86	4.42
I/E	1.61	1.88	1.97	2.05	2.11	2.23	2.29	2.35	2.41	2.47	2.59	2.65	2.73	2.82	3.09
INT	3.14	3.39	3.47	3.53	3.59	3.70	3.86	3.81	3.76	3.92	4.03	4.09	4.15	4.23	4.48

(Combined)

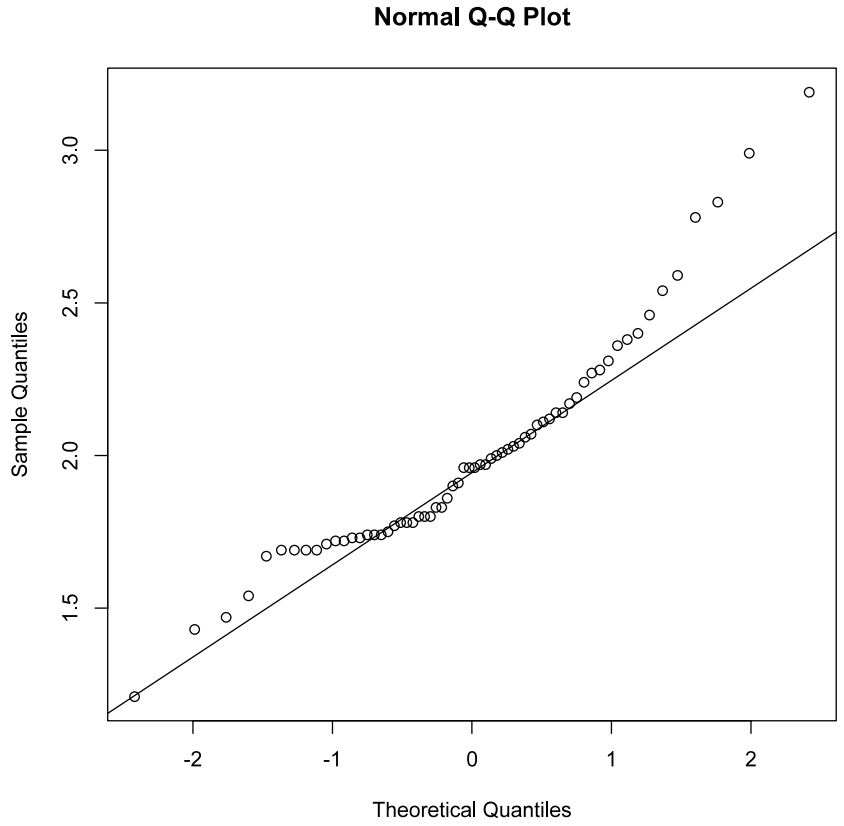
* Due to significant differences on the subscale means by gender and RIAS form, regression coefficients are provided below from Table 9 to correct to appropriate reference data.

Significant Indep. Moderators	*b*	*b SE*	*95% CI*	*p-value*
Percent Female				
PE % Female	-0.247	0.121	[-.484, -0.01]	0.047*
I/E % Female	-0.5176	0.1908	[-.8916, -.144]	0.009**
RIAS Form				
EN 60-Item	-1.12	0.545	[-2.188, -.052]	0.044*
INT 50-Item	0.395	0.095	[0.209, 0.581]	0.001**

Skewness and Kurtosis of RIAS Mean Distribution

Subscale	**Skew**	**Level of Skew**	**Excess Kurtosis**	**Level of Kurtosis**	**Range of Distribution**
Pre-Encounter	0.970	Moderately Skewed (R)	1.363	Platykurtic	[1.96, 4.24]
Encounter	0.063	Approximately Symmetric	-.063	Mesokurtic	[1.21, 3.19]
Immersion/Emersion	0.960	Moderately Skewed (R)	0.682	Platykurtic	[1.83, 3.93]
Internalization	0.273	Approximately Symmetric	-.314	Platykurtic	[3.46, 4.68]

Figure 4.31: QQ Normal Plot and Histogram for Pre-Encounter Mean



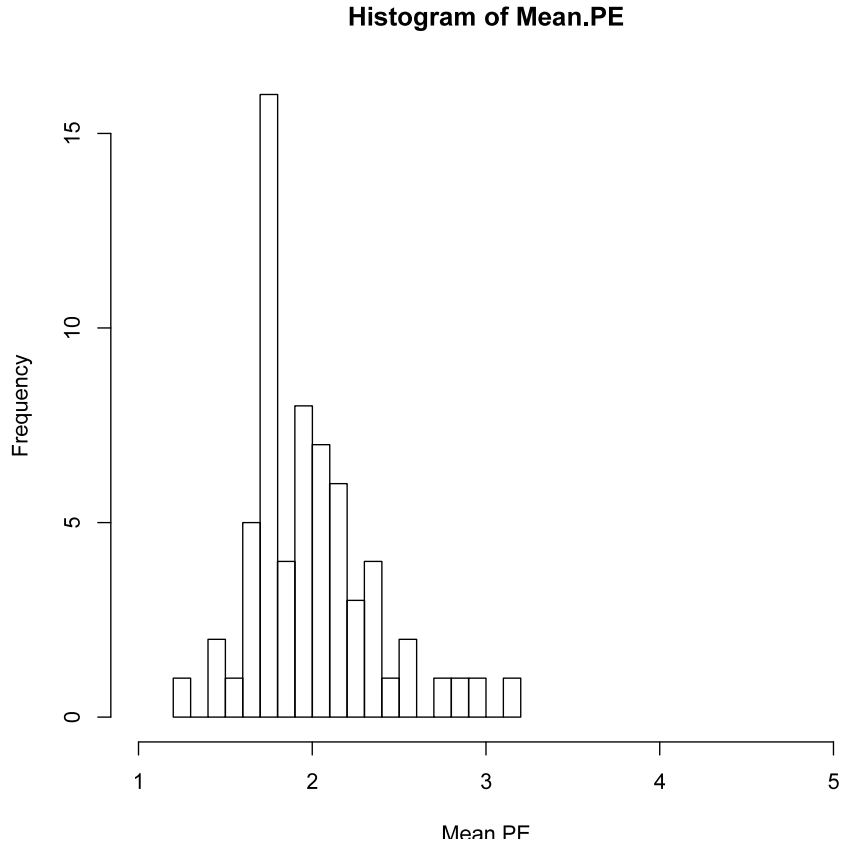


Figure 4.32: QQ Normal Plot and Histogram for Encounter Mean

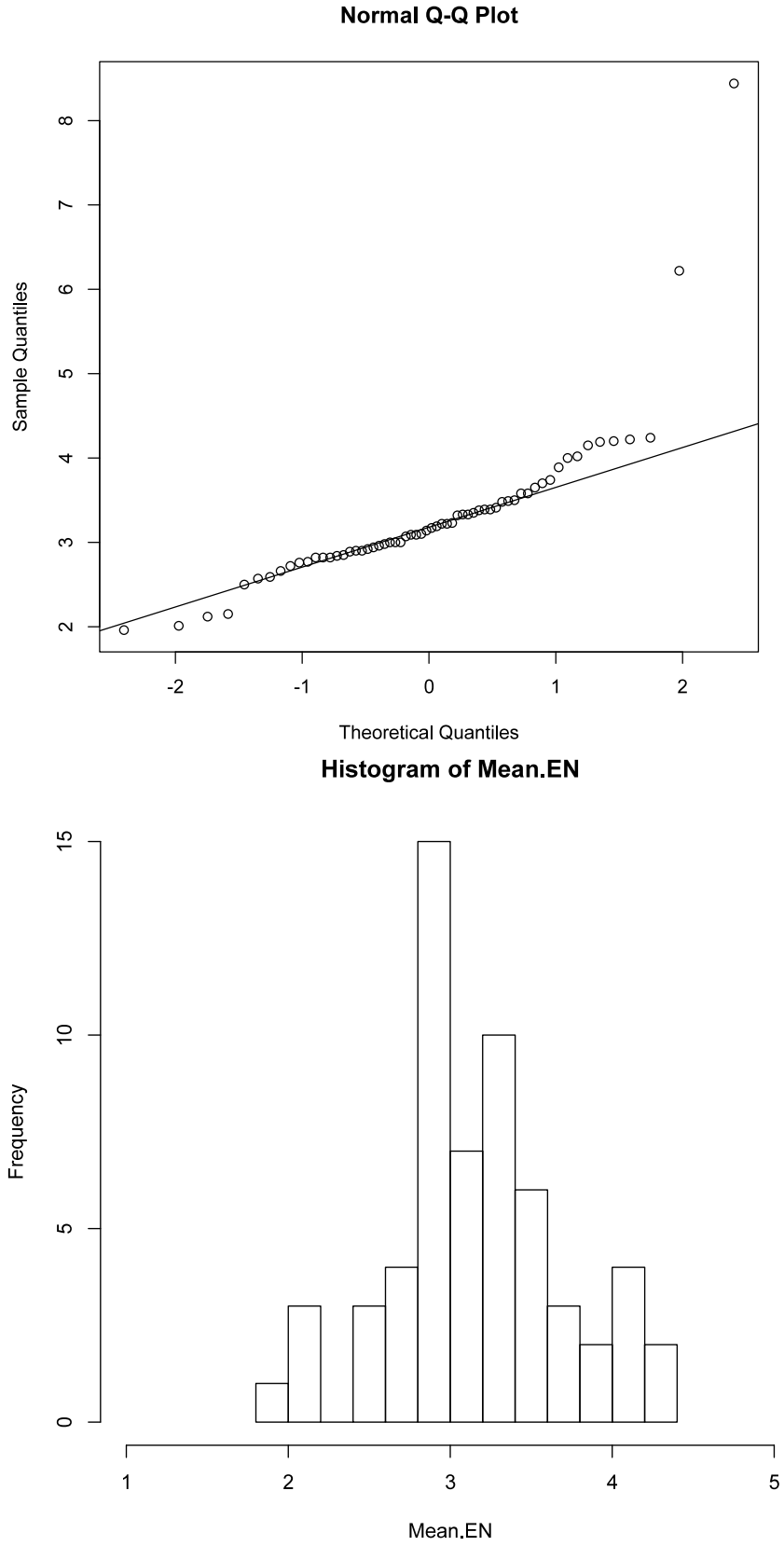


Figure 4.33: QQ Normal Plot and Histogram for Immersion/Emersion Mean

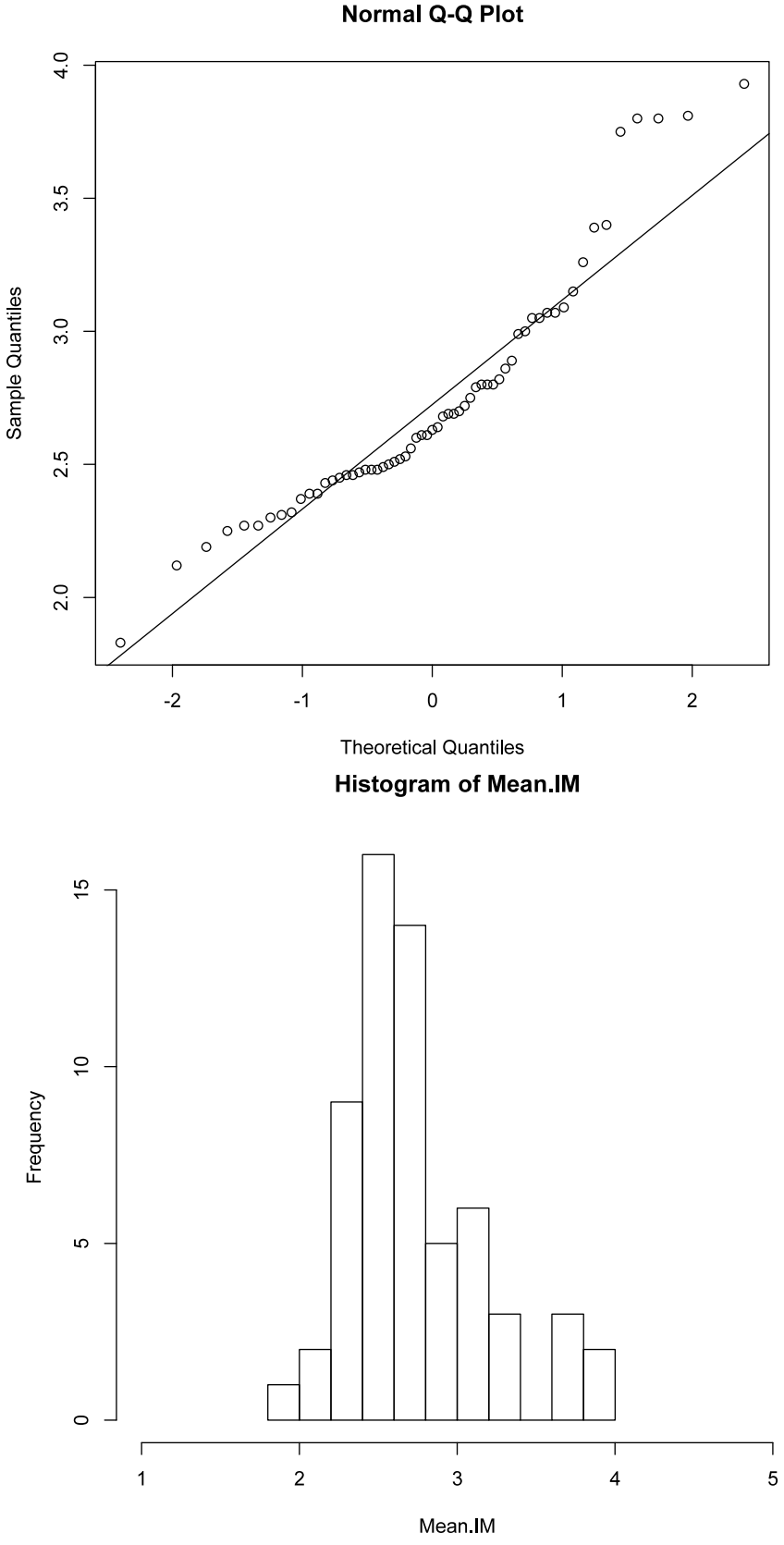
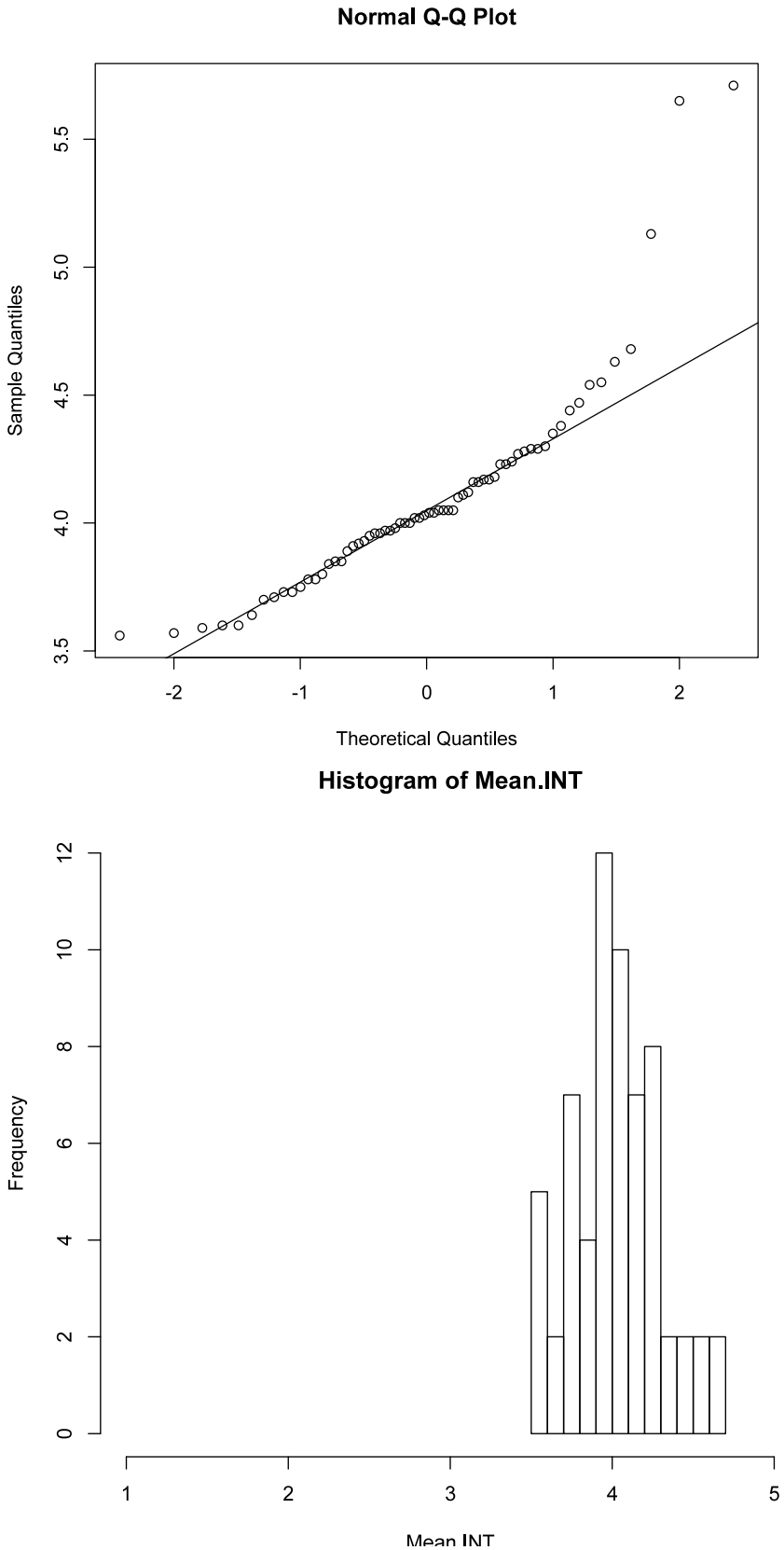


Figure 4.34: QQ Normal Plot and Histogram for Internalization Mean



Research Question #10: What are gender differences in the level of African American RIAS subscale levels (i.e., average item means)?

For all demographic main effects on racial identity subscale levels, please see Figure 4.35 Independent Demographic Predictors & MRC on RIAS Subscale Average Item Means. Gender, as measured by percent female in the sample, was the one of two significant independent predictor variables that affected the average item mean of RIAS subscales (main effects). Percent female had a main effect on both the Pre-Encounter average item mean (B = -.247, SE = .121, p<0.05) as well as the Immersion/Emersion average item mean (B = -.284, SE = .121, p<0.05). The first hypothesis that African American males would have lower Pre-Encounter levels was not supported by these results, such that for every ten percentage increase of African American females in the sample, the average Pre-Encounter item mean score decreased by -.0247 unstandardized units (i.e., on the 1-5 Likert scale). Additionally, the hypothesis that African American males would have higher Encounter item mean scores was not supported by the results of the present study, as there were no statistically significant differences in average Encounter item scores between African American males and females. (See Figure 4.36: Pre-Encounter Mean Regressed on Percent Female in Study Sample & 4.37: Immersion/Emersion Mean Regressed on Percent Female in Study Sample)

Figure 4.35: Independent Demographic Predictors & MRC on RIAS Subscale Item Means

Independent Predictors	*PE Mean*	*k* = 64				*Type II Error*
	b	*b SE*	*95% CI*	*p-value*	R^2	β Level
% Female	-0.247	0.121	[-.484, -0.01]	0.047*	0.062	0.54
Cohort	0.008	0.005	[-.002, 0.018]	0.090	0.050	0.45
Age	-0.003	0.005	[-.013, 0.007]	0.521	0.007	0.10
Form:					0.004	
50-Item	0.005	0.098	[-.187, 0.197]	0.961		
60-Item	-.101	0.228	[-.551, 0.349]	0.661		
Multiple Regressions	*PE Mean*					
	b	*b SE*	*95% CI*	*p-value*	R^2	β Level
Age	-0.0101	0.019	[-.047, 0.027]	0.599		
& Age^2	0.00009	0.0002	[-.0003, 0.001]	0.710	0.010	0.10
% Female	-.8311	0.414	[-1.64, 0.020]	0.049*		
& Age	-.0194	0.012	[-.043, 0.004]	0.118		
& % Female * Age	0.021	0.015	[-.008, 0.050]	0.156	0.105	0.60
% Female & Form:	-.251	0.123	[-.492, -.010]	0.046*		
50-Item	-.001	0.096	[-.187, 0.189]	0.991		
60-Item	-.131	0.223	[-.568, 0.306]	0.559	0.069	
Independent Predictors	*EN Mean*	*k = 61*				
	b	*b SE*	*95% CI*	*p-value*	R^2	β Level
% Female	-0.6043	0.4538	[-1.494, 0.285]	0.190	0.04	0.33
Cohort	0.0125	0.0142	[-.0153, 0.040]	0.383	0.02	0.17
Age	-0.0092	0.0141	[-.0286, 0.027]	0.519	0.01	0.11
Form:					0.125	
50-Item	0.335	0.239	[-.133, 0.803]	0.166		
60-Item	-1.12	0.545	[-2.188, -.052]	0.044*		
Multiple Regressions	*EN Mean*					
	b	*b SE*	*95% CI*	*p-value*	R^2	β Level
Age	0.0338	0.0537	[-.0714, 0.139]	0.532		
& Age^2	-0.0006	0.0006	[-.0017, 0.001]	0.411	0.024	0.17
% Female	1.2021	1.4706	[-1.680, 4.085]	0.418		
& Age	0.0390	0.0403	[-.0400, 0.118]	0.339		
& % Female * Age	-0.0621	0.0474	[-.1550, 0.031]	0.197	0.085	0.44
Independent Predictors	*I/E Mean*	*k* = 61				
	b	*b SE*	*95% CI*	*p-value*	R^2	β Level
% Female	-0.5176	0.1908	[-.8916, -.144]	0.009**	0.14	0.85
Cohort	0.0048	0.0077	[-.0103, 0.020]	0.538	0.008	0.10

Age		0.0014	0.0088	[-.0158, 0.019]	0.874	0.0005	0.04
Form:							
	50-Item	0.071	0.119	[-.162, 0.304]	0.555	0.006	
Multiple Regressions		*I/E Mean b*	*b SE*	*95% CI*	*p-value*	R^2	β Level
Age		0.1166	0.0622	[-.0053, 0.239]	0.067		
& Age^2		-0.0020	0.0010	[-.004,-.00004]	0.067	0.071	0.46
% Female		-.6571	0.671	[-1.972, 0.658]	0.333		
& Age		-.0051	0.017	[-.0384, 0.028]	0.768		
& % Female * Age		0.005	0.025	[-.0440, 0.054]	0.837	0.14	0.73
% Female		-.383	0.151	[-.679, -.087]	0.014*		
& Form:							
	50-Item	0.068	0.114	[-.155, 0.291]	0.555	0.105	
Independent Predictors		*INT Mean b*	*k* = 66 *b SE*	*95% CI*	*p-value*	R^2	β Level
% Female		0.0254	0.138	[-.245, 0.296]	0.855	0.0005	0.04
Cohort		0.002	0.005	[-.008, 0.012]	0.707	0.0024	0.06
Age		0.0029	0.005	[-.007, 0.013]	0.6	0.0046	0.07
Form:						0.218	
	50-Item	0.395	0.095	[0.209, 0.581]	0.001**		
	60-Item	0.142	0.224	[-.297, 0.581]	0.529		
Multiple Regressions		*INT Mean b*	*b SE*	*95% CI*	*p-value*	R^2	β Level
Age		0.0106	0.0209	[-.030, 0.052]	0.613		
& Age^2		-0.0001	0.0003	[-.0007, .0005]	0.702	0.0071	0.08
% Female		0.0880	0.480	[-0.85, 1.029]	0.855		
& Age		0.0046	0.0143	[-.023, 0.033]	0.747		
& % Female * Age		-.00225	0.0172	[-.036, 0.031]	0.896	0.0055	0.06

* = $p < .05$, ** = $p < .01$

Figure 4.36: Pre-Encounter Mean Regressed on Percent Female in Study Sample

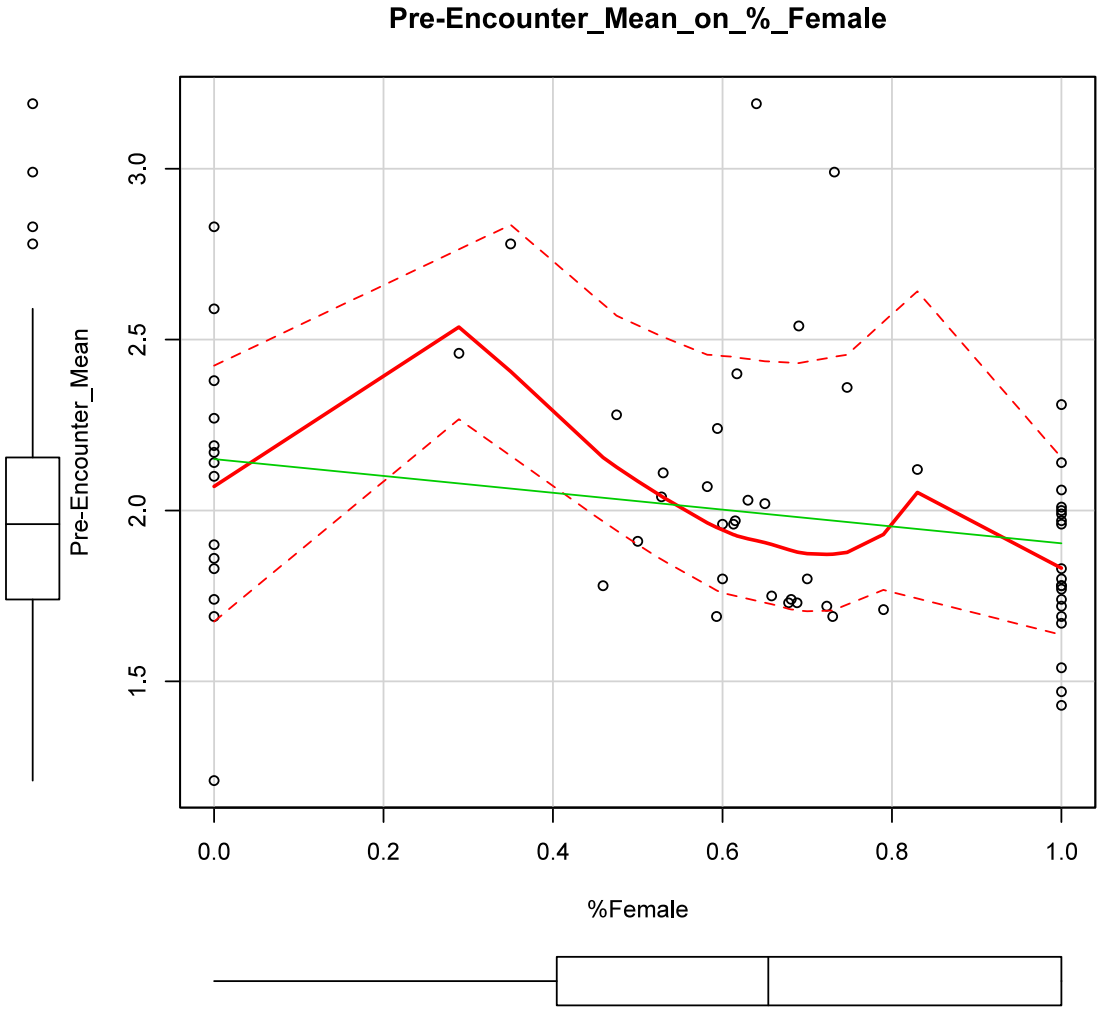
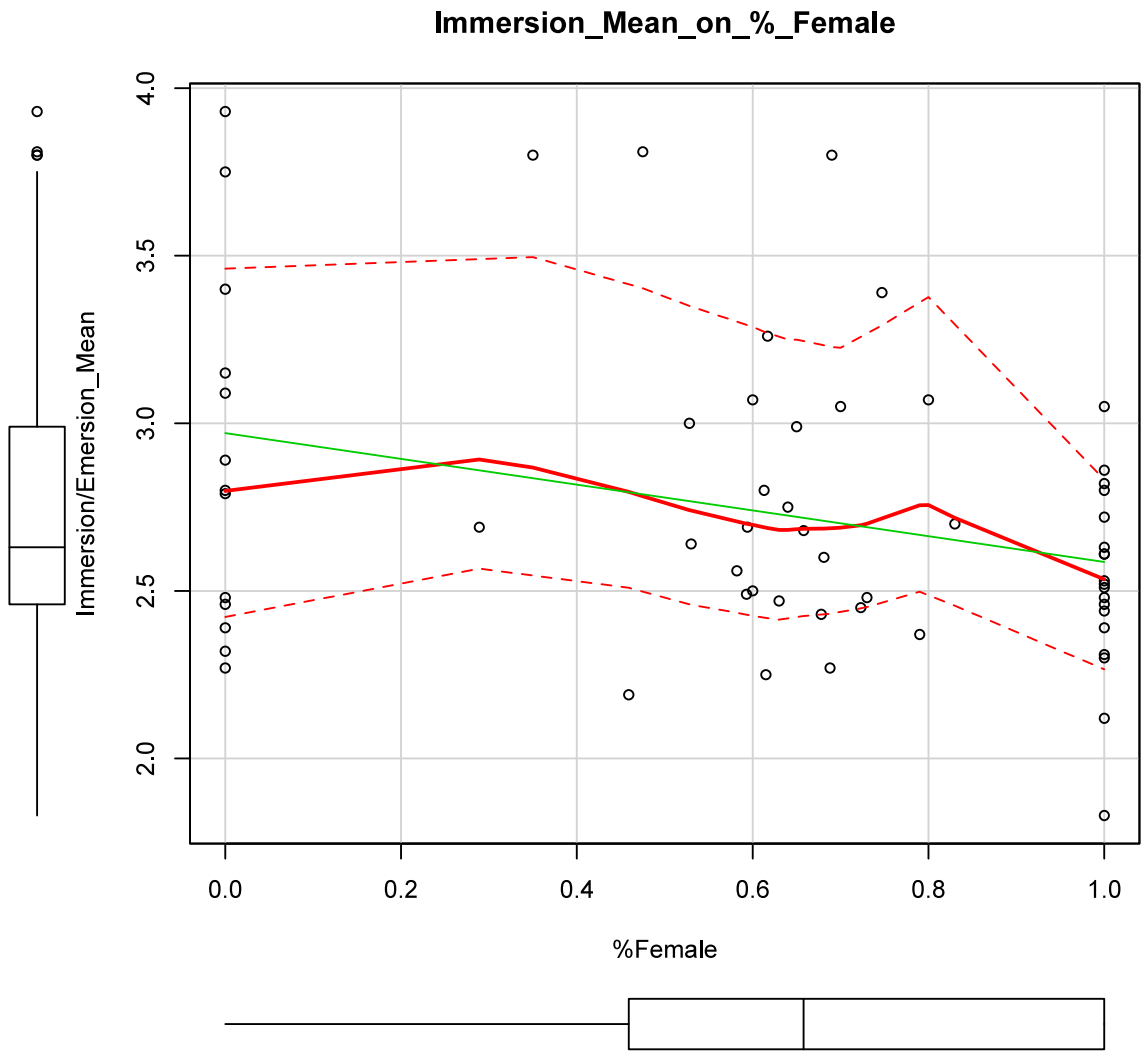


Figure 4.37: Immersion/Emersion Mean Regressed on Percent Female in Study Sample



On the contrary, the hypothesis that African American males would have higher Immersion/Emersion levels was supported by the results, such that every ten percentage increase of African American females in the study yielded a -.0518 unstandardized unit decrease on the average Immersion/Emersion item mean score. Moreover, the hypothesis that there would be no differences in average Internalization item scores was verified, as there was no statistically significant gender difference between average Internalization item means. These results remained consistent even after controlling for RIAS form.

RIAS form was another significant independent predictor variable that had a main effect on the average item mean of the Encounter and Internalization subscales. Furthermore, the 60-item Encounter subscale yielded a significantly different average item mean of 2.04, as compared to 3.16 for both the 30- and 50-item forms, and the 50-item Internalization subscale yielded a significantly different average item mean of 3.46, as compared to 3.86 for both the 30- and 50-item forms. Hence, future studies using the reference data in this study need to correct for percent female in their sample as well as RIAS form to acquire the appropriate RIAS reference data (See Figure 4.30).

Research Question #11: Are there age differences in African American RIAS subscale levels (i.e., average item means)? Is there evidence for a developmental model of African American racial identity modeled by a quadratic age term on RIAS subscale levels (i.e., average item means)?

Age, as an independent predictor variable, did not significantly predict average item means on any of the RIAS subscales (i.e., no main effects). Additionally, age as a quadratic regression model did not significantly predict RIAS subscale average item means. However, the Immersion/Emersion average item mean regressed on the quadratic age regression model was subcritically significant at $p = 0.067$. In light of these results, the statistical power observed for two predictors (i.e., Age & Age^2) with an observed $R^2 = 0.07$, $n = 55$, and α-level = 0.05 yielded $\beta = 0.41$, which is highly susceptible to Type II error. Given the high Type II error rate, the quadratic age regression model for the Immersion/Emersion average item mean is interpreted below.

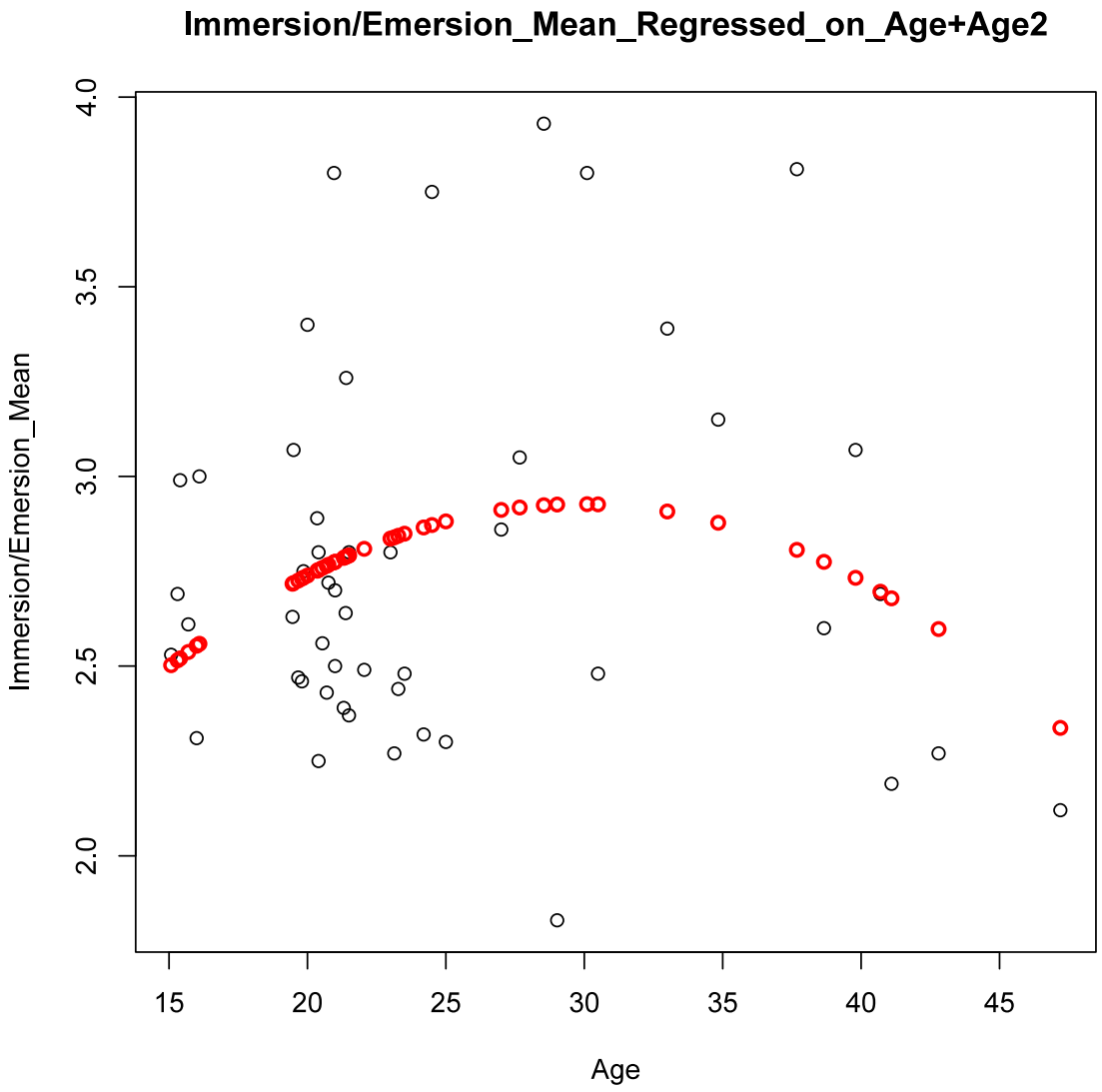
The mean age was 25.64 years with a standard deviation of 9.76 years with ages of the sample ranging from 15.31 to 74.4 years of age. At one standard deviation below the mean (i.e.,

15.88 years of age), the average Immersion/Emersion item average was 2.5. Increasing at the mean (25.64 years of age), the Immersion/Emersion item average was 2.8 with the vertex of the quadratic equation at 29.82 years of age yielding an Immersion/Emersion item average mean of 2.93; however, at one standard deviation above the mean age (i.e., 35.4 years of age) the average item Immersion/Emersion mean decreased to 2.9, and subsequently, decreased to 2.4 at two standard deviations above the mean (i.e., 45.16 years of age). At three standard deviations above the mean (i.e., 54.92 years of age), the average item I/E mean was 1.6. (See Figure 4.38: Immersion/Emersion Average Item Mean Regressed on Age + Age^2 & Figure 4.39: Immersion/Emersion Mean Regressed on Age + Age2).

Figure 4.38: Immersion/Emersion Average Item Mean Regressed on Age + Age^2

Standard Deviations from Mean Age	Age (Sample Range = 15.31 to 74.4)	Immersion/Emersion Mean
-1	15.88	2.5
0	25.64	2.9
1	35.4	2.8
2	45.16	2.4
3	54.92	1.6

Figure 4.39: Immersion/Emersion Mean Regressed on Age + Age²



The results of this study do not validate the hypotheses proposed on the main effect of age on the RIAS subscale average item mean. However, the results from the subcritical quadratic age regression model for the Immersion/Emersion average item mean displayed an increase in I/E levels from 15.88 to 29.82 years of age, and then, a continual decrease in I/E levels as age increased up through 54.92 years of age (See Figure 4.39: Immersion/Emersion Mean Regressed on Age + Age2). Hence, adolescents at 15.88 years of age report slightly higher Immersion/Emersion means than adults at 45.16 years of age. The highest reported

Immersion/Emersion levels were from adults between 25.64 and 35.4 years of age and the lowest reported Immersion/Emersion levels were from adults at 54.92 years of age.

Research Questions #12 & #13: How do gender, age, and the interaction effect between gender and age affect the level of African American RIAS subscale levels (i.e., average item means)? & How does cohort year of the sample affect the level of African American RIAS subscales (i.e., average item means)?

The interaction effect between age and gender did not significantly predict RIAS subscale average item means (no main effects). Additionally, all of the multiple regression models for the average item means were not statistically significant, which may be a result of low statistical power. For each of the RIAS subscale average item mean regression models, the sample size (i.e., number of studies) ranged between 61 and 66. Moreover, the statistical power for both the single regression and multiple regressions ranged from $\beta = .04$ to $\beta = 0.85$, most of which were below the $\beta = .80$ criterion. Only one of the regression models (i.e., Immersion/Emersion regressed onto percent female in the study) met the $\beta = 0.80$ criterion. Cohort, as a single predictor, had a non-significant main effect in all of the regression models (*β-levels* ranging from .06 to .45). Hence, these nil findings must be considered in light of the high probability of Type II Error, which is a function of low study sample size and small observed R-squared.

Research Questions #14 through #18

Research questions fourteen through eighteen examined the moderating effects of study variables on the RIAS subscales and psychological criterion omnibus effect sizes. The RIAS Internalization subscales' relationship to psychological outcomes was the only effect size not moderated by any of the selected moderating variables or meta-regression models.

Research question #14: How does the date of the study moderate the relationship between RIAS subscale and psychological distress for African Americans? How does the date of the study moderate the relationship between RIAS subscale and psychological well-being for African Americans?

Date of study, as a single moderating variable, did not significantly moderate any of the RIAS subscale and psychological outcome relationships.

Research question #15: How do cohort effects moderate the relationship between RIAS subscale and psychological distress for African Americans? How do cohort effects moderate the relationship between RIAS subscale and psychological well-being for African Americans?

Cohort year of the studies' samples, as a single moderating variable, was non-significant in moderating most of the relationships between the RIAS subscales and psychological outcomes, both psychological distress and psychological well-being. However, cohort was initially a significant single moderator on the Encounter subscale and psychological distress relationship (b= 0.007, 95% CI [0.0003, 0.0147], p<0.05) (See Figure 4.40), but after controlling for RIAS form/version due to the results of research question 8, cohort became non-significant (b =-.004, 95% CI [-.011, 0.004], p>.05) while RIAS form (b=0.203, 95%CI [0.035, 0.36], p<.05) remained significant.

Figure 4.40: MA Regressions/Moderators for RIAS-Outcome Omnibus Relationship

Indep. Mods	*PE r Distress*		*k* = 27			*PE r Well-Being*		*k* = 36		
	b	*SE b*	*95% CI*	*p-valu*	R^2	*b*	*SE b*	*95% CI*	*p-valu*	R^2
Cohort	-.0039	0.003	-.010, 0.002	0.20	0.04	-.0006	.003	-.007, 0.006	0.69	0.00
Date % AfAm Recruit:	0.004	0.006	-.008, 0.016	0.47	0.03	0.006	0.01	-.006, 0.018	0.29	0.00
AfAm Orgs Recruit:	0.211	0.116	-.013, 0.415	0.07	0.14	-.1712	0.13	-.400, 0.077	0.17	0.02
College	0.068	0.072	-.073, 0.206	0.33	.001	0.017	0.04	-.055, 0.089	0.57	0.00
Multiple Mods	0.026	0.040	-.052,0.103	0.48	0.00	-.025	0.04	-.100, 0.050	0.47	0.00
Cohort & % AfAm	-.0040	0.003	-.009, 0.002	0.19		-.0007	.003	-.007, 0.006	0.68	
	0.210	0.114	0.01, 0.408	.05*	0.18	-.1720	0.13	-.404, 0.081	0.18	0.00
Indep. Mods	*EN r Distress*		*k* = 24			*EN r Well-Being*		*k* = 30		
	b	*SE b*	*95% CI*	*p-valu*	R^2	*b*	*SE b*	*95% CI*	*p-valu*	R^2
Cohort	0.007	0.004	.0003, 0.01	.04*	0.14	-0.005	.003	-.010, 0.001	0.11	0.07
Date % AfAm Recruit	-0.012	0.008	-.027, 0.003	0.12	0.06	0.004	.006	-.008, 0.016	0.47	0.00
AfAm Org Recruit	0.188	0.167	-.136, 0.475	0.25	0.00	-.1260	0.14	-.376, 0.141	0.34	0.00
College	0.182	0.083	0.02, 0.333	.03*	.166	0.037	0.04	-.035, 0.089	0.30	0.01
Multiple Mods	0.089	0.044	0.002,0.175	.04*	.127	0.006	0.04	-.070, 0.082	0.70	0.00
Cohort & % AfAm	0.0077	0.004	.0006, .015	.03*		-.0048	.003	-.011, 0.001	0.10	
	0.202	0.154	-.096, 0.467	0.18	0.16	-.1337	0.13	-.376, 0.126	0.30	0.06
Indep. Mods	*I/E r Distress*		*k* = 24			*I/E r Well-Being*		*k* = 29		
	b	*SE b*	*95% CI*	*p-valu*	R^2	*b*	*SE b*	*95% CI*	*p-valu*	R^2
Cohort	-.0027	0.004	-.010, 0.005	0.46	0.00	-.0041	.002	-.009, .0004	0.07	0.17
Date % AfAm Recruit	-.0002	0.007	-.013, 0.013	0.75	0.00	-.0017	.004	-.010, 0.006	0.59	0.00
AfAm Org Recruit	0.060	0.115	-.164, 0.278	0.54	0.00	-.099	0.08	-.289, 0.066	0.23	.005
College	0.095	0.074	-.049, 0.235	0.19	0.05	0.019	0.02	-.028, 0.067	0.41	0.01
	0.163	0.076	0.015,0.303	.03*	0.13	-.0093	0.03	-.060, 0.041	0.53	0.00

Multiple Mods	*b*	*SE b*	*95% CI*	*p-valu*	R^2	*b*	*SE b*	*95% CI*	*p-valu*	R^2
Cohort & % AfAm	-.0024 0.046	0.004 0.119	-.010, 0.006 -.185, 0.272	0.51 0.60	 0.00	-.005 -.128	.002 0.08	-.01, -.0003 -.279, 0.028	.04* 0.11	 0.26
Indep. Mods	*INT r Distress*		*k* = 28			*INT r Well-Being*		*k* = 35		
	b	*SE b*	*95% CI*	*p-valu*	R^2	*B*	*SE b*	*95% CI*	*p-valu*	R^2
Cohort	0.0017	0.003	-.004, 0.008	0.52	.00	0.001	.003	-.005, 0.006	0.69	0.00
Date	-.0053	0.006	-.017, 0.007	0.36	.00	0.003	.005	-.008, 0.014	0.52	0.00
% AfAm Recruit	-.0743	0.111	-.285, 0.14	0.47	.00	0.036	0.13	-.211, 0.279	0.65	0.00
AfAm Org Recruit	0.025	0.068	-.108, 0.16	0.61	.00	0.021	0.03	-.045, 0.087	0.49	0.00
College	0.016	0.037	-.056, 0.09	0.58	.00	-.0093	0.04	-.079, 0.060	0.66	0.00
Multiple Mods										
Cohort & % AfAm	0.0017 -.0742	0.003 0.113	-.004, 0.008 -.287, 0.145	0.52 0.47	 .02	.0006 .0382	.003 0.13	-.005, 0.006 -.214, 0.285	0.68 0.64	 0.00

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

Surprisingly, cohort year, initially non-significant as single moderator on the Immersion/Emersion and psychological well-being relationship, became a statistically significant moderator in a multiple moderator regression model, including cohort year and percent of African Americans in the sampled context. This is understood to be a result of the initially low statistical power in the single moderator model; moreover, the addition of a second moderator resulted in an increase in the model's observed R^2 (i.e., R^2 of 0.17 to 0.26), which in turn increased the model's predictive power and simultaneously decreased the model's error term, making significance emerge especially in cases of low statistical power. Another alternative explanation is the possibility of multicollinearity between the two moderating variables; however, an examination of the correlation table (See Figure 4.41) displays a non-significant bivariate correlation of $r = -.15$ between percent of African Americans in the sampled context

and cohort year, thereby showing that multicollinearity was not likely a contributing factor in this result.

Figure 4.41: Encounter and Psychological Well-Being Correlation Table for MA Regression

(k = 30)	Date	% AfAm	Cohort	ENrPWB	C.Recruit	A.Recruit
Date	1.00	-	-	-	-	-
% AfAm	-0.16	1.00	-	-	-	-
Cohort	0.19	-0.02	1.00	-	-	-
ENrPWB	0.16	-0.19	-0.28	1.00	-	-
C.Recruit	-0.30	0.44*	0.16	-0.01	1.00	-
A.Recruit	0.05	0.54**	0.01	0.15	0.29	1.00

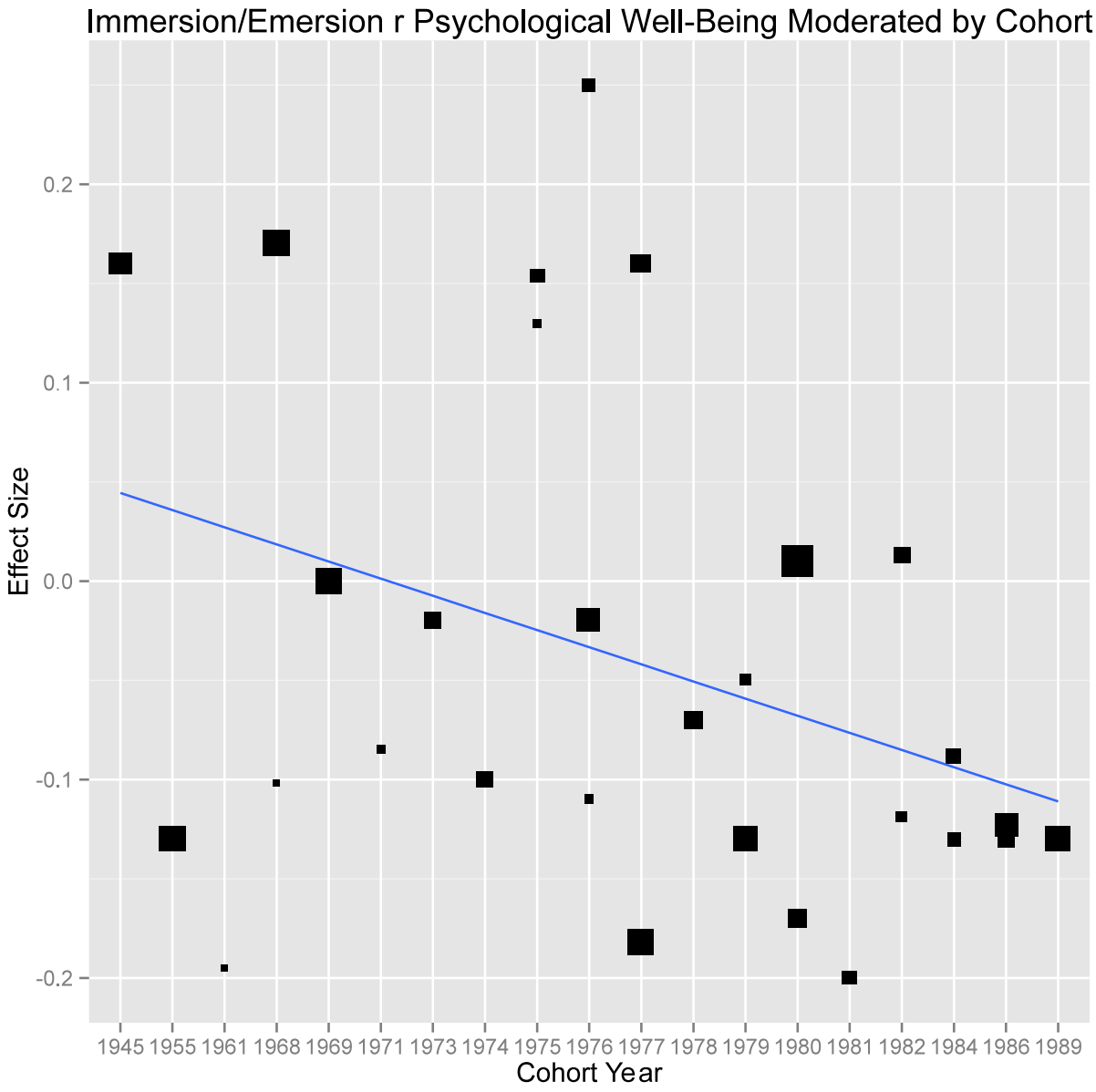
* p<.05 ** p<.01

(C.Recruit = College Recruitment vs. Community Recruitment; A.Recruitment = Specific African American targeted programs)

In the aforementioned multiple moderator test (i.e., cohort year and percent of African Americans in the sampled context) on the relationship between the Immersion/Emersion subscale and psychological well-being, cohort was the only significant moderator (b = -.005, 95%CI [-.0093, -.0003], p<.05). Thus, for every year increase (i.e., as the cohort year became more recent), the relationship between Immersion/Emersion and psychological well-being decreased by r = -.005. The average cohort year was 1975 with a standard deviation of 9.4 years, ranging from 1945 to 1989. At one standard deviation below the mean (i.e., 1965.6), the relationship between the Immersion/Emersion subscale and psychological well-being was r = .02. At the mean (i.e., 1975), the relationship between the Immersion/Emersion subscale and psychological well-being was r = -.02. At one standard deviation above the mean (i.e., 1984.6), the relationship between the Immersion/Emersion subscale and psychological well-being was r = -.09 (See Figure 4.42: Relationship between Immersion/Emersion subscale and Psychological Well-Being moderated by Cohort Year (multiple moderator model)). Hence, the Immersion/Emersion status was more strongly and negatively related to psychological well-being for studies with more recent cohorts; moreover, studies with cohorts born between 1945

and 1955 displayed a small, positive correlation between the Immersion/Emersion status and psychological well-being, whereas studies with cohorts born between 1971 and 1989 exhibited a small negative relations between the Immersion/Emersion subscale and psychological well-being. Overall, it appears that the Immersion/Emersion status is more adaptive (measured by psychological well-being) for earlier cohorts as compared to more recent cohorts.

Figure 4.42: Relationship between Immersion/Emersion subscale and Psychological Well-Being moderated by Cohort Year (multiple moderator model)



Research question #16: How does percentage of African Americans in the environmental context moderate the relationship between RIAS subscales and psychological distress? How does percentage of African Americans in the environmental context moderate the relationship between RIAS subscales and psychological well-being?

The percentage of African Americans in the environmental context, as a single moderating variable, did not significantly moderate any of the relationships between the RIAS subscales and psychological outcomes.

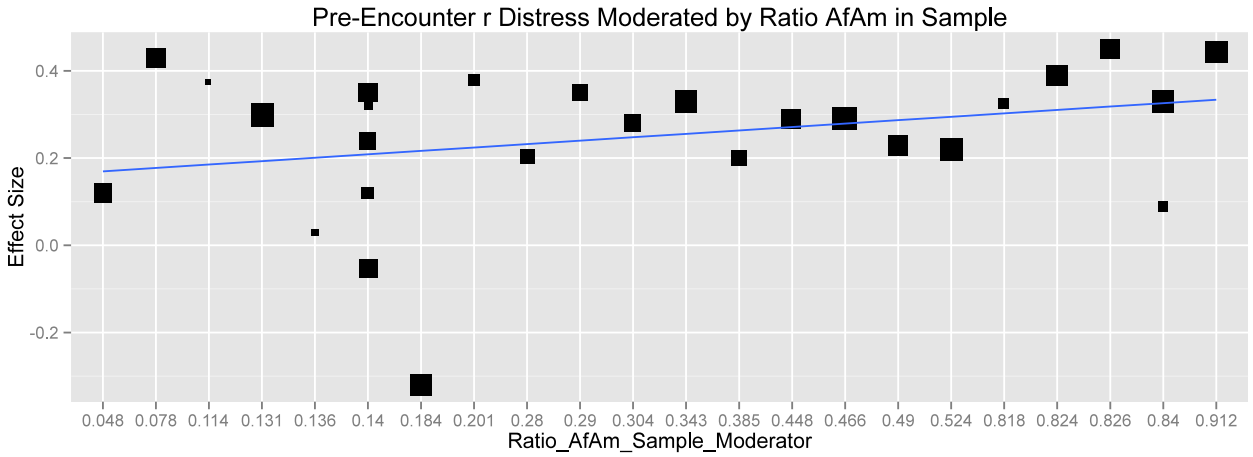
Research question #17: How do cohort effects and percentage of African Americans in the racial environment sampled moderate the relationship between RIAS subscales and psychological distress? How do cohort effects and percentage of African Americans in the racial environment sampled moderate the relationship between RIAS subscales and psychological well-being?

However, in a multiple moderator model with the two simultaneous moderators of cohort and percentage of African Americans in the context, the percentage of African Americans in the environmental context sampled was the only significant moderator on the Pre-Encounter and psychological distress relationship (b= .210, 95%CI [.01, .408], p<.05). The change in significance, from *p-value* = 0.07 to *p-value* = 0.05, is understood to be a result of the increased R^2 from 0.14 to 0.18. Thus, for every 10% increase of the African Americans in the context sampled the Pre-Encounter subscale and psychological distress relationship increased by r = .0210. The mean percentage of African Americans in the sampled context is 38% with a standard deviation of 29% with a range of 5% to 91%.

At one standard deviation below the mean (i.e., 9% African Americans in the sampled context), the relationship between the Pre-Encounter subscale and psychological distress is r =

.18. At the mean (i.e., 38% African American in the sampled context), the relationship between the Pre-Encounter subscale and psychological distress is *r* = .25. At one standard deviation above the mean (i.e., 67% African American in the sampled context), the relationship between the Pre-Encounter subscale and psychological distress is *r* = .29 (See Figure 4.43: Relationship between Pre-Encounter subscale and Distress moderated by % African American in the sample (multiple moderator model)).

Figure 4.43: Relationship between Pre-Encounter subscale and Distress moderated by Ratio African American in the sample (multiple moderator model)



Although the Pre-Encounter subscale had a small-to-medium, positive correlation with psychological distress for studies conducted using samples ranging from high-to-low percentages of African Americans in the environmental context, the Pre-Encounter subscale was more strongly and positively related to psychological distress for studies sampled in higher concentrated African American environments. Hence, it appears that the Pre-Encounter status is not adaptive, as measured by psychological distress, in either a high or low African American environment; however, the Pre-Encounter status is the least adaptive for African Americans in highly concentrated African American environments.

Research Question #18: How does the sampling context (i.e., African American specific recruitment vs. non-African American specific recruitment and college recruitment vs. community recruitment) moderate the relationship between RIAS subscale and psychological distress? How does the sampling context (i.e., African American specific recruitment vs. non-African American specific recruitment and college recruitment vs. community recruitment) moderate the relationship between RIAS subscale and psychological well-being? (Exploratory)

The coding of recruitment methods in the selected studies displayed a small number of studies in each category. For instance, the studies that reported Internalization and psychological distress effect sizes yielded a *k* of three or less studies in three out of the six recruitment categories. Due to the small number of observations in each of the coding categories for the recruitment method initially proposed, recruitment method was recoded into two dummy coded variables.

The first recruitment variable was coded to identify if the study had targeted specific African American focused groups or organizations, such as African American student organizations, Historically Black Colleges/Universities (HBCUs), African American churches, and African American barbershops (coded 2). Contrarily, if the study did not specifically target African American organizations, it was given a code of 0. However, if the study used a combination of the two aforementioned methods, it was assigned a code of 1 in hopes of creating an ordinal scale. The only African American specific recruitment method that was dichotomously coded was the Encounter and psychological distress relationship (0 = Non-specific African American recruitment and 1 = Specific African American recruitment) because none of the selected studies reporting this relationship used a combination of the two methods.

The second recruitment variable identified the educational setting, from which the study was sampled; specifically, whether or not the study used a community based sample (coded 0) or a college/university sample (coded 2). Moreover, if the study used a combination of community and college/university sampling, it was given the code of 1 in hopes of creating an ordinal scale.

The recoded recruitment methods were tested as a moderator on all of the RIAS subscale and psychological criterion relationships as both a categorical and continuous moderator because combination recruitment could fall between the two categories. Recruitment methods, both African American specific organizations and college/university sampling, were significant moderators in the Encounter and psychological distress as well as the Immersion/Emersion and psychological distress effect sizes (See Figure 4.40).

The Encounter and psychological distress effect size was initially significantly moderated by both recruitment variables in two separate single meta-analytic regressions. However, due to the results in research question eight, another meta-analytic regression controlling for RIAS form/version was computed rendering RIAS form significant and both recruitment variables non-significant in two separate meta-analytic equations (See Figure 4.44).

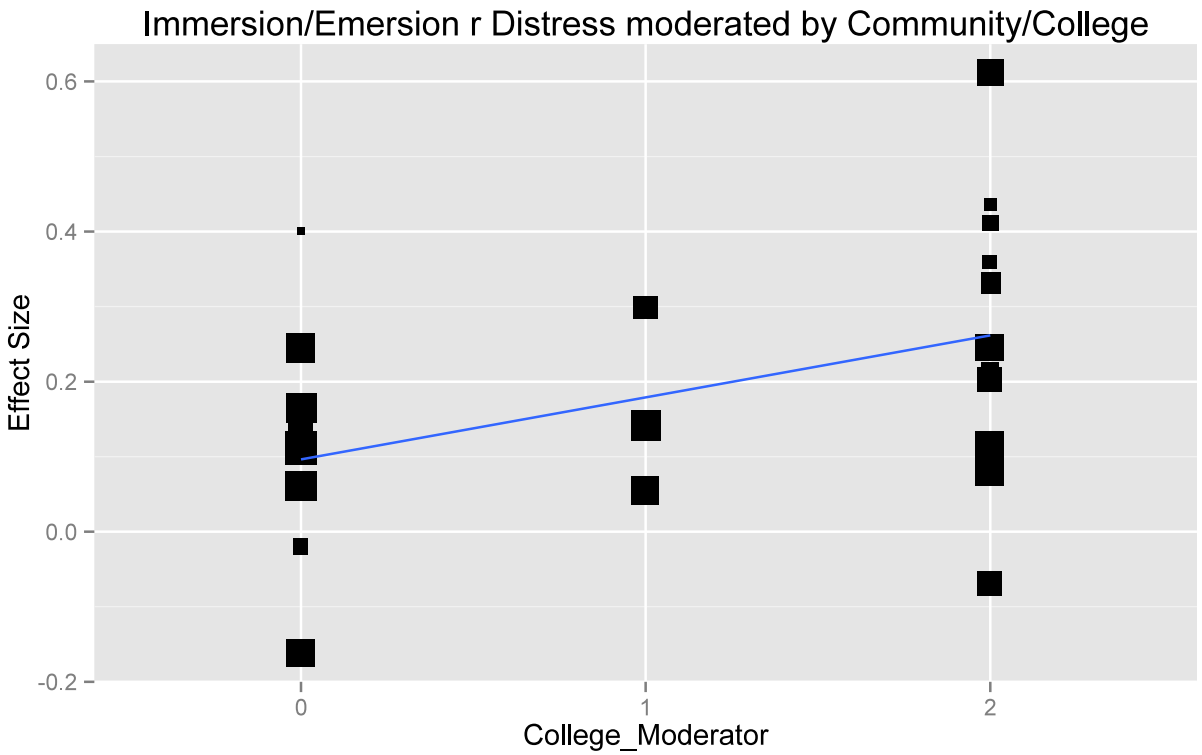
Figure 4.44: MA Regressions on Encounter and Psychological Distress Controlling for Form vs. Not Controlling for Form

	Original MA Regression					***Controlling for Form***		*60-item form omitted*		
Moderators	*EN r Distress*		*k* = 24			*EN r Distress*		*k* = 23		
	b	*SE b*	*95% CI*	*p-valu*	R^2	*b*	*SE b*	*95% CI*	*p-valu*	R^2
Cohort	0.007	0.004	.0003, 0.01	.04*	0.14	-.004	.004	-.011, 0.004	0.30	.13
& Form	-	-	-	-	-	0.203	.087	0.035, 0.36	.02*	
Study Date	-0.012	0.008	-.027, 0.003	0.12	0.06	-0.011	.006	-.023, 0.003	0.06	.17
& Form	-	-	-	-	-	0.243	.090	0.07, 0.401	.006**	
% AfAm	0.188	0.167	-.136, 0.475	0.25	0.00	00638	.117	-.165, 0.285	0.53	.06
& Form	-	-	-	-	-	0.182	.086	0.016,0.339	.03*	
Recruit AfAm Org	0.182	0.083	0.02, 0.333	.03*	.166	0.114	.061	-.006, 0.230	.06	.26
& Form	-	-	-	-	-	0.172	.081	0.016, 0.32	.03*	
Recruit College	0.089	0.044	0.002,0.175	.04*	.127	0.050	.033	0.01,0.175	0.13	.21
& Form	-	-	-	-	-	0.174	.082	0.02, 0.322	.03*	
Multiple Moderators										
Cohort	0.0077	.004	.0006, .015	.03*		-.0036	.004	-.012, .005	0.37	.04
& % AfAm	0.202	.154	-.096, 0.467	0.18	.16	0.289	.125	-.212, 0.267	0.67	
& Form	-	-	-	-	-	0.203	.090	0.03, 0.365	.02*	

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

The Immersion/Emersion subscale and psychological distress effect size was the only effect size significantly moderated by the recruitment variables. Community/College recruitment, as a categorical ordinal variable, yielded a small effect size ($b = 0.163$, 95% CI [0.015, 0.303], $p<.05$), such that community sampling displayed an Immersion/Emersion and psychological distress effect size of $r = 0.077$, combination of community and college/university sampling displayed an $r = 0.172$, and college/university sampling displayed an $r = 0.267$ (See Figure 4.45: Relationship between Immersion/Emersion subscale and Psychology Distress moderated by Recruitment Method (Community versus College).

Figure 4.45: Relationship between Immersion/Emersion subscale and Psychological Distress moderated by Recruitment Method (Community versus College)



Note: 0 = Community Sample
1 = Combination of Community and College/University Sample
2 = College/University

Interestingly, the two recruitment method variables were highly correlated with each other within the RIAS subscale and psychological distress outcome studies, such that the Pearson's correlation coefficients between community/college recruitment and African American specific organization recruitment displayed *rs* ranging between 0.52 and 0.78 for the RIAS subscale and psychological distress criterion (See Figures 4.46-4.53). This means that the studies that reported RIAS and psychological distress effect sizes tended to sample from either community settings and non-specific African American organizations or college/university settings and African American specific organizations. Due to the possibility of multicollinearity based on these observations, the two recruitment method variables were not simultaneously

regressed onto the RIAS subscale and psychological distress effect size. There were no significant relationships between the two recruitment methods on the RIAS subscale and psychological well-being criterion.

Figure 4.46: Pre-Encounter and Psychological Distress Correlation Table for MA Regression

(k = 27)	Date	% AfAm	Cohort	PErDistress	C.Recruit	A.Recruit
Date	1.00	-	-	-	-	-
% AfAm	-0.20	1.00	-	-	-	-
Cohort	0.21	-0.04	1.00	-	-	-
PErDistress	0.15	0.31	-0.24	1.00	-	-
C.Recruit	-0.10	0.18	0.23	0.14	1.00	
A.Recruit	0.19	0.30	0.30	0.18	0.52**	1.00

* p<.05 ** p<.01
(C.Recruit = College Recruitment vs. Community Recruitment; A.Recruitment = Specific African American targeted programs)

Figure 4.47: Encounter and Psychological Distress Correlation Table for MA Regression

(k = 24)	Date	% AfAm	Cohort	ENrDistress	C.Recruit	A.Recruit
Date	1.00	-	-	-	-	-
% AfAm	-0.23	1.00	-	-	-	-
Cohort	0.19	-0.07	1.00	-	-	-
ENrDistress	-0.32	0.25	0.36	1.00	-	-
C.Recruit	-0.20	0.29	0.30	0.41*	1.00	-
A.Recruit	0.09	0.34	0.34	0.44*	0.52**	1.00

* p<.05 ** p<.01
(C.Recruit = College Recruitment vs. Community Recruitment; A.Recruitment = Specific African American targeted programs)

Figure 4.48: Immersion/Emersion and Psychological Distress Correlation Table for MA Regression

(k = 24)	Date	% AfAm	Cohort	I/ErDistress	C.Recruit	A.Recruit
Date	1.00	-	-	-	-	-
% AfAm	-0.20	1.00	-	-	-	-
Cohort	0.51*	-0.17	1.00	-	-	-
I/ErDistress	0.06	0.09	-.12	1.00	-	-
C.Recruit	-0.02	0.19	0.10	0.55**	1.00	-
A.Recruit	-0.10	0.20	-.01	0.42*	0.78**	1.00

* p<.05 ** p<.01
(C.Recruit = College Recruitment vs. Community Recruitment; A.Recruitment = Specific African American targeted programs)

Figure 4.49: Internalization and Psychological Distress Correlation Table for MA Regression

(k = 28)	Date	% AfAm	Cohort	INTrDistress	C.Recruit	A.Recruit
Date	1.00	-	-	-	-	-
% AfAm	-0.17	1.00	-	-	-	-
Cohort	0.18	0.02	1.00	-	-	-
INTrDistress	-0.14	-0.08	0.09	1.00	-	-
C.Recruit	-0.19	0.26	0.28	0.08	1.00	-
A.Recruit	0.20	0.38*	0.38*	0.09	0.53**	1.00

* p<.05 ** p<.01

(C.Recruit = College Recruitment vs. Community Recruitment; A.Recruitment = Specific African American targeted programs)

Figure 4.50: Pre-Encounter and Psychological Well-Being Correlation Table for MA Regression

(k = 36)	Date	% AfAm	Cohort	PErPWB	C.Recruit	A.Recruit
Date	1.00	-	-	-	-	-
% AfAm	-0.16	1.00	-	-	-	-
Cohort	0.23	0.00	1.00	-	-	-
PErPWB	0.18	-0.24	-0.04	1.00	-	-
C.Recruit	-0.25	0.33	0.21	-0.12	1.00	-
A.Recruit	-0.13	0.42**	-0.24	0.09	0.12	1.00

* p<.05 ** p<.01

(C.Recruit = College Recruitment vs. Community Recruitment; A.Recruitment = Specific African American targeted programs)

Figure 4.51: Encounter and Psychological Well-Being Correlation Table for MA Regression

(k = 30)	Date	% AfAm	Cohort	ENrPWB	C.Recruit	A.Recruit
Date	1.00	-	-	-	-	-
% AfAm	-0.16	1.00	-	-	-	-
Cohort	0.19	-0.02	1.00	-	-	-
ENrPWB	0.16	-0.19	-0.28	1.00	-	-
C.Recruit	-0.30	0.44*	0.16	-0.01	1.00	-
A.Recruit	0.05	0.54**	0.01	0.15	0.29	1.00

* p<.05 ** p<.01

(C.Recruit = College Recruitment vs. Community Recruitment; A.Recruitment = Specific African American targeted programs)

Figure 4.52: Immersion/Emersion and Psychological Well-Being Correlation Table for MA Regression

(k = 29)	Date	% AfAm	Cohort	I/ErPWB	C.Recruit	A.Recruit
Date	1.00	-	-	-	-	-
% AfAm	-0.11	1.00	-	-	-	-
Cohort	0.47**	-0.15	1.00	-	-	-
I/ErPWB	-0.03	-0.25	-0.28	1.00	-	-
C.Recruit	-0.13	0.32	0.12	-0.03	1.00	-
A.Recruit	0.20	0.57**	-0.05	0.09	0.23	1.00

* p<.05 ** p<.01

(C.Recruit = College Recruitment vs. Community Recruitment; A.Recruitment = Specific African American targeted programs)

Figure 4.53: Internalization and Psychological Well-Being Correlation Table for MA Regression

(k = 35)	Date	% AfAm	Cohort	INTrPWB	C.Recruit	A.Recruit
Date	1.00	-	-	-	-	-
% AfAm	-0.15	1.00	-	-	-	-
Cohort	0.26	-0.09	1.00	-	-	-
INTrPWB	0.11	0.05	0.04	1.00	-	-
C.Recruit	-0.17	0.18	0.16	-0.05	1.00	-
A.Recruit	0.12	0.50**	-0.07	0.12	0.16	1.00

* p<.05 ** p<.01

(C.Recruit = College Recruitment vs. Community Recruitment; A.Recruitment = Specific African American targeted programs)

V. Discussion

Alpha Generalizability. The alpha omnibus fixed effects results indicate that three of the RIAS subscales within the selected studies displayed minimally acceptable internal consistencies (i.e., $\alpha > .70$; Nunnally, 1978), with the exception of the Encounter subscale. Extrapolating these results to the larger population of studies that have utilized the RIAS, the random effects alpha omnibus effect sizes demonstrated that only the Pre-Encounter subscale met the minimally acceptable internal consistency criterion, while the Encounter subscale fell even lower and the Immersion/Emersion subscale as well as the Internalization subscale slipped just below the acceptable $\alpha > .70$ criterion. Consistent with these findings, previous narrative critiques (e.g., Cokley, 2007; Fischer et al., 1998; Tokar & Fischer, 1998; Yanico et al., 1994) have justifiably called the RIAS subscales internal consistencies into question. However, the only subscale that is clearly below acceptable criteria is the Encounter subscale, supporting the hypothesis that the Encounter subscale would have the lowest alpha coefficient out of all of the RIAS subscales.

Despite Ponterotto and Wise's (1987) suggestion that the Encounter subscale should be dropped due to the results from their factor analytic study, only six of the 57 selected studies in this meta-analysis heeded their suggestion and removed the Encounter subscale from their analysis. One possible explanation for the Encounter subscales' low internal consistency is that the items on the Encounter subscale may be measuring multiple heterogeneous constructs which may actually reflect the difficulty capturing the complexity and transience of the Encounter status. By definition, the Encounter status is identified as a psychological struggle incited by experiences of racial discrimination, which might actually come in waves of being relatively short-lived and capricious. Upon further examination of the RIAS Encounter subscale items, the

Encounter subscale appears to measure two different constructs. The first construct that seems to emerge from the item wording is in-group exploration with items, such as "I find myself reading a lot of Black literature and thinking about Black people" (Item 23) and "I am determined to find my Black identity" (Item 28). The second construct seems to measure the emotional consequences with being Black, such that the items state, "I am increasing my involvement in Black activities because I don't feel comfortable in White environments" (Item 3) and "I feel guilty or anxious about some of the things I believe about Black people" (Item 24). These appear to be somewhat consistent with the Encounter status, which is conceptualized to cause an individual to evaluate the role of racial identification in one's life and make an individual vulnerable to a new racialized world. The emotional consequences related to this new vulnerability and awakening are confusion, anxiety, fear, and anger. Although the Encounter subscale assesses for the emotional consequences, it does not appear to tap into the shock, confusion, and vulnerability of this status, which may play a role in the Encounter subscales low internal consistency.

Consequently, the Encounter subscale items' wording could be conflated with characteristics of initial movement into the Immersion/Emersion status (e.g., Encounter Item: "I am dedicated to finding my Black identity). Based on these observations, it is uncertain whether the Encounter subscale is actually measuring characteristics of the Immersion/Emersion status. Supporting this claim, the subsequent analysis examining the intercorrelation between RIAS subscales yielded the largest observed intercorrelation between the Encounter and Immersion/Emersion subscales. Hence, the complexity and transience of the Encounter status may be reflected in its low internal consistency and medium-sized intercorrelation with the

Immersion/Emersion subscale, and highlights issues with the RIAS in terms of measurement and its ability to detect racism and experience of racism.

Given that both the Immersion/Emersion and Internalization subscales slipped just below minimally acceptable standards, they should also be used and interpreted with some caution. That said, roughly 18% to 20% of the population of studies met the acceptable standards on both the Immersion/Emersion and Internalization subscales, which is based on the area under the random effects distribution at or above the minimally acceptable criteria. As a result, the internal consistency alpha coefficient levels for each subscale should be calculated, reported, and taken into account when interpreting in future studies (Helms, 2007).

Alpha moderators. RIAS version used and demographic variables demonstrated significant moderating effects on the RIAS subscales' alpha coefficients. With respect to the RIAS version used, there were significant moderating effects on the Pre-Encounter and Immersion/Emersion alpha levels as well as a subcritical ($p<.076$) moderating effect on the Encounter alpha level, which is most likely due to low power ($k = 3$ studies). The results of the study suggest that the 50-item and 60-item RIAS forms are superior, in terms of internal consistency, to the 30-item form. The 60-item RIAS form's Encounter subscale most likely yields a higher internal consistency coefficient when compared to the 50-item form; however, the 50-item RIAS form yields a higher internal consistency coefficient in comparison to the 60-item form when the Encounter subscale is omitted (i.e., higher Pre-Encounter and Immersion/Emersion subscale alpha coefficients).

The Pre-Encounter alpha coefficient was significantly higher for the 50-item form in comparison to both the 30-item and 60-item forms. Considering the effect of the differing number of items on the 50-item form as compared to the 30-item form, the 50-item form consists

of fourteen items, while the 30-item form consists of eight items. Based on Spearman Brown's formula (i.e., $\rho_{50} = (n*\rho_{30}) / (1+(n\text{-}1)*\rho_{30})$), increasing the length of a scale increases the internal consistency of the scale (In Crocker & Algina, 1986). The formula predicts that by increasing the 30-item RIAS Pre-Encounter scale from eight items to fourteen items the additional items should result in an internal consistency of $\rho_{14} = (14/8)(0.6784)/(1+0.6784*(14/8 - 1)) = 0.7869$, which does account fully for the 0.7681 alpha coefficient observed in this study. Although the 50-item form's Pre-Encounter subscale yields a higher internal consistency estimate, its rise can be attributed to the increased number of items. As compared to the 60-item Pre-Encounter subscale, which contains more items (i.e., seventeen items), the 50-item Pre-Encounter subscale yielded a higher alpha coefficient. Overall, the 50-item form seems to display the highest internal consistency estimate on the Pre-Encounter subscale, when compared to the 30-item and 60-item forms.

Interpreting the subcritical significance of RIAS form regressed on Encounter alpha, the Encounter subscale on the 60-item form displays an acceptable internal consistency level, which may be a result of the increased number of items on the subscale (i.e., eight items versus four items). Based on Spearman-Brown's formula (i.e., $\rho_{22} = 2\rho_{11} / 1+\rho_{11}$), doubling the length of a scale increases the internal consistency of the scale (In Crocker & Algina, 1986). Hence, the Spearman-Brown prophecy predicts that doubling four-items on the 30-item or 50-item scale should increase the internal consistency estimate from $\rho_4 = 0.4816$ for the 50-item Encounter subscale alpha to $\rho_8 = 2(0.4816)/(1+0.4816) = 0.65$, or $\rho_4 = 0.5231$ for the 30-item Encounter subscale alpha to $\rho_8 = 2(0.5231)/(1+0.5231) = 0.687$. These predictions account for some of the increase in the 60-item form's Encounter alpha coefficient estimates (i.e., $\alpha = 0.7058$); furthermore, the 60-item Encounter subscale may be measuring the Encounter subscale more

consistently above and beyond the effects of increasing scale length. Hence, the observed increase in the alpha coefficient for the 60-item Encounter subscale is most likely the best candidate in terms of internal consistency to measure the Encounter status.

The 50-item Immersion/Emersion subscale yielded a significantly higher coefficient alpha estimate than the 30-item scale. In the test construction discipline, the Spearman-Brown formula is used to predict increases in a scale's internal consistency based on increases in scale length. Thus, the Spearman-Brown formula predicts that the 50-item Immersion/Emersion subscale, which consists of nine items, should display an internal consistency of $\rho_9 =$ (9/8)(0.6588)/(1+0.6588*(9/8 - 1) = 0.685, when using the eight item 30-item Immersion/Emersion subscale internal consistency observed in this study. The additional item on the 50-item Immersion/Emersion subscale does not fully account for the observed alpha coefficient for the 50-item Immersion/Emersion subscale in this study. Hence, the 50-item Immersion/Emersion subscale appears to be superior to the 30-item Immersion/Emersion subscale in terms of internal consistency, above and beyond the effects of increased item length.

Upon a deeper understanding of the alpha coefficient, alpha is not an inherent, stable property of scales (AERA et al., 1999, Thompson, 1994), and actually describes a sample's response to a set of items under a set circumstance (Helms, 2007; Vacha-Haase, 1998). As a result, sample demographics and study characteristics were tested as moderators on the subscales' alpha coefficients. The Encounter subscale alpha coefficient seemed to become less reliable with more recent cohorts, which might be interpreted as a result of the historical context in which the RIAS was originally operationalized (Lesane-Brown, 2006; Sellers et al., 1998). Cohorts born in 1957, seven years prior to the Civil Rights Act of 1964, had the highest Encounter subscale alpha coefficient, which met the 0.70 criterion; subsequent cohorts displayed

decreasing Encounter subscale alpha coefficients, which after the 1961 cohort fell below the 0.70 alpha criterion. The intriguing convergence of the historical Civil Rights Act of 1964 and the decreasing nature of the Encounter alpha coefficient with younger cohorts suggests the possible impact of desegregation on the operationalization and conceptualization of the Encounter status. Following initiatives to desegregate, African Americans may have likely experienced more interracial contact, leading to increased discriminatory and Encounter experiences, or possibly more consciousness of discrimination and willingness to report it. As a result, the Encounter subscale might have become a less cohesive and unified status, as more opportunities to experience discrimination became a part of daily African American life regardless of racial identity status. The Encounter status may be more of an important theoretical construct, as it is an awakening phase of a new identity (Cross, 1971); however, the Encounter status may be better conceptualized as Encounter experiences and operationalized as exposure and reactions racial discrimination in the present day (e.g., Sellers et al., 1998).

The Immersion/Emersion alpha coefficient increased as study date increased. This seems to be a result of the observation that the 50-item form has a significantly higher Immersion/Emersion subscale alpha coefficient, and the fact that the 50-item form (Parham & Helms, 1985) was created after the 30-item form (Parham & Helms, 1981). Upon further investigation, a positive correlation was observed between RIAS form and study date ($r = 0.313$). Therefore, the 50-item form has been used in more recent studies because it was created after the 30-item form, which may be a likely explanation for this phenomenon.

Intercorrelations among RIAS Statuses. Consistent with Cross' racial identity theory (1971, 1991), the results of this analysis identified significant small-to-medium correlations between adjacent statuses, which is theorized to be representative of the transition between

statuses. Moreover, non-adjacent statuses displayed either slightly positively correlations (i.e., Pre-Encounter and Immersion/Emersion $r = .0786$) or small negative correlations (i.e., Pre-Encounter and Internalization $r = -.0902$). These observations partially support the hypothesis that non-adjacent subscales are either not correlated or negatively correlated with one another.

One discrepancy that remains is the small-to-medium significant positive correlation between the Encounter and Internalization subscales ($r = 0.119$), which is the third largest correlation between any of the subscales and is not moderated by RIAS version. Inconsistent with Helms' (1990) original published intercorrelation subscale data, which displayed no correlation between the Encounter and Internalization subscales, this finding may suggest the impact of the changing racial environment over the past 40 years. For instance, one can be characterized by an Internalization status and hold attitudes/behaviors that are termed *Encounter*, such as finding "myself reading a lot of Black literature and thinking about being Black," feeling "guilty or anxious about some of the things I believe about Black people," being "determined to find my Black identity," and believing that "Whites should feel guilty about the way they have treated Blacks in the past." Upon further examination, the Encounter subscale actually had the highest intercorrelations with any other subscale on the RIAS. Therefore, African Americans holding Internalization attitudes or any other attitudes may still experience, be exposed to experiences of racial discrimination, and be subject to the sequelae of racial discrimination, thereby endorsing Encounter subscale items.

Together with the Encounter subscale alpha decreasing with more recent cohorts, these trends highlight the phenomenon of hybridization of identity (Hermans & Kempen, 1998). That is, less distinct identities, which are reflected in this study as less distinct statuses and clear-cut subscale characteristics. Alternatively, this observation may also highlight the heterogeneous

nature of the Encounter status represented in its low internal consistency across a multitude of samples and study characteristics. Overall, the claims (Sellers et al., 1998; Rowley & Sellers, 1998) that non-adjacent RIAS subscales have allegedly high intercorrelations are not confirmed by this study.

Intercorrelation moderators. RIAS form moderated three intercorrelations between RIAS susbscales. With respect to the Pre-Encounter subscale and Internalization subscale intercorrelation, both the 30-item and 50-item forms produced intercorrelations predicted by theory (Helms, 1990). However, the 60-item form demonstrated a large, positive intercorrelation (i.e., the first and last statuses are highly correlated), which is not supported by theory; this could be a result of the low power observed by the limited sample size of RIAS 60-item studies. Moreover, both 30-item and 50-item forms produced intercorrelations between the Immersion/Emersion and Internalization subscales consistent with theory; however, the 50-item form demonstrated a significantly smaller intercorrelation (i.e., small, positive correlation versus medium, positive correlation), which appears to be a more theoretically accurate representation of the relationship between the Immersion/Emersion and Internalizaiton statuses. The intercorrelations provided by the 50-item form are the most in line with Helms' (1990) published intercorrelations in both direction and magnitude. With the criterion of theoretically consistent subscale intercorrelations, the 50-item form fared the best when compared to either the 30-item or 60-item versions.

Test of RIAS Validity. Most of the RIAS subscales demonstrated significant relationships to psychological criterion variables under random effects omnibus analyses, which provides substantial clarification and a quantitative summary of the varying, inconsistent, and equivocal nature of the African American racial identity studies that utilized the RIAS.

The results of the analyses identified that psychological distress and psychological well-being are orthogonal criterion variables when correlated with the Encounter and Immersion/Emersion subscales. Moreover, the Encounter and Immersion/Emersion subscales displayed a positive correlation with psychological distress, but no relationship with psychological well-being, thereby indicating that psychological distress may be a more robust criterion variable with these two RIAS subscales. Both the Pre-Encounter and Internalizations subscales were significantly correlated with both psychological distress and psychological well-being criterion variables, such that the Pre-Encounter subscale displayed a positive correlation with psychological distress and a negative correlation with psychological well-being while the Internalization subscale displayed a negative correlation with psychological distress and a positive correlation with psychological well-being. Moreover, psychological distress may be a more robust outcome criterion for the Pre-Encounter subscale than psychological well-being, and psychological well-being may be a more robust outcome criterion for the Internalization subscale than psychological distress. This appears to be consistent with Cross' (1971) and Helms' (1990) definitions of the Pre-Encounter and Internalization statuses, as the Pre-Encounter status is described as a less adaptive status (i.e., more psychological distress) and the Internalization status is defined as a more adaptive status (i.e., more psychological well-being).

RIAS form as a moderator. The relationship between the Encounter subscale and psychological distress was the only omnibus effect size that was moderated by RIAS form. This suggests that the Encounter subscale may yield varying and inconsistent results with the psychological distress criterion based on the RIAS version used, which may also be related to the low internal consistency estimate for the Encounter subscale. As a result, the significant moderators for the Encounter subscale and psychological distress relationship were conducted by

controlling for RIAS form to tease out the effect of RIAS form as compared to demographic and study variables.

Pre-Encounter subscale and psychological outcomes. Although most of the extant literature has previously identified a positive correlation between the Pre-Encounter subscale and psychological distress, some of the selected studies (e.g., Bazelais, 2011; Horsey, 2009; Mahalik et al., 2006) identified a large correlation between the Pre-Encounter status and psychological distress, while others reported a small to no correlation (e.g., Halgunseth et al., 2005; Phelps et al., 2001). The random effects omnibus effect size yielded a medium, positive omnibus effect size between the Pre-Encounter subscale and psychological distress, which is similar in direction but differing in magnitude with the Lee and Ahn's (2013) racial identity meta-analysis, which found a small positive correlation between the Pre-Encounter subscale and psychological distress.

Similarly, the extant literature has accurately identified a negative correlation between the Pre-Encounter status and psychological well-being. The random effects omnibus effect size for the relationship between the Pre-Encounter subscale and psychological well-being displayed a small, negative correlation. Moreover, the relationship between the Pre-Encounter status and psychological well-being is consistently small and negative despite the contextual and demographic factors of cohort year, percentage of African Americans in the sampled context, and recruitment method.

Taken together with the results from the Pre-Encounter status and psychological distress omnibus effect size, the Pre-Encounter status is related to both elevated psychological distress and lower ratings on psychological well-being. The Pre-Encounter subscale displays a larger correlation with distress symptoms as compared to diminishing levels of psychological well-

being. Furthermore, the Pre-Encounter status is considered to be the most maladaptive status, as compared to the other RIAS statuses, which is consistent with the ways in which racial identity scholars speak of a hierarchy of statuses as well as the movement from less adaptive statues to more adaptive statuses (e.g., Helms, 1990; Vandiver et al., 2002). These results support the assumption behind the nigrescence model that African Americans, who accept being African American, are better adjusted and have better psychological health than African Americans, who accept the values of White society.

The aggregate effect size described above indicates that the Pre-Encounter status is moderately related to higher levels of psychological distress. However, the percentage of African Americans in the environmental context was the only significant moderator in the Pre-Encounter subscale and psychological distress relationship. Such that, the relationship between the Pre-Encounter status and psychological distress strengthened as the percentage of African Americans in the sampled context increased.

In the most concentrated African American environments in the selected studies, the relationship between Pre-Encounter attitudes and psychological distress was in the medium-to-large range. This highlights the phenomenon that Pre-Encounter attitudes may act as a conductive "lightening rod" for psychological distress in highly concentrated African American environments (Sellers, 1993). Furthermore, African Americans with Pre-Encounter attitudes in highly concentrated African American environments do not receive the benefits of *in-group favoritism* based on Social Identity Theory, but rather their non-adherence to in-group values results in *in-group rejection*, which result in these individuals not receiving the trust, positive regard, and cooperation from the African American community (Brewer, 2001; Tajfel & Turner, 1979). Additionally, Pre-Encounter attitudes were not protective against psychological distress

in predominately white environments, as hypothesized; however, they were less strongly correlated (small-to-medium relationship) to psychological distress in predominately white environments, as compared to predominately African American environments. Thus, Pre-Encounter attitudes are less harmful in predominately white environments as compared to predominately African American environments, which highlights the buffering role of in-group favoritism depending on context.

Cohort was not a significant moderator in the Pre-Encounter and psychological distress relationship or the Pre-Encounter and psychological well-being relationship, which does not provide support for the hypothesis that Pre-Encounter attitudes would more adaptive for older cohorts because it allows for an assimilation to dominant culture and, thereby, sidestepping the negative effects of overt racial discrimination. In explaining these results, it could be that African Americans scoring high on Pre-Encounter attitudes may perceive and attribute instances of racial discrimination to personal characteristics, as opposed to race; an alternative explanation may be that the level of racial discrimination in the U.S. has remained relatively consistent over the past 40-50 years, despite the increasingly covert shift in racial discrimination practices. Hence, it is difficult to make more specific conclusions for this finding.

In conjunction with Social Identity theory, the Rejection-Identification model (Branscombe, Schmitt, & Harvey, 1999) posits that perceived discrimination is linked to higher in-group identification as a coping mechanism to maintain psychological well-being in the face of adversity. Through this lens, African Americans with a Pre-Encounter status actually experience more psychological distress perhaps because they cannot rely on the resource of a racial in-group to protect against discrimination, supported by the results of this study. Therefore, African Americans characterized by a Pre-Encounter status may be unable to deflect

the attacks and responsibility from the self when dealing with discrimination, thereby possibly attributing discrimination to the self instead of their race (Crocker & Major, 1989).

Encounter subscale and psychological outcomes. The extant literature has consistently identified a positive relationship between the Encounter subscale and psychological distress, which is corroborated by the results of this meta-analysis. In light of the wide range of positive correlations displayed in previous studies (i.e., large to small correlations), the current study found a small, positive relationship between the Encounter status and psychological distress, which is consistent in direction and magnitude with Lee and Ahn's (2013) racial identity meta-analysis. Moreover, the Encounter subscale was not significantly correlated with psychological well-being via the random effects model, demonstrating that Encounter attitudes are associated with increased psychological distress but not decreased psychological well-being.

Before controlling for RIAS form, the moderators of cohort year, African American specific recruitment, and college recruitment were initially significant on the Encounter subscale and psychological distress relationship. However, all of the initially significant moderators became non-significant after controlling for RIAS version. Hence, the Encounter subscale is highly influenced by the RIAS version used, and thorough consideration in terms of RIAS form and internal consistency should be used when interpreting the results from Encounter subscale.

Immersion/Emersion subscale and psychological outcomes. The Immersion/Emersion subscale corroborated previous findings (e.g., Carter, 1991; Carter, Williams, Juby, & Buckley, 2005; Croasdale & Mate-Kole, 2006; Mahalik, Pierre, & Wan, 2006; Pierre & Mahalik, 2005) that the Immersion/Emersion subscale is positively correlated with psychological distress. Many of the published RIAS studies identified medium-to-large correlations between the Immersion/Emersion subscale and psychological distress (e.g., Carter et al., 2005; Dudley, 2011;

Finley, 2012; Phelps et al., 2001; Whatley et al., 2003); however, the present study found a more modest small-to-medium correlation. The results of the present study are similar to Lee and Ahn's (2013) racial identity meta-analysis, but display a difference in the magnitude, such that the Lee and Ahn meta-analysis identified a small correlation.

The extant literature remains equivocal on the relationship between the Immersion/Emersion status and psychological well-being (e.g., Buckley & Carter, 2005 vs. Awad, 2007). And, the results of this meta-analysis identify no significant correlation in the random effects model. Hence, the Immersion/Emersion status is associated with psychological distress, but not psychological well-being. Theoretically, these observations highlight that denigrating White culture and deifying African American culture may increase the level of racial discrimination that one perceives. Interestingly, the lack of relationship between the Immersion/Emersion subscale and psychological well-being relationship was significantly moderated by cohort year and college recruitment.

In older cohorts, there was no relationship between Immersion/Emersion and psychological well-being, but as the cohorts became more recent (i.e., > 1973 cohort year) a slight negative relationship between Immersion/Emersion and psychological well-being emerged. For both older and younger cohorts, the Immersion/Emersion status is characterized by excessive public displays of anti-white, African heritage sentiments (Cross, 1971), which is most likely linked to increased discriminatory experiences through anti-white sentiments and actions, and therefore, increased psychological distress (Sellers & Shelton, 2003). Accounting for this observation, one possible difference between younger and older cohorts is that older cohorts had a greater sense of cohesiveness in a single, Black Power and Civil Rights movement, whereas younger cohorts, due in part to the hybridization or diffusion of identity, experienced

more within group discrimination based on the various ways of expressing a Black identity. With this in mind, the MIBI scale developed by Sellers et al. (1998) may be better suited to measure the within group variability in the Immersion/Emersion status, as it breaks down private and public regard (i.e., private beliefs about one's racial group and one's perceived public view of one's racial group).

Upon further examination of the relationship between the Immersion/Emersion subscale and psychological well-being, age and cohort were highly correlated (r = -.77) in this particular analysis. In this case, it is difficult to determine whether the effect is from age or cohort, as age displayed a positive effect size of the same magnitude with a p-value of 0.06 when it replaced cohort in the multiple regression model. Based on this observation, an alternative explanation is that older African American adults do not experience diminished psychological well-being in the context of Immersion/Emersion scores; however, younger African Americans experience decreased psychological well-being with an Immersion/Emersion status. Hence, there may be a manner in which older African American adults are able to adopt an Immersion/Emersion status without the detrimental effects on psychological well-being, as compared to younger African Americans. When confronted with threatening situations, older African Americans have a greater opportunity through more life experience navigating discrimination with an Immersion/Emersion status to develop conscious or unconscious strategies to protect their psychological well-being (Allport, 1954; Clark et al., 1999; Meyer, 2003; Miller & Kaiser, 2001).

Recruitment method, specifically community or college sampling, was another significant moderator on the relationship between the Immersion/Emersion subscale and psychological distress. Given that most of the racial identity literature is conducted on college

samples, sampling from college settings do indeed change the ecological context of the sample, and limit the generalizability of existing and future racial identity findings. College samples displayed a stronger correlation between the Immersion/Emersion and psychological distress relationship compared to community samples. Therefore, findings from college samples should be carefully interpreted and not used to generalize outside of the college context, as they display greater levels of psychological distress with the Immersion/Emersion status.

The college sample also displayed more variance in the Immersion/Emersion and psychological distress relationship. Given this increased variance in the college-sampled population, it can be interpreted that the college context is more diverse with differing perspectives and consequences with an Immersion/Emersion status due to a more critical analysis of an African American identity, which may not be representative of African Americans in the community. This provides evidence for the theory of hybridization of identity, as most college students are placed in multiple contexts and need to manage a wider diversity of interactions. Hence, an Immersion/Emersion status in the college population creates a greater range of "being Black" in America as compared to African American community samples, bolstering the rationale for supplementing the RIAS through use of the MIBI scale in order to tease out aspects of the Immersion/Emersion status among individuals.

Upon further examination, college sampling was highly correlated with African American specific recruitment, which was not a significant moderator most likely due to low power. Many of the colleges sampled were HBCUs; and in fact, nine of the eleven college studies for the Immersion/Emersion and psychological distress relationship were HBCUs. The two studies conducted on PWIs displayed correlations of 0.32 and 0.39 for the Immersion/Emersion and psychological distress relationship, which is observably larger than the

average college recruitment effect sizes observed in this study. This can be understood as an Immersion/Emersion status being detrimental via increased psychological distress for African Americans in a predominately white context, as individuals characterized by an Immersion/Emersion status tend to oppose the majority culture and do not receive in-group benefits (Brewer, 2001; Tajfel & Turner, 1979); however, this conclusion is tentative based on the limited number of observations.

Internalization subscale and psychological outcomes. The Internalization status has been identified by the literature as the most sophisticated and adaptive of all of the racial identity statuses (Helms, 1995; Johnson, 2002). The extant literature has found that Internalization attitudes are associated with the lowest levels of psychological distress as compared to the other statuses (Carter, Williams, Juby, & Buckley, 2005; Forsyth & Carter, 2012; Franklyn-Jackson & Carter, 2007; Munford, 1994; Pieterse & Carter, 2010). This meta-analysis corroborates these findings and identified a small, negative relationship between the Internalization subscale and psychological distress, which is consistent with the results from Lee and Ahn's (2013) racial identity meta-analysis. However, these findings drastically differ from results gathered from the CRIS, which found that Internalization-Multicultural Inclusive attitudes were positively correlated with in one study (e.g., Whittaker & Neville, 2010) and not associated (e.g., Telesford, Mendoza-Denton, & Worrell, 2013) in another study with psychological distress.

Moreover, the present study found that the Internalization subscale has a small-to-medium correlation with psychological well-being, which is consistent with previous RIAS results (e.g., Buckley & Carter, 2005; Collins & Lightsey, 2001; Goodstein & Ponterotto, 1997; Mahalik, Pierre, & Wan, 2006; Speight et al., 1996) as well as CRIS findings (e.g., Whittaker &

Neville, 2010). Overall, the Internalization status appeared to be more strongly associated with increased psychological well-being than with decreased psychological distress.

There were no significant moderators on the Internalization status and psychological functioning criterion relationships. This is may be interpreted as a result of the stable quality of the Internalization status, such that the Internalization status seems to provide a solid foundation of psychological health for African Americans regardless of context or demographic variables. Moreover, the Internalization status is theorized to be the most sophisticated status, allowing for the greatest flexibility and proffering a grounded sense of being African American regardless of external influences (Helms, 1995). For example, one of the Internalization subscale items states, that "a person's race has little to do with whether or not he or she is a good person" (RIAS 50-item: Item 45), displaying that one's perceptions about the outward appearance of other does not influence qualities attributed to the other.

Lack of significant moderators. Given the findings that study date was a not significant moderator for any of the RIAS-psychological criterion variable relationships, this study fails to reject the hypotheses that the RIAS is an obsolete measure in the 21st century. Hence, the RIAS is still an appropriate scale for current and future studies, but should be supplemented with other racial identity scales (e.g., MIBI, CRIS), psychological functioning outcome variables (i.e., psychological distress or psychological well-being), as well as consideration in the appropriate RIAS version (i.e., college or community sample; importance of measuring the Encounter subscale) are important considerations in the future use of the RIAS.

Summary of criterion validity. The most robust finding of the present study is the RIAS subscales has small connection to psychological well-being, which raises concerns for the construct validity and theoretical expectations of the RIAS statuses. Most of the RIAS subscales

are inversely related to adjustment, or in other words positively related to maladjustment. Cross (1995) describes the dynamic process of psychological nigrescence as a "resocialization process" (p. 97), during which a *healthy* African American progresses from a non-Afrocentric to an Afrocentric to a multicultural identity. It would seem that each of the RIAS statuses should have some characteristics that are positively related to adjustment; however, it is only the Internalization status that is positively associated with adjustment. For instance, the Immersion/Emersion status could provide some connection to adjustment given the positive benefits derived from in-group affiliation, which is also theorized by the ethnic identity paradigm (Phinney, 1992) as well as in-group favoritism from Social Identity Theory (Tajfel & Turner, 1986). This observed pattern of empirical relationships may be, however, conflated by the manner in which Cross' original theory has been operationalized on the RIAS.

Based on the relationship of RIAS subscales to both criterion variables, there appears to be a similarity between the Encounter and Immersion/Emersion subscales as well as the Pre-Encounter and Internalization subscales. The Encounter and Immersion/Emersion subscales are both correlated with psychological distress but not with psychological well-being, whereas the Pre-Encounter and Internalization subscales are both correlated with psychological distress and psychological well-being. The Pre-Encounter and Internalization status may be seen as being similar as they are pre-struggle and post-struggle statuses; on the contrary, the Encounter and Immersion/Emersion statuses may be seen as being similar as they are both currently active in the racial identity struggle. Given these differences, it could makes sense that the Encounter and Immersion/Emersion statuses are correlated with only psychological distress, as individuals in a struggle only focus on surviving and making it through the metaphorical storm (i.e., focus on

distress and decreasing distress symptoms) (e.g., Moberly & Watkins, 2008; Nolen-Hoeksema et al., 2008).

The Internalization status appears to be different than the other subscales in its relation to adjustment and distress, such that the Internalization subscale is the only status that is positively correlated with psychological well-being and inversely correlated with psychological distress. It sees that the Internalization status is the most adaptive, highlighting the notion that both de-identifying with Whites (i.e., Encounter and Immersion/Emersion statuses) and not identifying with Blacks appears to be maladaptive (i.e., Pre-Encounter status). Hence, the best stance, from an adaptive perspective, is to maintain a positive orientation towards Blacks and Whites, which is theoretically congruent with the concept of biculturalism in the acculturation literature.

The concept of biculturalism (Berry, 1997; Kurtines & Fernandez, 1980) was coined by the acculturation literature to highlight the phenomenon of the ways in which an individual synthesizes their heritage and receiving cultures into a unique and personalized form, which is unique to that individual and not reducible to either the heritage or receiving culture. Although biculturalism originally focused on behaviors, several scholars (e.g., Park & Kim, 2008; Schwartz & Unger, 2010; Umaña-Taylor, Bhanot, & Shin, 2006) have expanded biculturalism to include holding values and identification with both cultures. Biculturalism is most adaptive when individuals endorse cultural practices characteristic of both cultural contexts, exercise increased perspective-taking ability (i.e., see both sides of complex social issues), use coping strategies from both cultures, and interact with people from both cultural communities (Chen, Benet-Martínez, & Bond, 2008; Tadmor, Tetlock, & Peng, 2009).

Given that the Internalization subscale is not influenced by demographic factors or study variables, it appears that the Internalization status may be idiographic to each individual in that

each individual finds a way to exist harmoniously in both Black and White cultures, as "Being Black just feels natural" (RIAS 50-Item Form: Item 37). Additionally, individuals with an Internalization status believe that "being Black is a positive experience" (RIAS 50-Item Form: Item 1) and that "people regardless of their race have strengths and limitations" (RIAS 50-Item Form: Item 20), which highlights the ability to feel comfortable in one's culture and engage in perspective-taking of other cultures. Furthermore, African Americans with an Internalization status "feel good about being Black, but do not limit [themselves] to Black activities" (RIAS 50-Item Form: Item 10), which demonstrates an integration of Black and White cultural practices as well as an openness to interacting with Whites. Taken together, these characteristics of the Internalization status appear to be consistent with the perspective of biculturalism, but do not include adapted behaviors within differing

s, as biculturalism also includes behavioral changes where Internalization is purely attitudinal.

Based on the item wording, the Internalization subscale seems to be assessing two main characteristics. One of the constructs that seems to be measured by the RIAS is increased perspective-taking ability (i.e., five items), such that African American individuals are able to see similarities and differences among people of various racial/ethnic backgrounds as well as strengths and limitations regardless of race. For example, these items state, "I involve myself in causes that will help all oppressed people" (Item 6) and "a person's race has little to do with whether or not he or she is a good person" (Item 45). The second construct (i.e., nine items) that appears to be measured is in-group affiliation and group membership. For instance, these items state, "I feel an overwhelming attachment to Black people" (Item 5) and "I feel excitement and joy in Black surroundings" (Item 20). Hence, the Internalization subscale appears to be

measuring a combination of attitudes related to in-group affiliation and increased flexibility with one's ability to see others as people that are unique members of different racial/ethnic groups.

Racial Identity Levels. The results of the present study confirm the non-centered, often skewed, and restricted range nature of the RIAS subscale distributions. Few of the RIAS studies actually reported the skew or displayed the QQ plot for their sample; in some instances, some studies, mostly dissertations, identified the non-normal distribution as a limitation and rationale for discrepant results with the extant literature (e.g., Ferguson, 2008).

Additionally, the non-centered nature of the RIAS may pose a problem when comparing across subscales as the RIAS subscales have varying means and standard deviations. All of the extant RIAS studies are only able to compare RIAS subscale scores with their own sample as the reference group; hence, it is not possible to make accurate generalizations to a larger population outside of the study. Several researchers (e.g., Carter, 1996; Neville & Lily, 2000) have moved in the direction of scaling the RIAS subscales in order to create racial identity profiles. Although informative, their results are limited to the population sampled. As a result, the next step in this direction is to compare a study sample's RIAS levels to a reference population, controlling for significant demographic variables, in order to generate results with greater external validity. This study provides reference data based on the studies included in the meta-analyses as well as regression coefficients to adjust the reference data, based on percent female and RIAS form utilized in future studies.

Given the possible impact of demographic characteristics on RIAS subscale levels, it is important to identify the demographic variables that influence the subscale levels. Specifically, percent female in the sample and age were demographic variables that significantly moderated some of the RIAS subscale levels.

Percent female – Pre-encounter means. As percent female in the sample increased, Pre-Encounter means significantly decreased; that is, African American females reported lower Pre-Encounter means compared to African American males. These findings falsify the hypothesis that African American males would display lower Pre-Encounter means compared to their female counterparts based on the rationale that African American males are more likely to report higher levels of racial discrimination than their female counterparts (Banks & Kohn-Wood, 2007l Forman et al., 1997; Kessler et al., 1999), thereby having higher levels of racial discrimination and identification (Sellers & Shelton, 2003). One explanation is that African American females have a double minority status (i.e., gender and race) (Gonzales, Blanton, & Williams, 2002), and that the identities do not develop concurrently. As a result, African American females are more quickly able to develop an awareness of their racial identity because they have first developed an awareness of gender identity.

According to the extant literature, infants between 18 and 24 months are able to label their own and other's gender (Ruble et al., 2006) based on gender typed preferences (Lobel et al., 2000; Serbin et al., 2001; Zosuls et al., 2009). This cognitive developmental process precedes the documented racial awareness literature, which concludes that children become aware of racial differences as early as three to four years of age (Gimenez & Harris, 2002; Alejandro-Wright, 1985). Hence, African American females are already primed (priming: Tulving, Schacter, & Stark, 1982) to look for inherent differences compared to their male counterparts.

Percent female – Immersion/Emersion means. The observation that when percent female in the sample increased, Immersion/Emersion means significantly decreased provides support for the hypotheses that the nature of the Immersion/Emersion status (i.e., it is characterized by aggression and hostility) will result in higher ratings by African American males as compared to

African American females based on gender socialization. Extant literature identifies male socialization being related to a greater tendency to use hostility and externalizing defense mechanisms compared to females (Cochran & Rabinowitz, 2003; Deaux, 1985; Dulmus & Hilarski, 2006; Levit, 1991; O'Neil, 2008; Wexler, 2009), which is perpetuated by the expectation that men are supposed to be more aggressive, dominant, and appear more outwardly strong compared to females (i.e., Gender Role Conflict: David & Brannon, 1976; Levant et al., 1992; O'Neil, 2008). Hence, gender role socialization and Gender Role Conflict also apply to African American males and manifests itself in higher Immersion/Emersion means on the RIAS.

Additionally, African American men are usually given credit for historical African American movements. As such, many of the movements' visible leaders were men that espoused and practiced more views consistent with an Immersion/Emersion perspective (e.g., Huey Newton, Malcolm "Red" X, Bobby Seale, Stokely Carmichael, Elijah Muhammad, etc.). Not only were African American men provided with visible role models they could emanate (Social Learning Theory: Bandura, 1977), but they may also have established a greater sense of pride and value for the Immersion/Emersion status as compared to their female peers, thereby subjecting the RIAS to more social desirability bias (Crowne & Marlowe, 1964) for African American men.

That is not to say that African American females do not have role models involved in African American movements (e.g., Dorothy Irene Height, Ella Baker, Rosa Parks, Ida Bell Wells-Barnett); however, many of the African American women leaders worked in the background and rarely filled public leadership roles. This may be in part due to the effects of Social Role Theory, which was conceptualized on the historical division of labor between men and women and posited that men and women are expected to fulfill specific roles, embody

specific characteristics, and transmit these expectations to future generations (Eagly, 1987, 1997; Eagly, Wood, & Diekman, 2000). As women often assumed responsibilities at home, they were expected to be warm, expressive, caring, and friendly (Eagly, 1987, 1995), and were empirically shown to demonstrate more communal traits, as compared to their male counterparts (Aydin, Graupmann, Fischer, Frey, & Fischer, 2011; Feingold, 1994). In contrast with the expectations for males to be more dominant and aggressive based on Gender Role Conflict, females are expected to be more harmonious, more communal, and maternal according to social role theory, which is one explanation for African American men having higher Immersion/Emersion subscale level means than African American females.

There were no observed differences in Encounter subscale levels by gender, which does not provide support for the hypothesis that African American males would have higher Encounter subscale levels due to their higher reported levels of racial discrimination. This may be a result of the low internal consistency of the Encounter subscale or due to the possibility that both African American males and females experience similar levels of racial discrimination. Furthermore, the extant literature may be focusing more on the ways in which African Americans experience racial discrimination (e.g., cite studies that show and compare African American males and females and their reported racial discrimination levels).

Additionally, this study provides support for the hypothesis that there would be no differences in Internalization means by gender, which is consistent with much of the extant literature (e.g., Cokley, 1999; Gardner-Kitt & Worrell, 2007; Parham & Helms, 1993; Wade, 2002; Wilson & Constantine, 1999). Out of all of the statuses, there is evidence to suggest that the Internalization status may be the most autonomous out of all of the statuses, as it was not influenced by demographic characteristics or study level variables in this study. Moreover, it

appears that the Internalization status characterizes an attitudinal status that is the most adaptive, and the least influenced by gender, racial composition of the ecological environment, and sampling methods. Given these observations, it may be that the Internalization status is less about racial identity and more about integration of personal identity or personal characteristics with racial identity.

Age. Previous literature has claimed that there is no evidence for a developmental, linear model of racial identity (Quintana, 2007; Worrell, 2008). For the most part, the results of the present study did not find age as a significant predictor of RIAS subscale levels for the Pre-Encounter, Encounter, and Internalization subscales. However, age and the quadratic age term subcritically (*p-values* = 0.067) predicted Immersion/Emersion subscale levels. Given the small *R-squared* ($R = 0.071$) and high type II error rate ($\beta = 0.46$), it is suspected that this finding would have been statistically significant with a larger sample size. As a result, there is some evidence to support the hypothesis that there would be an increase in Immersion/Emersion subscale levels through young adulthood, followed by a decrease in middle to older adulthood. This observation is consistent with Plummer's (1996) finding that Immersion/Emersion attitudes consistently decreased through middle and older adulthood, which she interpreted as a resolution of the nigrescence struggle. In the present study, the Immersion/Emersion subscale peaked at approximately 25 to 30 years of age and consistently decreased into older adulthood; it is difficult to conclude whether the Immersion/Emersion subscale exhibits a developmental trend, or if this observation is attributable to the college experience challenging racial identity development (i.e., college students had lower Immersion/Emersion scores (College I/E Mean = 1.91) as compared to their community counterparts (Community I/E Mean = 2.10)).

Summary of RIAS item means. The Pre-Encounter and Immersion/Emersion item means are centered below the midpoint of the 5-point Likert scale, and the Encounter and Internalization item means are centered above the midpoint of the 5-point Likert scale. It seems that the differing item means may be due to social desirability bias in the item wording. For instance, the Immersion/Emersion subscale includes strong and extreme wording towards Whites, such as "White people can't be trusted" and "Black people who have White people's blood should feel ashamed of it," for which agreement may be difficult to endorse. The Pre-Encounter subscale includes similarly strong wording against Blacks, such as "Most Blacks I know are failures" and "I believe that being Black is a negative experience". In both cases, the items are likely to elicit strong reactions due to the overt hostility expressed towards White or Black culture in the items.

Conversely, the Encounter and Internalization subscales appear more socially desirable. The Internalization items, such as "I am satisfied with myself" and "People regardless of their race all have limitations", are much more positive and balanced statements that are more open to agreement. The Encounter subscale items, such as "I am determined to find my Black identity" and "I feel guilty or anxious about some of the things I believe about Black people", similarly provide a positive or balanced statement. Given these observations, the differences in RIAS subscale item means may be understood based on social desirability bias based on the hostile Pre-Encounter and Immersion/Emersion item wording in contrast to the positive-to-balanced Encounter and Internalization item wording.

Study Limitations. The present study was subject to several limitations. Although the entire meta-analysis included 57 studies, only a fraction of the 57 studies were utilized in each of the aggregate omnibus effect sizes and meta-analytic regression, as many studies did not measure

all of the RIAS subscales or examine both psychological distress and psychological well-being criterion variables. Hence, most of the meta-analytic regression analyses displayed low power (i.e., high Type-II Error rate), which may explain the sparse statistically significant results, especially with analyses that included multiple moderators.

In the reliability generalization regressions, alpha was used as the dependent variable, which is subject to range-restriction, thereby attenuating effect sizes. According to Rodriguez and Maeda (2006), range-restriction adjustments to coefficient alpha are only possible when the original studies report observed score variance, and in the cases when observed score variances are reported they suggest that the variances should incorporated as a covariates as opposed to being used to make range-restriction adjustments because these types of adjustments often violate the assumption that error variance remains constant. Due to the lack of primary studies reporting observed score variance on the RIAS, the alpha generalizability regressions in the present study are limited and most likely display attenuated effect sizes, resulting from the restricted range of the dependent variable alpha.

There were only four selected studies that utilized the 60-item RIAS form, most likely resulting in inaccurate aggregate alpha estimates for the 60-item form. Although the selected studies ranged in age from 15 to 74 years of age with the 25^{th} to 75^{th} quartile ranging from 20 to 30 years of age, there were no samples with ages 50 to 70 years, which limits the generalizability of these results to populations within that age range. Moreover, over half of the selected studies included either 100% male (k = 16) or 100% female (k = 21) samples, limiting the ability to directly compare African American male and females sampled within the same context across RIAS means. Lastly, a high number of studies sampled from colleges that were HBCUs, which resulted in a strong correlation between percent African American in the sampled context and

recruitment variables (r = .33 to .57) as well as college recruitment and African American specific recruitment methods (r = .52 to .78). Although issues of multicollinearity were corrected for in the present study, further exploration of the effects of recruitment methods is needed based on these limitations.

Another limitation includes the low and varying reliability of several of the scales used in the validity analyses. Due to the nature of reliability estimates for the RIAS subscales in the study, the RIAS subscale effect sizes to validity criterion variables were most likely attenuated as the relationship to validity criterions needed to work against the decreasing alpha coefficients for several of the subscales.

Implications for the Future of Racial Identity Studies. Based on the results from the present study, it is recommended that future meta-analyses examine multiple appropriate criterion variables theoretically linked to the constructs of interest. For instance, psychological well-being and psychological distress are both criterion variables theoretically and empirically linked to racial identity statuses; however, the most robust finding of the present study concluded that some racial identity statues are positively related to maladjustment and have small or no relationships to well-being. Moreover, psychological well-being and psychological distress may not be the most appropriate outcome criteria for RIAS statuses, as the RIAS statuses may actually be theoretically linked to an individual's meaning making and sense of self, as opposed to their psychological distress or well-being levels.

Due to the low reliability, sometimes problematic item wording, and contextually bound observations on RIAS, it is also recommended that future researchers supplement the use of the RIAS with other racial/ethnic identity measures in hopes of corroborating findings from multiple theories and perspectives. For instance, the Immersion/Emersion subscale's relationship to

psychological distress yields more variability in college settings; and as a result, it may be important to further tease out the within group variability in that status within a college setting. One possible suggestion is adding Sellers' et al. (1998) Multidimensional Inventory of Black Identity (MIBI) measure, specifically the private and public regard subscales, to supplement and further understand the within group variability within the Immersion/Emersion subscale. By the same stroke, researchers are encouraged to further explore the adaptable qualities within each of the statuses (e.g., bridging, buffering, etc.), as each RIAS status is conceptualized as a situationally-based lens through which individual perceive their world, all of which should have positive benefits.

Given the absolute item wording resulting in the skewed Pre-Encounter and Immersion/Emersion subscales, it does not appear that the RIAS is a reliable, or precise, enough of a measure for accurate profile analyses. Given that profile analysis is growing in the Counseling Psychology field and is constructed using multiple subscales, it is important to interpret profile analyses within the context of compounded measurement error and examine the alpha coefficients each of the subscales for the given sample. Although RIAS profile analysis is a direction that could be fruitful in understanding an individual's racial profile, it appears that a revision of the RIAS instrument with more precise wording that aims to capture the meaning making and sense of self established within each status is the next step in the RIAS development.

In making revisions to the RIAS, it may be beneficial to revise the double-barreled items, eliminate the cross-loading of items on RIAS subscales (e.g., EN and I/E & EN and INT), reduce absolute item wording, and tease out attitudinal, behavioral, cognitive, and emotional components of each status. Although the RIAS is stated to be an attitudinal measure, it also assesses both behaviors and emotional responses. It may be of benefit to expand the RIAS to

include cognitive, behavioral, and emotional components. Each of the RIAS statuses are quite complex and involve unique ways of perceiving racial discrimination, emotionally reacting to racial discrimination, coping with racial discrimination, and reinforcing cognitive self-beliefs by racial discrimination. Moreover, the Encounter subscale, which has the lowest internal consistency, might be measuring components of the Encounter status, as it is conceptualized; if revised, the Encounter subscale may benefit from a larger focus on assessing the larger emotional theme of being in a state of shock or confusion, as s/he starts to see him/herself as a member of the African American racial group. It is through this more fine tuned and precise way of measuring the quality of racial identity that researchers may be able to explore the meaning-making processes behind each of the statuses, and the situations in which each status is implored.

Based on the fact that internal consistency is a property of specific populations under the unique conditions sampled, it is encouraged for future meta-analyses to consider conducting alpha generalizability analyses. This allows for researchers to explain variance in their results based on the varying level of internal consistency estimates from differing demographic or sampling methods in the selected studies. In the present study, RIAS validity relationships were most likely attenuated as Encounter subscale reliability coefficients decreased with more recent cohorts and more accurate as the Immersion/Emersion subscale alpha coefficient increased with more recent studies. It is also important to consider contextual variables that affect the ways in which racial identity operates, such that the same racial identity status may yield differing consequences and may differ in adaptability in different contexts; this is reflected in the significant moderator tests on the RIAS validity relationships as well as the varying internal consistency levels based on contextual variables. Lastly, it is recommended that future meta-

analyses examine the effects of multiple moderators on omnibus effect sizes in efforts to more thoroughly examine the interaction of demographic and study variables.

Implications for conceptualizing racial identity studies. African American racial identity development was the first race specific model, upon which many of the conceptualizations and trajectories of other race-specific models are derived, and the present study most likely highlights similar measurement and theoretical issues within the literature of other racial group identity development (e.g., Kim's (1981, 2001) Asian American Identity Development Model, Atkinson, Morten, and Sue's (1979, 1989, 1993, 1998) Racial and Cultural Identity Development Model, Helm's (1995) White Identity Development Model, Fredman and Gallego's (2001) Model of Latino Identity Development, and Horse's (2001) American Indian Identity Development). Many of the race specific theories pose movement from a de-identified racial status through a pro-race status and then to an integrated status, in which individuals maintain personal pride in their race but are able to interact with members of other racial groups. Therefore, future researchers are encouraged to see the racialization process from both emic and etic perspectives and look to other race-specific literatures in hopes of identifying common ways in which different statuses may lead to increased meaning-making and understandings of self based on situationally-based contexts.

There are several differences in the ways scholars have attempted to conceptualize the racial development of other racial groups. Studies conducted on other racial groups often utilize acculturation theory (Berry, 2004), the ethnic identity perspective (Phinney, 1992), which is the degree to which individuals perceive themselves to be included and aligned with an ethnic group, in conjunction with a cultural values orientation (Carter, 1991; Sue & Sue, 2002; Yeh, Carter & Pieterse, 2004), which identifies particular cultural worldviews that tend to differ among

racial/ethnic groups (e.g., time orientation, subjugation to/mastering nature, collectivistic/independent, etc.). Ethnic identity is a psychologically important construct, as it provides individuals in marginalized groups recognition of positive virtues of their own ethnic group, and thereby minimizing the effects of negative societal beliefs (e.g., Outten, Schmitt, Garcia, & Brandscombe, 2009). Ong et al. (2006) describe ethnic identity as "a process of exploring the implications of one's ethnicity and coming to understand and affirm one's membership in an ethnic group (p. 963). Moreover, the cultural values orientation is an extention of the ethnic identity perspective and offers further specificity in the specific values and the degree to which an individual in a racial/ethnic group adheres to these values (e.g., collectivism, orientation to time, relationship with environment, etc.). Lastly, the concept of biculturalism, or bicultural competence, (Lafromboise, Coleman, & Gerton, 1993) from the acculturation literature highlights a mode by which individuals from racial/ethnic groups are able to learn how to navigate two different cultural worlds.

Although a controversial point, it does appears that the biculturalism models, ethnic identity models, and racial identity models derived from the Cross model have overlapping conceptual grounds. In the face of racial opposition and denigration, one method of coping for members of racial/ethnic groups is to identify with one's ethnic/racial group, which provides social support as well as an affirmation of the values and beliefs of one's ethnic/racial group, and learn to navigate living in both one's heritage cultural world and the majority environment. The ethnic identity construct focuses mainly on the adherence to ethnic group membership, which also appears to be the main construct that the Internalization subscale is measuring. Used in conjunction, racial identity, ethnic identity, and biculturalism theories may provide a fuller picture of how members of racial/ethnic groups respond to discrimination and the consequences

as well as implications related to utilizing differing coping mechanisms (e.g., statuses, in-group identification, etc.).

While the ethnic identity paradigm highlights in-group affiliation, the Cross' racial identity model includes both in-group affiliation and the cognitive as well as emotional responses related to dealing with racial discrimination. While the ethnic identity theory and measures, namely the Multi-Ethnic Identity Measure (MEIM: Phinney, 1992), tap into in-group affiliation more reliably and directly as compared to the racial identity models, the acculturation literature focuses on the ways in which individuals are able to develop an ability to be of and navigate both worlds. Furthermore, the RIAS provides an added component of the emotional consequences (e.g., confusion, anger, etc.) and cognitive lens through which individuals perceive racial discrimination, which is not present in the other theories' measures. Although the ethnic identity, racial identity, and acculturation paradigms are born out of different traditions and have been viewed as disparate theories, the collaboration between the three conceptualizations may facilitate movement in the field to further examine, and tease out the responses and consequences of racial/ethnic group members to racial discrimination. In some ways, the ethnic identity, racial identity, and acculturation theories are similar and different, but may be glimpses of a larger single phenomenon, such that the most adaptive response in all paradigms appears to be having a sense of group membership while being able to navigate differing cultural worlds.

Practice Implications. Based on the variability observed in the main effects and moderator analyses, practitioners are encouraged to consider within-group variability in the African American population. More notably, racial identity statuses are fluid in that they change based on the situation and context in which they are required. For instance, a practitioner may conceptualize an African American client to be in a certain status, which the practitioner may

attribute as the reason the client is in distress; however, it is important to keep in mind that racial identity statuses are context dependent, and that the cultural context of the therapy setting may call for a certain racial identity status. Furthermore, the most adaptable racial identity status appears to be the Internalization status, as it seemed to be idiosyncratic of contextual and/or demographic variables in the present study. Based on the results of this study, it seems that African American individuals that have a sense of connection to their racial group and exercise biculturalism and flexibility in their coping responses tended to have higher levels of psychological functioning, measured by higher levels of psychological well-being and lower levels of psychological distress, compared to the processes of any other racial identity status. Moreover, racial identity is a meaning making process, which does not appear to be fully captured by the extant racial identity literature and measures. It will be increasingly important for practice to inform research, as the ways in which an individual's coping methods and perception of discrimination influence his/her sense of self as a cultural being is not fully understood. Hence, practitioners are encouraged to focus on biculturalism and diversifying coping resources when working with African Americans that struggle in coping with racial discrimination to further the study and understanding of racial identity.

Conclusion. The results of the present study identified some criterion validity issues with the RIAS instrument, such that most subscales were not positively associated with psychological well-being. All subscales were positively related to maladjustment, except for the Internalization subscale, which was negatively correlated with maladjustment and positively associated with psychological well-being. The aggregate omnibus effect sizes between RIAS subscales and psychological criterion variables displayed a range of magnitudes from small to medium. Some of the omnibus effect sizes were moderated by percent of African American in the sampled

context, study recruitment method, and cohort year. Furthermore, the Encounter subscale alpha coefficient was below what is considered acceptable levels of internal consistency criterion and alpha coefficients for the Pre-Encounter and Immersion/Emersion subscales were moderated by RIAS form. The RIAS 50-Item form yielded the highest internal consistencies and most theoretically accurate RIAS subscale intercorrelations. The highest interrecorrelation between RIAS subscales was observed between the Encounter subscale and Immersion/Emersion subscale, which is consistent with theory. Overall, the Internalization subscale proved to be the most autonomous status, as it was not moderated by any of the study or demographic variables, which is theoretically similar to the concept of biculturalism in the acculturation literature. Lastly, RIAS subscale average item means were not centered, which is likely related to social desirability bias in item wording.

References

Aboud, F. E. (1988). *Children and prejudice*. New York, NY: Basil Blackwell.

Adam, M. (1994). The Pioneer Fund: Bankrolling the professors of hate. *The Journal of Blacks in Higher Education, 6*(3), 58–61.

Ahijevych, K., & Bernhard, L. (1994). Health-promoting lifestyles of African American women. *Nursing Research, 43*, 86-89.

Airhihenbuwa, C., Kumanyika, S., Agrus, T., & Lowe, A. (1995). Perceptions and beliefs about exercise, rest, and health among African Americans. *American Journal of Health Promotion, 9*, 426-429.

Akbar, N. (1984). *The Chains and Images of Psychological Slavery*. Jersey City, NJ: New Mind Productions.

Akbar, N.A. (1996). *Breaking the Chains of Psychological Slavery*. Tallahassee, FL: Mind Productions & Associates.

Alejandro-Wright, M. N. (1985). The child's conception of racial classification: A socio-cognitive model. In W. R. Allen, G. K. Brookins, & M. B. Spencer (Eds.), Beginnings: *The social and affective development of Black children* (pp. 185-200). Hillsdale, NJ: Lawrence Erlbaum.

Altschul, I., Oyserman, D., & Bybee, D. (2006). Racial-ethnic identity in mid-adolescence: Content and change predictors of academic achievement. *Child Development, 77*(5), 1155-1169.

Alvarez, A. (1996). Asian American racial identity: An examination of world views and racial adjustment (Doctoral dissertation, University of Maryland, College Park, 1996). *Dissertation Abstracts International, 57*, Z6554.

Alexander, M. (2012). *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*. New York: New Press.

Anderson, L. P. (1991). Acculturative stress: A theory of relevance to Black Americans. *Clinical Psychology Review, 11,* 685-702.

Anglin, D. M., & Wade, J. C. (2007). Racial socialization, racial identity, and Black students' adjustment to college. *Cultural Diversity And Ethnic Minority Psychology, 13*(3), 207-215. doi:10.1037/1099-9809.13.3.207

Apple, M.W., & Beane, J.A. (2007). *Democratic Schools: Lessons in Powerful Education* (2nd edition). NH: Heinemann.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. American Psychologist, 55, 469– 480. doi:10.1037/0003-066X.55.5.469

Austin, C. (2006). *Up Against the Wall*. Fayetteville: University of Arkansas Press.

Austin, N.L., Carter, R.T., & Vaux, A. (1990). The role of racial identity in Black students' attitudes towards counseling and counseling centers. *Journal of College Student Development, 31*, 237-243.

Awad, G.H. (2007). The role of racial identity, academic self-concept, and self-esteem in the prediction of academic outcomes for African American students. *Journal of Black Psychology, 33*(2), 188-207.

Ayalon, L., & Gum, A. M. (2011). The relationships between major lifetime discrimination, everyday discrimination, and mental health in three racial and ethnic groups of older adults. *Aging & Mental Health, 15*(5), 587-594. doi:10.1080/13607863.2010.543664

*Baker, B.L. (1999). *The relationship of unipolar depression to racial identity, self-esteem, and*

academic achievement in young, Black males between ages 18 and 24 years. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Baldwin, J.A. (1979). Theory and research concerning the notion of Black self-hatred: A review and reinterpretation. *Journal of Black Psychology, 5*(2), 51-77

Baldwin, J.A. (1980). The psychology of oppression. In M.K. Asante & A. Vandi (Eds.), *Contemporary black thought* (pp. 131-147). Beverley Hills, CA: Sage.

Banks, K.H., & Kohn-Wood, L.P. (2007). The influence of racial identity profiles on the relationship between racial discrimination and depressive symptoms. *Journal of Black Psychology, 33*(3), 331-354.

Barbujani, G., Magagni, A., Minch, E., & Cavalli-Sforza, L.L. (1997). An apportionment of human DNA diversity. *Proceedings of the National Academy of Sciences, 94*(9), 4516-4519.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.

*Bazelais, K.N. (2011). *Triple jeopardy: Race-related stress, racial identity, coping patterns, and psychological distress among elderly African American women*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Belgrave, F. Z., Brome, D., & Hampton, C. (2000). The contribution of afrocentric values and racial identity to the prediction of drug knowledge, attitudes, and use among African American youth. *Journal of Black Psychology, 26*(4), 386-401. doi:10.1177/0095798400026004003

Benes, F.M., Turtle, M., Khan, Y., Farol, P. (1994). Myelination of a key relay zone in the

hippocampal formation occurs in the human brain during childhood, adolescence, and adulthood. *Archives of General Psychiatry, 51*, 477-484.

Benjamin, J.T. Jr. (2007). *A Brief History of Modern Psychology*. New Jersey: Blackwell Publishing.

Bennett, M. D., Jr. (2006a). Cultural resources and school engagement among African American youths: The role of racial socialization and ethnic identity. *Children & Schools, 28*(4), 197–206.

Bennett, M. D., Jr. (2006b). Culture and context: A study of neighborhood effects on racial socialization and ethnic identity in a sample of African American adolescents. *Journal of Black Psychology, 32*, 479–500.

Bennett, M.D. Jr. (2007). Racial socialization and ethnic identity: Do they offer protection against problem behaviors for African American youth? *Journal of Human Behavior in the Social Environment, 15*(2/3), 137-161.

Bernal, M., & Knight, G. (1997). Ethnic identity of Latino children. In J. Garcìa & M. Zea (Eds.), *Psychological interventions and research with Latino populations* (pp. 15 – 38). Newton, MA: Allyn & Bacon.

Berry, J.W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review, 46,* 5–34.

Bisaga, K., Whitaker, A., Davies, M., Chuang, S., Feldman, J., & Walsh, B.T. (2005). Eating disorder and depressive symptoms in urban high school girls from different ethnic backgrounds. *Journal of Developmental and Behavioral Pediatrics. 26,* 257–267.

Bobko, P., Roth, P. L., & Potosky, D. (1999). Derivation and implications of a meta-analytic

matrix incorporating cognitive ability, alternative predictors, and job performance. *Personnel Psychology, 62*, 561–589.

Bond, S., & Cash, T.F. (1992). Black beauty: Skin color and body images among African American college women. *Journal of Applied Social Psychology, 22*, 874-888.

Borenstein, M. (2009). Effect sizes for continuous data. In H. M. Cooper, L. V. Hedges, & J. C. Valentine (Eds.), *The handbook of research synthesis and meta-analysis* (2nd ed., pp. 221–235) .New York, NY: Russell Sage Foundation.

Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2010). A basic introduction to fixed effect and random effects models for meta-analysis. *Research Synthesis Methods, 1*, 97-111.

Bourdieu, P. (1997). The forms of capital. In A.H. Halsey, H. Lauder, P. Brown, and A. S. Wells (Eds.), *Education: Culture, economy, and society* (pp. 40–58). Oxford, England: Oxford University Press.

*Bowman Heads, A.M. (2009). *Perfectionism and its relationship to racial identity, satisfaction with life, stress and coping*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Bradburn, N. M., & Caplovitz, D. (1965). *Reports on happiness*. Chicago: Aldine.

Braman, D. (2004). *Doing Time on the Outside: Incarceration and Family Life in Urban America*. Ann Arbor: University of Michigan Press.

Branch, C.W. (2001). The many faces of self: Ego and ethnic identities. *The Journal of Genetic Psychology, 162*(4), 412-429.

Brewer, M.B. (2001). Ingroup identification and intergroup conflict: When does ingroup love

become outgroup hate? In R. Ashmore, L. Jussim, & D. Wilder (Eds.) *Social Identity, Intergroup Conflict, and Conflict Reduction*. New York: Oxford Univ. Press.

Brewer, M.B. (2007). The importance of being we: Human nature and intergroup relations. *American Psychologist, 62*, 728-738.

*Britton, E.M. (2001). *Looking good: African American women and eating disorders*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Brondolo, E., ver Halen, N. B., Pencille, M., Beatty, D., & Contrada, R. J. (2009). Coping with racism: A selective review of the literature and a theoretical and methodological critique. *Journal of Behavioral Medicine, 32*(1), 64-88. doi:10.1007/s10865-008-9193-0

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist, 32*, 513-531.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.

Brookins, C.C., Anyabwile, T.M., & Nacoste, R. (1996). Exploring the links between racial identity attitudes and psychological feelings of closeness in African American college students. *Journal of Applied Social Psychology, 26*(3), 243-264.

*Bryant, M.L. (2009). *A comparative study between black and white university students*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Bryant-Davis, T., & Ocampo, C. (2005). The trauma of racism: Implications for counseling, research, and education. *The Counseling Psychologist, 33*(4), 574-578. doi:10.1177/0011000005276581

*Buckley, T.B., & Carter, R.T. (2005). Black adolescent girls: Do gender role and racial identity: Impact their self-esteem? *Sex Roles, 53*(9/10), 647-661.

Burrow, A. L., & Ong, A. D. (2010). Racial identity as a moderator of daily exposure and reactivity to racial discrimination. *Self and Identity, 9*(4), 383-402.

Byars-Winston, A., Estrada, Y., Howard, C., Davis, D., & Zalapa, J. (2010). Influence of social cognitive and ethnic variables on academic goals of underrepresented students in science and engineering: A multiple-groups analysis. *Journal of Counseling Psychology, 57*(2), 205-218. doi:10.1037/a0018608

Byrd, C. M. (2012). The measurement of racial/ethnic identity in children: A critical review. *Journal of Black Psychology, 38*(1), 3-31. doi:10.1177/0095798410397544

Bulhan, H. A. (1985). *Frantz Fanon and the psychology of oppression*. New York: Plenum.

Caldwell, C. H., Zimmerman, M. A., Bernat, D. H., Sellers, R. M., & Notaro, P. C. (2002). Racial identity, maternal support, and psychological distress among African American adolescents. *Child Development, 73*, 1322–1336.

*Campbell, D.B. (1996). *The fear of success and its relationship to racial identity attitudes and achievement behaviors in Black males*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

*Caples, S.L. (2008). *Measuring up: An examination of the impact of racial identity schema, feminist attitudes, and socio-economic status on body image attitudes among Black women*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Carson, E.A., & Sabol, W. J. (2012). *Prisoners in 2011*. Washington, DC: U.S. Department of Justice.

Carter, R. T. (1991). Racial identity attitudes and psychological functioning. *Journal of Multicultural Counseling And Development, 19*(3), 105-114.

Carter, R. T. (2007). Racism and psychological and emotional injury: Recognizing and

assessing race-based traumatic stress. *Counseling Psychologist, 35*, 13–105.

Carter, R. T., & Helms, J. E. (1987). The relationships of Black value-orientation to racial identity attitudes. *Measurement and Evaluation in Counseling and Development, 19,* 185-195.

*Carter, R. T., DeSole, L., Sicalides, E. I., Glass, K., & Tyler, F. B. (1997). Black racial identity and psychosocial competence: A preliminary study. *Journal of Black Psychology, 23*(1), 58-73. doi:10.1177/00957984970231006

Carter, R. T., & Reynolds, A. L. (2011). Race-related stress, racial identity status attitudes, and emotional reactions of Black Americans. *Cultural Diversity And Ethnic Minority Psychology, 17*(2), 156-162. doi:10.1037/a0023358

*Carter, R. T., Williams, B., Juby, H. L., & Buckley, T. R. (2005). Racial identity as mediator of the relationship between gender role conflict and severity of psychological symptoms in Black, Latino, and Asian men. *Sex Roles, 53*(7-8), 473-486.

Chavous, T. M., Rivas-Drake, D., Smalls, C., Griffin, T., & Cogburn, C. (2008). Gender matters too: The influence of school discrimination and racial identity on academic disengagement outcomes among African American adolescents. *Developmental Psychology, 44*, 637–654.

Chen, S.X., Benet-Martínez, V., & Bond, M.H. (2008). Bicultural identity, bilingualism, and psycho- logical adjustment in multicultural societies: Immigration-based and globalization-based acculturation. *Journal of Personality, 76*, 803–838.

Cheng, H., & Furnham, A. (2003). Personality, self-esteem, and demographic predictions of happiness and depression. *Personality and Individual Differences, 34*(6), 921–942.

Cheng, H., Kwan, K., & Sevig, T. (2013). Racial and ethnic minority college students' stigma

associated with seeking psychological help: Examining psychocultural correlates. *Journal of Counseling Psychology, 60*(1), 98-111. doi:10.1037/a0031169

Chugani, H.T., Phelps, M.E., and Mazziotta, J.C. (1987). Positron emission tomography study of human brain functional development. *Annals of Neurology, 22*, 487–497.

Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American Psychologist, 54*, 805–816.

Clark, K.B., & Clark, M.P. (1939). The development of self and the emergence of racial identification in Negro pre-school children. *Journal of Social Psychology*, *10*, 591-599.

Clark, K.B., & Clark, M. P. (1947). Racial identification and preference among negro children. In E. L. Hartley (Ed.) *Readings in Social Psychology*. New York: Holt, Reinhart, and Winston.

Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in scale development. *Psychological Assessment, 7*, 309–319.

*Coard, S.I. (1997). *Perceptions of and preferences for skin color, Black racial identity, and self-esteem among African Americans*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Cochran, S. V., & Rabinowitz, F. E. (2003). Gender-sensitive recommendations for assessment and treatment of depression in men. *Professional Psychology: Research And Practice, 34*(2), 132-140. doi:10.1037/0735-7028.34.2.132

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Cokley, K.O. (1999). Reconceptualizing the impact of college racial composition on African American students' racial identity. *Journal of College Student Development, 40*(3), 235-

241.

Cokley, K. O. (2001). Gender differences among African American students in the impact of racial identity on academic psychosocial development. *Journal of College Student Development, 42*, 480–487.

Cokley, K. O. (2002). Testing Cross's revised racial identity model: An examination of the relationship between racial identity and internalized racialism. *Journal of Counseling Psychology, 49*, 476–483.

Cokley, K.O. (2007). Issues in the measurement o ethnic and racial identity: A referendum on the state of the field. *Journal of Counseling Psychology, 54*(3), 224-234.

Cokley, K.O., & Vandiver, B.J. (2011). Ethnic and racial identity. In E.M. Altmaier & J.C. Hansen (Eds.) *The Oxford Handbook of Counseling Psychology*. London: Oxford University Press.

Cokley, K.O., & Williams, W. (2005). A psychometric examination of the Africentric Scale: Challenges in measuring Afrocentric values. *Journal of Black Studies, 35*(6), 827-843. doi:10.1177/0021934704266596

Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, F., Mood, A. M., Weinfeld, F. D., et al. (1966). *Equality of educational opportunity*. Washington, DC: U.S. Government Printing Office.

*Collins, K.W., & Lightsey, O.R. Jr. (2001). Racial identity, generalized self-efficacy, and self-esteem: A pilot study for a mediation model for African American women. *Journal of Black Psychology, 27*(3), 272-287.

Cooley, C.H. (1922). The social self: The meaning of "I". In *Human Nature and the Social Order* (pp. 168-210). New York: Charles Scribner's Sons.

Cooper, H. M. (2009). *Research synthesis and meta-analysis*. Thousand Oaks, CA: Sage.

Cooper, H. M., Hedges, L. V., & Valentine, J. C. (2009). *The handbook of research synthesis and meta-analysis* (2nd ed.). New York, NY: Russel Sage Foundation.

*Cosby, M. C. (1999). *The influence of racial identity development and locus of control on career self-efficacy of African American adolescents*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Coutinho, M. J., & Oswald, D. P. (2000). Disproportionate representation in special education: A synthesis and recommendations. *Journal of Child and Family Studies, 9(2)*, 135–156.

Cramer, P. (1979). Defense mechanisms in adolescence. *Developmental Psychology, 15*, 416-41

*Croasdale, A., & Mate-Kole, C. (2006). Racial Identity Development and Psychological Adjustment Among African American Drug Users. *Humboldt Journal of Social Relations, 30*(2), 68-88.

Crocker, J., & Wolfe, C. T. (2001). Contingencies of Self-Worth. *Psychological Review, 108*, 593-623.

Cronbach, L.J., & Shavelson, R.J. (2004). My current thoughts on coefficient alpha and successor procedures. *Educational and Psychological Measurement, 64*(3), 391-418.

Cross, W.E., Jr. (1971). The Negro-to-Black conversion experience: Toward a psychology of Black liberation. *Black World, 20*(9), 13-27.

Cross, W. E., Jr. (1991). *Shades of Black*. Philadelphia: Temple University Press.

Cross, W. E., Jr. (1995). The psychology of Nigrescence: Revising the Cross Model. In J. G. Ponterotto, J. M. Casas. L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 93-122). Thousand Oaks, CA: Sage.

Cross, W.E., & Cross, T.B. (2007). Theory, research, and models. In S.M. Quintana and C. McKown (Eds.) *Handbook of Race, Racism, and the Developing Child*. New Jersey: Wiley Publishers.

Cross, W. E., Parham, T. A., & Helms, J. E. (1991). The stages of Black identity development: Nigrescence models. In R. L. Jones (Ed.), *Black psychology* (pp. 319-338). Berkeley, CA: Cobb & Henry.

Cross, W., Jr., & Vandiver, B. J. (2001). Nigrescence theory and measurement: Introducing the Cross Racial Identity Scale (CRIS). In J. G. Ponterotto, J. Casas, L. A. Suzuki, C. M. Alexander (Eds.), *Handbook of multicultural counseling* (2nd ed.) (pp. 371-393). Thousand Oaks, CA US: Sage Publications, Inc.

*Crow, G.M. (2002). *A structural analysis of depression and its relationship to perfectionism, self-esteem, and racial identity in African American college students*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Cokley, K.O. (1999). Reconceptualizing the impact of college racial composition on African American students' racial identity. *Journal of College Student Development, 4*, 235-246.

Cokley, K. O. (2002). Testing Cross's revised racial identity model: An examination of the relationship between racial identity and internalized racism. *Journal of Counseling Psychology, 49*(4), 476-483.

Cokley, K., & Williams, W. (2005). A psychometric examination of the Africentrism Scale: Challenges in measuring Africentric values. *Journal of Black Studies, 35*, 827–843.

Cooper, C. R., García Coll, C. T., Bartko, W. T., Davis, H. & Chatman, C. (Eds). (2005). *Developmental Pathways through Middle Childhood: Rethinking Contexts and Diversity as*

Resources. Mahwah, NJ: Lawrence Erlbaum Associates.

*Dartson, M. V. (1999). *Racial identity attitudes and self-esteem of African–American college students at a historically Black college and a historically White university*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

David, D.S. & Brannon, R. (1976). *The forty-nine percent majority: The male sex role*. Boston: Addison-Wesley.

Deaux, K. (1985). Sex and gender. *Annual Review of Psychology, 36*, 49-81.

Diener, E., & Emmons, R. A. (1984). The independence of positive and negative affect. *Journal of Personality and Social Psychology, 47*(5), 1105–1117.

DeVries, R. (1969). Constancy of generic identity in the years three to six. *Monographs of the Society of Research in Child Development, 34*(3).

*Dickerson-Dorsey, M.L. (2007). *The influence of African centered rites of passage on racial identity and psycho-social competency on African American adolescent females*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

DiMatteo, M. R., Lepper, H. S., & Croghan, T. W. (2000). Depression is a risk factor for noncompliance with medical treatment: Meta-analysis of the effects of anxiety and depression on patient adherence. *Archives of Internal Medicine, 160*, 2101–2107.

Du Bois, W. E. B. (1903). *The Souls of Black Folk*. Chicago: A.C. McClurg & Co.

*Dudley, A.F. (2011). *A quantitative study of the relationship between racial discrimination and racial-ethnic identity development of Black men*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Dulmus, C. N., & Hilarski, C. (2006). Significance of Gender and Age in African American

Children's Response to Parental Victimization. *Health & Social Work, 31*(3), 181-188. doi:10.1093/hsw/31.3.181

Elion, A. A., Wang, K. T., Slaney, R. B., & French, B. H. (2012). Perfectionism in African American students: Relationship to racial identity, GPA, self-esteem, and depression. *Cultural Diversity And Ethnic Minority Psychology, 18*(2), 118-127. doi:10.1037/a0026491

*Ellis, C.A. (2000). *Racial identity, acculturation, self-esteem and depression in a sample of Black adolescent females*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Elmore, C.A., Mandara, J., & Gray, L. (2012). The effects of racial identity on African American youth well-being: A clarification of the research and meta-analysis. In J.M. Sullivan and A.M. Esmail (Eds.) *African American identity: Racial and Cultural Dimensions of the Black Experience*. New Jersey: Lexington Books.

Erikson, E. (1950). *Childhood and society*. New York: Norton.

Erikson, E. (1964). Inner and outer space: Reflections on womanhood. In R. J. Lifton (Ed.), *The woman in America* (pp. 1-26). Boston: Beacon Press.

Erikson, E. (1968). *Identity: Youth and crisis*. New York: Norton.

Feldt, L. S. (1965). The approximate sampling distribution of Kuder– Richardson reliability coefficient twenty. *Psychometrika, 30*, 357–370.

Fhagen-Smith, P.E., Vandiver, B.J., Worrell, F.C., & Cross, W.E.Jr. (2010). (Re) Examining racial identity differences across socioeconomic status community of origin, and gender among African American college students. *Identity: An International Journal of Theory and Practice, 10*, 164-180.

*Finley, T.L. (2012). *Black racial identity and internalized racism: Their relationship to depression in Black deaf college students*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Fischer, A.R., Tokar, D.M., & Serna, G.S. (1998). Validity and construct contamination of the Racial Identity Attitudes Scale – Long Form. *Journal of Counseling Psychology, 45*(2), 212-224.

Fisher, C. B., Wallace, S. A., & Fenton, R. E. (2000). Discrimination distress during adolescence. *Journal of Youth and Adolescence, 29*, 679–695. doi:10.1023/A:1026455906512

Flowers, K. C., Levesque, M. J., & Fischer, S. (2012). The relationship between maladaptive eating behaviors and racial identity among African American women in college. *Journal of Black Psychology, 38*(3), 290-312.

Ford, J. D. (2008). Trauma, posttraumatic stress disorder, and ethnoracial minorities: Toward diversity and cultural competence in principles and practices. *Clinical Psychology: Science and Practice, 15*, 62–67.

*Ford, R.P. (2000). *Racial socialization and identity: Implications for the mental health of African American college students*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Fordham, S., & Ogbu, J.U. (1986). Black school success: Coping with the burden of "acting White." *The Urban Review, 18*(3), 176-206.

Forman, T. A., Williams, D. R., & Jackson, J. S. (1997). Race, place, and discrimination. *Perspectives on Social Problems, 9*, 231–261.

*Forsyth, J.M. (2010). *The influence of racial identity and racism-related coping on mental*

health Black Americans. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

*Forsyth, J., & Carter, R. T. (2012). The relationship between racial identity status attitudes, racism-related coping, and mental health among Black Americans. *Cultural Diversity And Ethnic Minority Psychology, 18*(2), 128-140.

Foucault, M. (1975). *Discipline & Punish* (A. Sheridan, Trans.). New York: Vintage Books.

*Franklin-Jackson, D., & Carter, R. T. (2007). The relationships between race-related stress, racial identity, and mental health for Black Americans. *Journal of Black Psychology, 33*(1), 5-26.

French, S., Seidman, E., Allen, L., & Aber, J. (2000). Racial/ ethnic identity, congruence with the social context, and the transition to high school. *Journal of Adolescent Research, 15*, 587 – 602.

Freud, S. (1933). The psychology of women. In J. Strachey (Ed.), *The standard edition of the complete works of Sigmund Freud* (Vol. 22, p. 3). London: Hogarth Press.

Fuller-Rowell, T. E., Burrow, A. L., & Ong, A. D. (2011). Changes in racial identity among African American college students following the election of Barack Obama. *Developmental Psychology, 47*(6), 1608-1618. doi:10.1037/a0025284

Fuller-Rowell, T. E., Cogburn, C. D., Brodish, A. B., Peck, S. C., Malanchuk, O., & Eccles, J. S. (2012). Racial discrimination and substance use: Longitudinal associations and identity moderators. *Journal of Behavioral Medicine, 35*(6), 581-590. doi:10.1007/s10865-011-9388-7

Fuster, J.M. (2001). The prefrontal cortex – An update: Time is of the essence. *Neuron, 30*, 319-333.

Gardner-Kitt, D.L., & Worrell, F.C. (2007). Measuring nigrescence attitudes in school-aged adolescents. *Journal of Adolescence, 30*, 187-202.

Garvey, M. (1986). *The philosophy and opinions of Marcus Garvey on Africa for the Africans*. Dover (Massachusetts): Majority Press. p. 163.

Ghee, K.L. (1990). The psychological importance of self-definition and labeling: Black versus African American. *Journal of Black Psychology, 17,* 75-93.

*Gilbert, S.C., So, D., Russell, T.M., & Wessel, T.R. (2006). Racial identity and psychological symptoms among African American attending a Historically Black University. *Journal of College Counseling, 9*(3), 111-122.

Gimenez, M., & Harris, P.L. (2002). Understanding constraits on inheritance: Evidence for biological thinking in early childhood. *British Journal of Developmental Psychology, 20*, 307-324.

Gloria, A.M., & Hird, J.S. (1999). Influences of ethnic and nonethnic variables on the career decision-making self-efficacy of college students. *The Career Development Quarterly, 48*, 157-174.

Gonzales, P. M., Blanton, H., & Williams, K. J. (2002). The effects of stereotype threat and double-minority status on the test performance of Latino women. *Personality And Social Psychology Bulletin, 28*(5), 659-670. doi:10.1177/0146167202288010

*Goodstein, R., & Ponterotto, J. (1997). Racial and ethnic identity: Their relationship and their contribution to self-esteem. *Journal of Black Psychology, 23*, 275–292.

Gray-Little, B., & Hafdahl, A. R. (2000). Factors influencing racial comparisons of self-esteem: A quantitative review. *Psychological Bulletin, 126*, 26–54.

Greene, M. L., Way, N., & Pahl, K. (2006). Trajectories of perceived adult and peer

discrimination among Black, Latino, and Asian American adolescents: Patterns and psychological correlates. *Developmental Psychology, 42,* 218–238. doi:10.1037/0012-1649.42.2.218

Grothe, K. B., Bodenlos, J. S., Whitehead, D., Olivier, J., & Brantley, P. J. (2008). The psychosocial vulnerability model of hostility as a predictor of coronary heart disease in low-income African Americans. *Journal of Clinical Psychology in Medical Settings, 15*(2), 163-169. doi:10.1007/s10880-008-9112-0

Guthrie, R.V. (2004). *Even the rat was white: A historical view of psychology*. New Jersey: Pearson.

Hagiwara, N., Kashy, D. A., & Cesario, J. (2012). The independent effects of skin tone and facial features on Whites' affective reactions to Blacks. *Journal Of Experimental Social Psychology, 48*(4), 892-898.

Hakstian, A. R., & Whalen, T. E. (1976). A k-sample significance test for independent alpha coefficients. *Psychometrika, 41*, 219 – 231.

*Halgunseth, L. C., Ispa, J. M., Csizmadia, A., & Thornburg, K. R. (2005). Relations Among Maternal Racial Identity, Maternal Parenting Behavior, and Child Outcomes in Low-Income, Urban, Black Families. *Journal of Black Psychology, 31*(4), 418-440. doi:10.1177/0095798405275272

Hall, W.S., Freedle, R., & Cross, W.E. (1972). *Stages in the development of a Black identity* (ACT research report No. 50). Iowa City: The American Testing Program, Research and Development Division.

Harrell, S. P. (2000). A multidimensional conceptualization of racism- related stress:

Implications for the well-being of people of color. *American Journal of Orthopsychiatry, 70,* 42–57.

Headey, B., Kelley, J., & Wearing, A. J. (1993). Dimensions of mental health: Life satisfaction, positive affect, anxiety, and depression. *Social Indicators Research, 29*, 63–82.

Heard, E., Whitfield, E. K., Edwards, C. L., Bruce, M. A., & Beech, B. M. (2011). Mediating effects of social support on the relationship among perceived stress, depression, and hypertension in Africa Americans. *Journal of the National Medical Association, 103*, 16–122.

Hedges, L. V., & Olkin, I. (1985). *Statistical methods for meta-analysis*. Orlando, FL: Academic Press.

Hedges, L. V., & Vevea, J. L. (1998). Fixed- and random-effects models in meta-analysis. *Psychological Methods, 3*, 486-504.

Helms, J. E. (1984). Toward a theoretical explanation of the effects of race on counseling. *The Counseling Psychologist, 12*, 153-165.

Helms, J.E. (1986). Toward a methodology for measuring and addressing racial identity as distinguished from ethnic identity. In G. Sodowsky, and J. Impara (Eds.), *Multicultural assessment in counseling and clinical psychology* (pp. 285-311). Lincoln, NE: Buros Institute of Mental Measurement.

Helms, J.E. (1989). Considering some methodological issues in racial identity counseling research. *The Counseling Psychologist, 17*, 227-252.

Helms, J. E. (Ed.). (1990). *Black and White racial identity: Theory, research, and practice*. Westport, CT: Greenwood.

Helms, J. E. (1990b). An overview of Black racial identity theory. In J. E. Helms (Ed.),

Black and White racial identity: Theory, research, and practice (pp. 9–32). Westport, Conn: Praeger.

Helms, J. E. (1992). *A race is a nice thing to have: A guide to being a White person or understanding the White persons in your life*. Topeka, KS: Content Communication.

Helms, J. E. (1995). An update of Helm's White and people of color racial identity models. In J. G., Ponterotto, Casas, J. M., L. A. Suzuki, & C. M. Alexander, (Eds.), *Handbook of multicultural counseling* (pp. 181-198). Thousand Oaks, CA: Sage.

Helms, J.E. (2003). Racial identity in the social environment. In P.B. Pedersen, & J.C. Carey (Eds.), *Multicultural counseling in schools: A practical handbook (2nd ed.)*. (pp. 44-58). Needham Heights, MA, US: Allyn & Bacon.

Helms, J. E. (2007). Some better practices for measuring racial and ethnic identity constructs. *Journal of Counseling Psychology, 54*, 235–246.

Helms, J.E., & Carter, R.T. (1990). Development of the White Racial Identity Inventory. In J.E. Helms (Ed.), *Black and White racial identity: Theory, research, and practice* (pp.67-80). Westport, CT: Greenwood Press.

Helms, J. E., Henze, K. T., Sass, T. L., & Mifsud, V. (2006). Treating Cronbach's alpha reliability as data in counseling research. *The Counseling Psychologist, 34*, 630–660.

Helms, J. E., Nicholas, G., & Green, C. E. (2010). Racism and ethnoviolence as trauma: Enhancing professional training. *Traumatology, 16*, 53–63.

Helms, J. E., & Parham, T. A. (1990). Black Racial Identity Attitudes Scale (Form RIAS-B). In J. E. Helms (Ed.). *Black and White racial identity: Theory, research, and practice* (pp. 245-248). Westport, CT: Praeger.

Helms, J. E., & Parham, T. A. (1996). The development of the Racial Identity Attitude Scale. In R. L. Jones (Ed.), *Handbook of tests and measurements for Black populations* (Vol. 2, pp. 167-174). Hampton, VA: Cobb & Henry.

Helms, J.E., & Talleyrand, R.M. (1997). Race is not ethnicity. *American Psychologist, 52,* 1246-1247.

Hermans, H.J.M. (2001). The dialogical self: Towards a theory of personal and cultural positioning. *Cultural Psychology, 7*(3), 243-281.

Hermans, H.J.M., & Kempen, H.J.G. (1998). Moving cultures: The perilous problems of cultural dichotomies in a globalizing society. *American Psychologist, 53*, 1111–1120.

Herrnstein, R.J., & Murray, C. (1994). *The Bell Curve: Intelligence and Class Structure in American Life*. New York: Free Press.

*Horsey, W. (2009). *Racial identity and symptomatology among people of African descent: An exploratory study*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

*Huckleberry, T.M. (2002). *Moving beyond race: Examining the multidimensional self-concept of African-American college students*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Hudspeth, W.J., & Pribram, K.H. (1990). Stages of brain and cognitive maturation. *Journal of Educational Psychology, 82*(4), 881-884.

Hurd, N.M., Sellers, R.M., Cogburn, C.D., Butler-Barnes, S.T., & Zimmerman, M.A. (2013). Racial identity and depressive symptoms among Black emerging adults: The moderating effects of neighborhood racial composition. *Developmental Psychology, 49*(5), 938-950.

Jacobson, A. M , Beardslee, W, Hauser, S. T , Noam, G. V, & Powers, S. I. (1982). Assessing

adolescent ego processes. *Scientific Proceedings, American Psychiatric Association, 135*.

James, W.H., Kim, G.K., & Armijo, E. (2000). The influence of ethnic identity on drug use among ethnic minority adolescents. *Journal of Drug Education, 30*(3), 265-280.

Jensen, A.R. (1969), How much can we boost IQ and scholastic achievement?, *Harvard Educational Review, 39*(1), 1–123.

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory--Versions 4a and 54*. Berkeley: University of California, Berkeley, Institute of Personality and Social Research.

Johnson, S.C., & Arbona, C. (2006). The relation of ethnic identity, racial identity and race-related stress among African American college students. *Journal of College Student Development, 47*(5), 495-507.

Johnson, J., Lecci, L. & Swim, J. (2006). Predicting perceived racism and acceptance of negative behavioral intergroup responses: Validating the JLS in a college and community sample of Blacks. *Personality and Individual Differences, 40*, 421-431.

Jones, J. M. (1972). *Prejudice and racism*. New York, NY: McGraw-Hill.

Jones, J. M. (1997). *Prejudice and racism* (2nd ed.) New York, NY: McGraw Hill.

Jones, J. M., & Carter, R. T. (1996). Racism and white racial identity: Merging realities. In B. Bowser & R. Hunt (Eds.), *Impacts of racism on white America* (2nd ed., pp. 1–23). Thousand Oaks, CA: Sage.

Jones, H.L., Cross, W.E. Jr., & DeFour, D.C. (2007). Race-related stress, racial identity attitudes, and mental health among Black women. *Journal of Black Psychology, 33,* 208-231.

Joseph, S., & Lewis, C. A. (1998). The depression-happiness scale: Reliability and validity of a bipolar self-report scale. *Journal of Clinical Psychology, 54(*4), 537–544.

Joseph, S., Lewis, C. A., & Olsen, C. (1996). Convergent validity of the depression-happiness scale with measures of depression. *Journal of Clinical Psychology, 52*(5), 551–554.

Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior, 40*, 208–230.

Keyes, C. L. M. (2005). Mental illness and/or mental health? Investigating axioms of the complete state model of health. *Journal of Consulting and Clinical Psychology, 73*(3), 539–548.

Khaylis, A., Waelde, L., & Brice, E. (2007). The role of ethnic identity in the relationship of race-related stress to PTSD symptoms among young adults. *Journal of Trauma and Dissociation, 8*, 91–105.

Klonoff, E. A., Landrine, H., & Ullman, J. B. (1999). Racial discrimination and psychiatric symptoms among Blacks. *Cultural Diversity and Ethnic Minority Psychology, 5*, 329 –339. doi:10.1037/1099- 9809.5.4.329

Kohatsu, E. L., & Richardson, T. Q. (1996). Racial and ethnic identity assessment. In L. A. Suzuki, P. J. Meller, & J. G. Ponterotto (Eds.), *Handbook of multicultural assessment: Clinical, psychological and educational applications* (pp. 611-650). San Francisco: Jossey-Bass.

Kohlberg, L. (1968). Cognitive stages and preschool education. In J.L. Frost (Ed.), *Early childhood education rediscovered: Readings*. New York: Holt, Rhinehart, & Winston.

Korell, S. (2008). *A cluster analysis of Cross Racial Identity Scale scores and their*

usefulness in predicting levels of acculturation and social distance in the lives of Black college students. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Kristof, W. (1963). The statistical theory of stepped-up reliability coefficients when a test has been divided into several equivalent parts. *Psychometrika, 28*, 221–238.

Kurtzleben, D. (2010, August 3). Data show racial disparity in crack sentencing. *US News and World Report*. Retrieved from http://www.usnews.com/news/articles/2010/08/03/data-show-racial-disparity-in-crack-sentencing on April 15, 2013.

Leary, J. D. (2005). *Post Traumatic Slave Syndrome: America's Legacy of Enduring Injury and Healing*. Oregon: Uptone Press.

Lee, D. L., & Ahn, S. (2013). The relation of racial identity, ethnic identity, and racial socialization to discrimination–distress: A meta-analysis of Black Americans. *Journal of Counseling Psychology, 60*(1), 1-14. doi:10.1037/a0031275

Lesane-Brown, C. L. (2006). A review of race socialization within Black families. *Developmental Review, 26*, 400–426.

Levant, R. F., Hirsch, L. Celentano, E., Cozza, T. Hill, S., MacEachern, M., & Schnedeker, J. (1992). The male role: An investigation of norms and stereotypes. *Journal of Mental Health Counseling, 14*, 325-337.

Levin, H.R., Culhane, K.A., Hartmann, J., Evankovitch, K., Martson, A.J., Harward, H., et al. (1991). Developmental changes in performance on tests of purported frontal lobe function. *Developmental Neuropsychology, 7*, 377-395.

Lewin, K. *A dynamic theory of personality*. New York: McGraw-Hill, 1935.

Lewin, K. *Problems of topological psychology*. New York: McGraw-Hill, 1936.

Lewin, K. *Resolving social conflict*. New York: Harper, 1948.

Lewin, K. *Field theory in social science*. New York: Harper, 1951.

Lieberman, G.A., & Hoody, L.L. (1998). *Closing the achievement gap: Using the environment as an integrating context for learning*. California: Science Wizards.

Lim, C. S., Welkom, J. S., Cohen, L. L., & Osunkwo, I. (2012). Evaluating the protective role of racial identity in children with sickle cell disease. *Journal of Pediatric Psychology, 37*(8), 832-842. doi:10.1093/jpepsy/jss059

Locke, A.L. (1925). *Forward to The New Negro: An Interpretation*. New York: Albert and Charles Boni.

*Lockett, C. T., & Harrell, J. P. (2003). Racial identity, self-esteem, and academic achievement: Too much interpretation, too little supporting data. *Journal of Black Psychology*, *29*, 325-336.

Loomba, A., (2005). *Colonialism/Postcolonialism*. Oxon: Routledge, p. 176.

Lott, J.L II (2011). Testing factorial invariance of the Black Racial Identity Attitudes Scale across gender. *Journal of College Student Development, 52i(2), 224-234*.

*Mahalik, J. R., Pierre, M. R., & Wan, S. C. (2006). Examining racial identity and masculinity as correlates of self-esteem and psychological distress in Black men. *Journal of Multicultural Counseling and Development, 34*(2), 94-104.

Manese, J.E. (1984). *The relationship between Black students' racial identity attitudes and vocational identity foreclosure and career exploration attitudes*. Unpublished Masters Thesis, University of Maryland, College Park, MD.

Marks, B., Settles, I. H., Cooke, D. Y., Morgan, L., & Sellers, R. M. (2004). African American

Racial Identity: A Review of Contemporary Models and Measures. In R. L. Jones (Ed.), *Black Psychology* (4th ed., pp: 383-404), Hampton, VA : Cobb & Henry.

*Martin, J.K., & Nagayama-Hall, G.C. (1992). Thinking Black, thinking internal, thinking feminist. *Journal of Counseling Psychology, 39*(4), 509-514.

Martin, T. (1976). *Race first: The ideological and organizational struggles of Marcus Garvey and the Universal Negro Improvement Association*. Westport, CN: Greenwood Press.

Mauser, M., & Huling, T. (1995). *Young black Americans and the criminal justice system: Five years later*. Washington, DC: The Sentencing Project.

McGreal, R., & Joseph, S. (1993). The depression-happiness scale. *Psychological Reports, 73*(3), 1279–1282.

Mead, G. H. (1934). *Mind, self, and society*. Chicago: University of Chicago Press.

*Miles, S.E. (1997). *The relationship between racial identity, feminist identity, and psychological well-being in a sample of African American women*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Miller, D. B., & MacIntosh, R. (1999). Promoting resilience in urban African American adolescents: Racial socialization and identity as protective factors. *Social Work Research, 23*, 159–169.

Milliones, J. (1973) Construction of a Black consciousness measure: Psychotherapeutic implications. *Psychotherapy: Theory, Research, and Practice, 17*(2), 175-182.

Mitchell, S. L., & Dell, D. M. (1992). The relationship between black students' racial identity attitude and participation in campus activities. *Journal of College Student Development, 33*, 39-43.

Moberly, N. J., & Watkins, E. R. (2008). Ruminative self-focus, negative life events, and negative affect. *Behaviour Research And Therapy, 46*(9), 1034-1039. doi:10.1016/j.brat.2008.06.004

Montagu, A. (1999). Race and IQ. London: Oxford University Press.

Moreland, C., & Leach, M.M. The relationship between Black racial identity and moral development. *Journal of Black Psychology, 27*(3), 255-271.

Mulser, R., Hucke, K., Trask-Tate, A., & Cunningham, M. (2012). When racial identity matters: Stressful events and mental health in rural African American adolescents. In J. M. Sullivan, A. M. Esmail (Eds.), *African American identity: Racial and cultural dimensions of the Black experience* (pp. 171-186). Lanham, MD US: Lexington Books/Rowman & Littlefield.

*Mu'mim, A.S. (2010). *Racial identity and resilience as predictors of the psychological health of African American men.* (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

*Munford, M. B. (1994). Relationship of gender, self-esteem, social class, and racial identity to depression in Blacks. *Journal of Black Psychology, 20*(2), 157-174. doi:10.1177/00957984940202005

*Myers, C. (2006). *Problem-solving effectiveness and racial identity as moderators of the relationship between race-related stress and adjustment and Black-American students at predominately white institutions*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

National Association for the Advancement of Colored People. (2013). Health care fact

sheet. Retrieved from http://www.naacp.org/pages/health-care-fact-sheet on March 13, 2013.

Neblett, E., & Carter, S. E. (2012). The protective role of racial identity and Africentric worldview in the association between racial discrimination and blood pressure. *Psychosomatic Medicine, 74*(5), 509-516. doi:10.1097/PSY.0b013e3182583a50

Neblett E, Rivas-Drake D, & Umaña-Taylor A. (2012). The promise of racial and ethnic protective factors in promoting ethnic minority youth development. *Child Development Perspectives, 6*(3), 295-303.

Neblett, E.W., Jr., Shelton, J.N., & Sellers, R.M. (2004). The role of racial identity in managing daily hassles. In G. Philogène (Ed.). *Race and identity: The legacy of Kenneth Clark*. Washington, DC: American Psychological Association Press.

Neisser, U., Boodoo, G., Bouchard, T. J., Boykin, A. W., Brody, N., Ceci, S. J., Halpern, D. F., Loehlin, J. C., Perloff, R., Sternberg, R. J., & Urbina, S. (1996). Intelligence: Knowns and unknowns. *American Psychologist, 51*, 77-101

Neville, H. A., & Lily, R. L. (2000). The relationship between racial identity cluster profiles and psychological distress among African American college students. *Journal of Multicultural Counseling And Development, 28*(4), 194-207.

*Neville, H. A., Heppner, P. P., & Wang, L. (1997). Relations among racial identity attitudes, perceived stressors, and coping styles in African American college students. *Journal of Counseling and Development, 75*, 303-311.

Neville, H. A., & Pieterse, A. L. (2009). Racism, white supremacy, and resistance:

Contextualizing Black American experiences. In H. A. Neville, B. N. Tynes, & S. O. Utsey (Eds.), *Handbook of African American psychology* (pp. 159–174). Thousand Oaks, CA: Sage.

Nghe, L. T., & Mahalik, J. R. (2001). Examining racial identity statuses as predictors of psychological defenses in African American college students. *Journal of Counseling Psychology, 48*, 10–16.

Nobles, W.W. (1972) "African philosophy: foundations for Black Psychology," in R. L. Jones (ed.) *Black Psychology* (2nd Edition). New York: Harper.

Nobles, W. W. (1976). Extended self: Rethinking the so-called Negro self-concept. *Journal of Black Psychology, 2*(2), 15-24.

Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking rumination. *Perspectives on Psychological Science, 3*, 400–424.

Nora, A., & Cabrera, A. F. (1996). The role of perceptions of prejudice and discrimination on the adjustment of minority students to college. *Journal of Higher Education, 67*, 119–139.

Nunnally, J. C. (1978). *Psychometric theory*. St. Louis, MO: McGraw-Hill.

Ogbu, J.U. (1978). *Minority Education and Caste: The American System in Cross-Cultural Perspective*. San Diego, CA: Academic Press.

Oliver, P., Sandefur, G., Jakubowski, J. & Yocom, J.E.. (2005, August 13). "The Effect of Black Male Imprisonment on Black Child Poverty." Presented at the American Sociological Association on August 13, 2005.

O'Dougherty Wright, M., & Nguyen Littleford, L. (2002). Experiences and beliefs as predictors

of ethnic identity and intergroup relations. *Journal of Multicultural Counseling and Development, 30*(1), 2-20. doi:10.1002/j.2161-1912.2002.tb00474.x

O'Neil, J. M. (2008). Summarizing 25 years of research on men's gender role conflict using the Gender Role Conflict Scale: New research paradigms and clinical implications. *The Counseling Psychologist, 36*, 358.

Oney, C. N., Cole, E. R., & Sellers, R. M. (2011). Racial identity and gender as moderators of the relationship between body image and self-esteem for African Americans. *Sex Roles, 65*(7-8), 619-631.

Oyserman, D., Bybee, D., & Terry, K. (2003). Gendered racial identity and involvement with school. *Self and Identity, 2*, 307 – 324.

Pahl, K., & Way, N. (2006). Longitudinal trajectories of ethnic identity among urban Black and Latino adolescents. *Child Development, 77*, 1403–1415. doi:10.1111/j.1467-8624.2006.00943.x

Parham, T.A. (1989) Cycle of psychological nigrescence. *The Counseling Psychologist, 17*, 187-226.

Parham, T. A., & Helms, J. E. (1981). The influence of Black students' racial identity attitudes on preference for counselor's race. *Journal of Counseling Psychology, 28,* 250-258.

*Parham, T. A, & Helms, J. E. (1985a). Attitudes of racial identity and self-esteem of Black students. *Journal of College Student Personnel, 26*, 143-147.

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

Parham, T.A., & Williams, P.T. (1993). The relationship of demographic background variables to racial identity attitudes. *Journal of Black Psychology, 19*, 7-24.

Park, Y.S., & Kim, B.S.K. (2008). Asian and European American cultural values and communication styles among Asian American and European American college students. *Cultural Diversity and Ethnic Minority Psychology, 14*, 47–56.

Paulhus, D. L. (1991). Measurement and control of response bias. In J.P. Robinson, P.R. Shaver, & L.S. Wrightsman (Eds). *Measures of Personality and Social Psychological Attitudes*. San Diego: Academic Press.

Paus, T., Zijdenbos, A., Worsley, K., Collins, D.L., Blumenthal, J., Giedd, J.N., Rapoport, J.L., and Evans, A.C. (1999). Structural maturation of neural pathways in children and adolescents: In vivo study. *Science*, *283*, 1908–1911.

Perron, J., Vondracek, F., Skorikov, V., Tremblay, C., & Corbie`re, M. (1998). A longitudinal study of vocational maturity and ethnic identity development. *Journal of Vocational Behavior, 52*, 409–424.

Phelps, R. E., Taylor, J. D., & Gerard, P. A. (2001). Cultural mistrust, ethnic identity, racial identity and self esteem among ethnically diverse Black university students. *Journal of Counseling and Development, 79*, 209-216.

Phinney, J.S. (1989). Stages of ethnic identity development in minority group adolescents. *The Journal of Early Adolescence, 9*(1-2), 34-49.

Phinney, J. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with adolescents and young adults from diverse groups. *Journal of Adolescent Research, 7,* 156-176.

Phinney, J. S., (2008). Bridging identities and disciplines: Advances and challenges in

understanding multiple identities. In M. Azmitia, M. Syed, & K. Radmacher (Eds.), The intersections of personal and social identities. *New Directions for Child and Adolescent Development, 120*, 97–109.

Phinney, J., & Ong, A. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*, 271-281.

Piaget, J. (1954). *The construction of reality in the child (M. Cook, trans.)*. New York: Basic Books.

*Pierre, M. R., & Mahalik, J. R. (2005). Examining African self-consciousness and black racial identity as predictors of black men's psychological well-being. *Cultural Diversity and Ethnic Minority Psychology, 11*(1), 28-40.

Pieterse, J.N. (1995). Globalization as hybridization. In M. Feath- erstone, S. Lash, & R. Robertson (Eds.), *Global modernities* (pp. 45-68). London: Sage.

*Pieterse, A.L. (2005). *The relationship between perceptions of racism, life stress, racial identity, and psychological functioning in Black men: An exploratory investigation*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

*Pieterse, A. L., & Carter, R. T. (2010). The role of racial identity in perceived racism and psychological stress among Black American adults: Exploring traditional and alternative approaches. *Journal of Applied Social Psychology, 40*(5), 1028-1053.

Pieterse, A. L., Carter, R. T., Evans, S. A., & Walter, R. A. (2010). An exploratory examination of the associations among racial and ethnic discrimination, racial climate, and trauma-related symptoms in a college student population. *Journal of Counseling Psychology, 57*, 255–263.

*Pillay, Y. (2005). Racial identity as a predictor of the psychological health of African American

students at a predominately white university. *Journal of Black Psychology, 31*(1), 46-66.

Piper, R.E. (1992). *An examination of the relationship between racial identity attitudes and career concerns for Black students*. Unpublished paper, University of Maryland, College Park, MD.

Phinney, J. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with adolescents and young adults from diverse groups. *Journal of Adolescent Research, 7*, 156-176.

Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*, 271–281.

Plummer, D. L. (1995). Patterns of racial identity development of African American adolescent males and females. *Journal of Black Psychology, 21(*2), 168-180. doi:10.1177/00957984950212005

Plummer, D. L. (1996). Black racial identity attitudes and stages of the life span: An exploratory investigation. *Journal of Black Psychology, 22*, 169–181.

*Poindexter-Cameron, J. M., & Robinson, T. L. (1997). Relationships among racial identity attitudes, womanist identity attitudes, and self-esteem in African American college women. *Journal of College Student Development, 38*, 288–296.

Ponterotto, J.G. (1989). Expanding directions for racial identity research. *The Counseling Psychologist, 17*, 264-272.

Ponterotto, J. G., & Wise, S. L. (1987). Construct validity study of the racial identity attitude scale. *Journal of Counseling Psychology, 34*, 123-131.

*Pope, R.L. (1998). The relationship between psychosocial development and racial identity of Black College Students. *Journal of College Student Development, 39*(3), 273-282.

Popper, K. (1963). *Conjectures and Refutations: The Growth of Scientific Knowledge*, London: Routledge.

*Porter, C.A. (2008). *An examination of the relationship between code switching, racial identity development, acculturation, and mental health in African Americans*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

*Porter, T.G. (2012). *Self-esteem in African American women: The effects of economic status and stage of racial identity development*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Porter, J.R., & Washington, R.E. (1979). Black identity and self-esteem: A review of studies of black self-concept, 1968-1978. *Annual Review of Sociology, 5*, 53-74.

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

Quintana, S.M. (1998). Children's developmental understanding of ethnicity and race. *Applied and Preventive Psychology, 7*, 27 – 45.

Quintana, S.M. (2007). Racial and ethnic identity: Developmental perspectives and research. *Journal of Counseling Psychology, 54*, 259-270. doi:10.1037/0022-0167.54.3.259

Quintana, S. M., Castañeda-English, P., & Ybarra, V. C. (1999). Role of perspective-taking ability and ethnic socialization in the development of adolescent ethnic identity. *Journal of Research on Adolescence, 9*, 161–184.

Quintana, S.M., Chew, A.Y., & Schell, G.G. (2012). Counseling psychology theory and research

on race and ethnicity: Implications for a psychological science of diversity. In N. A. Fouad (Ed.). *APA handbook of counseling psychology, Vol. 1: Theories, research, and methods* (pp. 453-489). Washington, DC: American Psychological Association.

Quintana, S. M., & Minami, T. (2006). Guidelines for Meta-Analyses of Counseling Psychology Research. *The Counseling Psychologist, 34*(6), 839-877. doi:10.1177/0011000006286991

Ramey, C.T., & Suarez, T.M. (1985). Early intervention and the early experience paradigm: Towards a better framework for social policy. *Journal of Children in Contemporary Society, 7*(1), 3-13.

Raudenbush, S. W. (2009). Analyzing effect sizes: Random-effects mod- els. In H. Cooper, L. V. Hedges, & J. C. Valentine (Eds.), *The handbook of research synthesis and meta-analysis* (2nd ed., pp. 295–315). New York, NY: Russell Sage Foundation.

*Reid, K.W. (2007). *Black gold: Understanding the relationship between racial identity, self-efficacy, institutional integration and academic achievement of Black males in research universities*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Reissman, F. (1962) *The Culturally Deprived Child*. New York: Harper.

*Robb, M.A. (2002). *Gender, racial, and deaf identity development and self-esteem in Black, deaf women*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Rodriguez, M.C., & Maeda, Y. (2006). Meta-analysis of coefficient alpha. *Psychological Methods, 11*(3), 306-322.

Romero, A. J., & Roberts, R. E. (1998). Perception of discrimination and ethnocultural variables in a diverse group of adolescents. *Journal of Adolescence, 21*, 641–656.

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Roth, P.L., Bevier, C.A., Bobko, P., Switzer, F.S., & Tyler, P. (2001). Ethnic group differences in cognitive ability in employment and educational settings: A meta-analysis. *Personnel Psychology, 54*, 297-330.

Rotheram-Borus, M., Lightfoot, M., Moraes, A., Dopkins, S., & LaCour, J. (1998). Developmental, ethnic, and gender differences in ethnic identity among adolescents. *Journal Of Adolescent Research, 13*(4), 487-507. doi:10.1177/0743554898134006

Rowley, S.J. & Sellers, R.M. (1998). Nigrescence theory: Critical issues and recommendations for future revisions. In R.L. Jones (Ed.) *African American Identity Development: Theory, research, and intervention* (pp. 141-150). Hampton, VA: Cobb & Henry.

Rowley, S. J., Sellers, R. M., Chavous, T. M., & Smith, M. A. (1998). The relationship between racial identity and self-esteem in African American college and high school students. *Journal of Personality and Social Psychology, 3*, 715–724.

Rushton, J.P., & Jensen, A.R. (2005). Thirty years of research on race differences in cognitive ability. *Psychology, Public Policy, and Law, 11*(2), 235-294.

Russo, C. J. & Talbert-Johnson, C. (1997). *The overrepresentation of African American children in special education: The resegregation of educational programming? Education and Urban Society, 29(2)*, 136–148.

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review Psychology*, *52*, 141–166.

Ryff, C. D. (1989a). Beyond Ponce De Leon and life satisfaction: New directions in the quest of successful aging." *International Journal of Development, 12*(1), 35-55.

Ryff, C.D. (1989b). Happiness is everything, or is it? Explorations on the meaning of psychological well- being." *Journal of Personality and Social Psychology, 57*(6), 1069-81.

Ryff, C. D., & Singer, B. (1998). The contours of positive human health. *Psychological Inquiry*, *9*, 1–28.

Sanchez, D. (2013). Racial and Ego Identity Development in Black Caribbean College Students. *Journal of Diversity in Higher Education,* doi:10.1037/a0031684

Sandoval, S.R., Gutkin, T.B., & Naumann, W.C. (1997). Racial identity attitudes and school performance among African American high school students: An exploratory study. *Research in the Schools, 4*, 1-8.

Scherwitz, L., Perkins, L., Chesney, M., & Hughes, G. (1991). Cook-Medley Hostility Scale and subsets: Relationship to demographic and psychosocial characteristics in young adults in the CARDIA study. *Psychosomatic Medicine, 53*(1), 36-49.

Schwartz, S. J., & Unger, J.B. (2010). Biculturaism and context: What is biculturalism, and when is it adaptive? *Human Development, 53*, 26-32.

Scott, L. D., Jr. (2003). The relation of racial identity and racial socialization to coping with discrimination among African American adolescents. *Journal of Black Studies, 33*, 520–538.

Seaton, E. K. (2009). Perceived racial discrimination and racial identity profiles among African American adolescents. *Cultural Diversity And Ethnic Minority Psychology, 15*(2), 137-144.

Seaton, E. K., Neblett, E. W., Upton, R. D., Hammond, W., & Sellers, R. M. (2011). The

moderating capacity of racial identity between perceived discrimination and psychological well–being over time among African American youth. *Child Development, 82(*6), 1850-1867.

Seaton, E.K., Scottham, K.M., & Sellers, R.M. (2006). The status model of racial identity development in African American adolescents: Evidence of structure, trajectories, and well-being. *Child Development, 77*(5), 1416-1426.

Seaton, E. K., Yip, T., & Sellers, R. M. (2009). A longitudinal examination of racial identity and racial discrimination among African American adolescents. *Child Development, 80*, 406 – 417. doi:10.1111/j.1467- 8624.2009.01268.x

Sellers, R.M. (1993). A call to arms for researchers studying racial identity. *Journal of Black Psychology, 19*, 327-332.

Sellers, R. M., Caldwell, C. H., Schmeelk-Cone, K. H., & Zimmerman, M. A. (2003). Racial Identity, Racial Discrimination, Perceived Stress, and Psychological Distress among African American Young Adults. *Journal of Health and Social Behavior, 44*(3), 302-317. doi:10.2307/1519781

Sellers, R. M., Chavous, T. M., & Cooke, Y. D. (1998). Racial ideology and racial centrality as predictors of African American college students' academic performance. *Journal of Black Psychology, 24*, 8-27.

Sellers, R. M., Copeland-Linder, N., Martin, P. P., & Lewis, R. L. (2006). Racial identity matters: The relationship between racial discrimination and psychological functioning in African American adolescents. *Journal of Research on Adolescence, 16*, 187–216.

Sellers, R. M., Morgan, L., & Brown, T.N. (2001). A multidimensional approach to racial

identity: Implications for African American children. In A. Neal-Barret, J. Contreras, & K.Kerns (Eds.) *Forging links: African American children clinical developmental perspectives*, Westport, CT: Praeger.

Sellers, R. M., & Shelton, J. (2003). The role of racial identity in perceived racial discrimination. *Journal of Personality and Social Psychology, 84*(5), 1079-1092.

Senghor, L.S. (1965). New York Jazz orchestra: Solo trumpet. In J. R. and C. W. (trans), *L.S. Senghor: Prose and Poetry*. Oxford: Oxford University Press, p. 157.

Senghor, L.S. (1993). Negritude: A humanism of the twentieth century. In, P. W. & L. C. (Eds.), *Colonial Discourse and Post-colonial Theory*. London: Longman, p. 27.

Shacham, E., Basta, T. B., & Reece, M. (2008). Symptoms of psychological distress among African Americans seeking HIV-related mental health care. *AIDS Patient Care And Standards, 22*(5), 413-421. doi:10.1089/apc.2007.0177

Shadish, W. R., & Haddock, C. K. (1994). Combining estimates of effect size. In H. Cooper & L. V. Hedges (Eds.), *The handbook of research synthesis (*pp. 261–281). New York: Russell Sage Foundation.

Smedley, A. & Smedley, B.D. (2005). Race as biology is fiction, racism as a social problem is real: Anthropological and historical perspectives on the social construction of race. *American Psychologist, 60*(1), 16-26.

*Smith, L.R. (1991). *Fear of success, racial identity attitudes and the academic performance of African-American adolescents*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Smith, T.B., & Silva, L. (2011). Ethnic identity and personal well-being of people of color: A

meta-analysis. *Journal of Counseling Psychology, 58*(1), 42-60.

*Smith, Y.K. (2006). *Relationship between ethnic identity, level of accomplishment and self-esteem in a group of African American individuals*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Sowell, E.R., Thompson, P.M., Holmes, C.J., Jernigan, T.L., and Toga, A.W. (1999). In vivo evidence for post-adolescent brain maturation in frontal and striatal regions. *Nature Neuroscience, 2*, 859–861.

*Speight, S. L., Vera, E. M., & Derrickson, K. B. (1996). Racial self-designation, racial identity, and self-esteem revisited. *Journal of Black Psychology, 22*, 37–52.

Spencer, M.B. (1982). Personal and group identity of Black children: An alternative synthesis. *Genetic Psychology Monographs, 106*, 59-84.

*Spurgeon, S.L., & Myers, J.E. (2008). African American males: Relationships among racial identity, college type, and wellness. *Journal of Black Studies, 40*(4), 527-543.

Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist, 52*, 613–629.

Stevenson, H. C., Jr., McNeill, J. D., Herrero-Taylor, T., & Davis, G. Y. (2005). Influence of perceived neighborhood diversity and racism experience on racial socialization of Black youth. *Journal of Black Psychology, 31*, 273–290

Sue, D.W., Capodilupo, C.M., Torino, G.C., Bucceri, J.M., Holder, A.M.B., Nadal, K.L., & Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist, 62*(4), 271-286.

Sue, S. (2003). Science, ethnicity, and bias: Where have we gone wrong?. In A. E. Kazdin, A. E.

Kazdin (Eds.) , *Methodological issues & strategies in clinical research* (3rd ed.) (pp. 173- 188). Washington, DC US: American Psychological Association.

Super, D.E. (1984). Career and life development. In D. Brown and L. Brooks (Eds.), *Career choice development* (pp. 192-234). San Francisco: Jossey-Bass.

Syed, M., Azmitia, M. (2009). Longitudinal trajectories of ethnic identity during the college years. *Journal of Research on Adolescence, 19*(4), 601-624.

Tadmor, C.T., Tetlock, P.E., & Peng, K. (2009). Acculturation strategies and integrative complexity: The cognitive implications of biculturalism. *Journal of Cross-Cultural Psychology, 40*, 105–139.

Tajfel, H. and Turner, J. C. (1986). The social identity theory of inter-group behavior. In S. Worchel and L. W. Austin (eds.), *Psychology of Intergroup Relations*. Chicago: Nelson-Hall.

Tatum, B. D. (1987). *Assimilation blues: Black families in a white community*. Westport, CT: Greenwood Press.

Tatum, B.D. (1997). *Why are all the Black kids sitting together in the Cafeteria*. New York: Basic Books.

Taylor, J., Wilson, M., & Dobbins, J.E. (1972) *Nadanolitization scale*. Pittsburgh, PA: University of Pittsburgh.

*Taylor-Shaw, D.N. (2011). *A correlation study of racial identity, resilience, and academic performance in African American male adolescents*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Telesford, J., Mendoza-Denton, R. & Worrell, F.C. (2011). *Profiles of Cross Racial*

Identity Scores and psychological adjustment. Unpublished manuscript, Department of Psychology, University of California, Berkeley.

Thomas, C. (1971). *Boys no more*. Beverly Hills: Glencoe.

*Thomas, S. (2006). *African American adolescent females: An investigation of racial identity, skin color, and self-concept during adolescent development*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Thompson, B., & Snyder, P. A. (1998). Statistical significance and reliability analyses in recent JCD research articles. J*ournal of Counseling and Development, 76*, 436–441.

Thompson, C.E. (1985). *Attitudes towards academic undecidedness and identity foreclosure among Black students*. Unpublished Masters Thesis, University of Maryland, College Park, MD.

Thompson, C.E., & Carter, R.T. (1997). Race, socialization, and contemporary racism manifestations. In C.E. Thompson and R.T. Carter (Eds.) *Racial Identity Theory: Application to Individual, Group, and Organizational Interventions*. New Jersey: Lawrence Erlbaum Associates, Inc.

Thorndike, E.L. (1921). Intelligence and its measurement. *Journal of Educational Psychology, 12*, 124-127.

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

Tokar, D. M., & Fischer, A. R. (1998). Psychometric analysis of the Racial Identity Attitude Scale–Long Form. *Measurement and Evaluation in Counseling and Development, 31*, 138-149.

Tokar, D. M., & Swanson, J. L. (1991). An investigation of the validity of Helms's (1984) model of White racial identity. *Journal of Counseling Psychology, 38*, 296–301.

Townsend, T. G., & Belgrave, F. Z. (2000). The impact of personal identity and racial identity on drug attitudes and use among African American children. *Journal of Black Psychology, 26*, 421–436.

Tucker, W. (2002). *The funding of scientific racism: Wickliffe Draper and the Pioneer Fund*. Urbana: University of Illinois Press

Turner, J.C. (1975). Social comparison and social identity: Some prospects for intergroup behaviour. *European Journal of Social Psychology, 5*, 1-31.

Turner, J.C., & Reynolds, K.J. (2001). The social identity perspective in intergroup relations: theories, themes, and controversies. In R. Brown & S.L. Gaertner (Eds.) *The Social Identity Perspective in Intergroup Relations: Theory, Themes, and Controversies*, pp. 133–52. Blackwell Publishers Ltd, Oxford, UK. doi: 10.1002/9780470693421.ch7

Twenge, J. M., & Crocker, J. (2002). Race and self-esteem: Meta-analyses comparing Whites, Blacks, Hispanics, Asians, and American Indians and comment on Gray-Little and Hafdahl (2000). *Psychological Bulletin, 128*, 371–408.

Umaña-Taylor, A.J., Bhanot, R., & Shin, N. (2006). Ethnic identity formation during adolescence: The critical role of families. *Journal of Family Issues, 27,* 390–414.

U.S. Census Bureau. (2000). Census 2000 Special Reports: We the People, Blacks in the United States. (Washington, D.C.). Retrieved from www.census.gov/prod/2004pubs/censr-17.pdf on February 10, 2013.

U.S. Census Bureau. (2011). *Income, Poverty, and Health Care Coverage in the United States: 2011*. Washington DC: U.S. Department of Commerce.

U.S. Department of Education, National Center for Education Statistics, Common Core of Data, Public Elementary/Secondary School Universe Survey, 2006–07, Retrieved from http://nces.ed.gov/ccd/pubschuniv.asp on February 08, 2013.

U.S. Department of Health and Human Services. (2001). *Mental health: Culture, race and ethnicity—A supplement to mental health: A report of the surgeon general*. Rockville, MD: Author.

Utsey, S. O., Bolden, M. A., & Brown, A. L. (2001). Visions of revolution from the spirit of Frantz Fanon: A psychology of liberation for counseling African Americans confronting societal racism and oppression. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (2nd ed., pp. 311-336). Thousand Oaks, CA: Sage.

*Uzzell, K.L. (2007). *The health psychosocial development of Black males: The relationship between wellness and racial identity development*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Uusitalo-Malmivaara, L., & Lehto, J.E. (2013). Social factors explaining children's subjective happiness and depressive symptoms. *Social Indicators Research, 111*(1), 603-615.

Vacha-Haase, T. (1998). Reliability generalization: Exploring variance in measurement error affecting score reliability across studies. *Educational and Psychological Measurement, 58*(1), 6-20.

Vacha-Haase, T., & Thompson, B. (2011). Score reliability: A retrospective look back at 12 years of reliability generalization studies. *Measurement and Evaluation in Counseling and Development, 44*(3), 159-168.

Vandiver, B.J., Cross, W.E. Jr., Fhagen-Smith, P.E., Worrell, F.C., Swim, J., & Caldwell,

L. (2000). *The Cross Racial Identity Scale*. Unpublished scale.

Vandiver, B.J., Cross, W.E. Jr., Worrell, F.C., & Fhagen-Smith, P. (2002). Validating the Cross Racial Identity Scale. *Journal of Counseling Psychology, 49*(1), 71-85.

Viechtbauer, W. (2007). Accounting for heterogeneity via random-effects models and moderator analysis in meta-analysis. *Journal of Psychology, 215*(2), 104-121.

Wade, B.H. (2002). How does racial identity affect historically Black colleges and universities; student perception of September 11, 2001? *Journal of Black Studies, 33*(1), 25-43.

Warren, A.K. (2004). Patterns of self-perceived work and family roles and racial and gender identities in a community sample of Black American women. *Dissertation Abstracts International: Section B: The Sciences and Engineering*. *65*(12), 6712B.

Watson, J.C. (2009). Native American racial identity development and college adjustment at two-year institutions. *Journal of College Counseling, 12*(3), 125-138.

*Watt, S.K. (1997). *Identity and the making of meaning: Psychosocial identity, racial identity, womanist identity, self-esteem, and the faith development of African American college women*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

*Watt, S. K. (2006). Racial Identity Attitudes, Womanist Identity Attitudes, and Self-Esteem in African American College Women Attending Historically Black Single-Sex and Coeducational Institutions. *Journal of College Student Development, 47*(3), 319-334. doi:10.1353/csd.2006.0038

Watts, R. J., & Carter, R. T. (1991). Psychological aspects of racism in organizations. *Group and Organizational Studies, 16*(3), 328-344.

Weitzel, M., Hudak, J., Becker, H., Waller, P., & Stuifbergen, A. (1994). An exploratory

analysis of health-promotion beliefs and behaviors among White, Hispanic, and Black males. *Family Community Health, 17*(3), 23-34.

Weitzel, M., & Waller, P., (1990). Predictive factors for health-promotive behaviors in White, Hispanic, and Black blue-collar workers. *Family Community Health, 13*(1), 23-34.

Wester, S.R., Vogel, D.L., Wei, M., & McLain, R. (2006). African American men, gender role conflict, and psychological distress: The role of racial identity. *Journal of Counseling and Development, 84*, 419-429

Western, B., & Pettit, B. (2010). Incarceration and social inequity. *Daedalus*, *Summer,* 8-

Wexler, D. B. (2009). *Men in therapy: New approaches for effective treatment*. New York, NY US: W W Norton & Co.

*Whatley, P.R., Allen, J., & Dana, R.H. (2003). Racial identity and the MMPI in African American male college students. *Cultural Diversity and Ethnic Minority Psychology, 9*(4), 345-352.

White, J.L. (1970). Toward a black psychology. In R.L. Jones (ed.) *Black Psychology*. Boston, Massachusetts: Cobb & Henry Publishers.

White, J.L., & Parham, T.A. (1990). *The Psychology of Blacks: An African American Perspective*. New York: Prentice Hall.

White, J.L., Parham, W.D., & Parham, T.A., (1980). Black psychology: The Afro-American tradition as a unifying force for traditional psychology. In R. L. Jones (Ed.), *Black Psychology* (2nd ed.), 56-66.

White-Johnson, R. L. (2012). Prosocial involvement among African American young adults: Considering racial discrimination and racial identity. *Journal of Black Psychology, 38*(3), 313-341. doi:10.1177/0095798411420429

Whittaker, V.A., & Neville, H.A. (2010). Examining the relation between racial identity attitude clusters and psychological health outcomes in African American college students. *Journal of Black Psychology, 36*, 383-409.

Wilkinson, D. (1995). Central civilizations. In S. K. Sanderson (Ed.), *Civilizations and world systems: Studying world-historical change* (pp. 46-74). London: Altamira Press.

*Wilcots, K. D. (2001). *The relationship between racial identity, ethnic identity, and African-American acculturation and their contribution to psychological well-being*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Williams, R. (1975) *Psychological Tests on Minorities*, U.S. and National Institute of Health.

Williamson, J.A., (1999). In defense of themselves: The black student struggle for success and recognition at predominantly white colleges and universities. *Journal of Negro Education, 68*(1), 92-105.

*Wilson, J. W., & Constantine, M. G. (1999). Racial identity attitudes, self-concept and perceived family cohesion in Black college students. *Journal of Black Studies, 29*(3), 354-366. doi:10.1177/002193479902900302

Whitesell, N., Mitchell, C., Kaufman, C., & Spicer, P. (2006). Developmental trajectories of personal and collective self-concept among American Indian adolescents. *Child Development, 77,* 1487–1503.

*Whiterspoon, K.M., Speight, S., & Thomas, A. (1997). Racial identity attitudes, school achievement, and academic self-efficacy among African American high school students. *Journal of Black Psychology, 23*, 344-357.

Wolf, E. R. (1982). *Europe and the people without history*. Berkeley: University of California Press.

Wong, C. A., Eccles, J. S., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *Journal of Personality, 71*, 1197–1232.

*Woodroffe, S.F. (2011). *The relationships among racial identity attitudes, academic self-efficacy and academic achievement of Black male high school students*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Woods, P.A. (1987). *Racial identity and vocational orientation of Black college students as related to traditionality of academic major choice and expressed occupational preference*. (Doctoral dissertation). Retried from ProQuest Dissertations and Theses.

Worrell, F.C. (2007). Ethnic identity, academic achievement, and global self-concept in four groups of academically talented adolescents. *The Gifted Child Quarterly, 51*(1), 23-38.

Worrell, F.C. (2008). Nigrescence attitudes in adolescence, emerging adulthood, and adulthood. *Journal of Black Psychology, 34*(2), 156-178.

Worrell, F.C. (2012). Forty years of Cross' nigrescence theory: From stages to profiles, from African Americans to all Americans. In M. Sullivan and A.M. Esmail (Eds.), *African American identity: Racial and cultural dimensions of the Black experience*. Lanham, MD: Lexington Books.

Worrell, F. C., & Gardner-Kitt, D. L. (2006). The Relationship Between Racial and Ethnic Identity in Black Adolescents: The Cross Racial Identity Scale and the Multigroup Ethnic Identity Measure. Identity. *An International Journal Of Theory And Research, 6*(4), 293-315. doi:10.1207/s1532706xid0604_1

Worrell, F.C., Mendoza-Denton, R., Telesford, J., Simmons, C., & Martin, J.F., (in

press). Cross Racial Identity Scale (CRIS) scores: Stability and relationships with psychological adjustment. *Journal of Personality Assessment*.

Worrell, F.C., Vandiver, B.J., Schaefer, B.A., Cross, W.E. Jr., & Fhagen-Smith, P.E. (2006). Generalizing nigrescence profiles: A cluster analysis of Cross Racial Identity Scale (CRIS) scores in three independent samples. *The Counseling Psychologist, 34*, 519-547.

Yakovlev, P. I. & Lecours, A. R. (1967). The myelogenetic cycles of regional maturation of the brain. In A. Minkowski (Ed.) *Regional Development of the Brain in Early Life* (pp. 3–70). Oxford: Blackwell Scientific.

Yanico, B. J., Swanson, J. L., & Tokar, D. M. (1994). A psychometric investigation of the Black Racial Identity Attitude Scale-Form B. *Journal of Vocational Behavior, 44,* 218-234.

Yap, S. Y., Settles, I. H., & Pratt-Hyatt, J. S. (2011). Mediators of the relationship between racial identity and life satisfaction in a community sample of African American women and men. *Cultural Diversity And Ethnic Minority Psychology, 17(*1), 89-97

Zinn, H. (1980). *A People's History of the United States*. New York: Harper & Row.

* indicates studies used in the present meta-analysis.

APPENDICIES

Appendix A: Racial Identity Attitudes Scale - B (Short Form)

Black Racial Identity Attitude Scale		
This questionnaire is designed to measure people's social and political attitudes. There are no right or wrong answers. Use the scale below to respond to each statement. On your answer sheet, write the number in the first space to the right of the statement that describes how you feel.		
1 - Strongly Disagree: 2 - Disagree: 3 - Uncertain: 4 - Agree: 5 - Strongly Agree		
Identification Number:_____		DO NOT WRITE IN THIS COLUMN
1. I believe that being black is a positive experience.		
2. I know through experience what being black in America means.		
3. I feel unable to involve myself in White experiences, and am increasing my involvement in black experiences.		
4. I believe that large numbers of blacks are untrustworthy.		
5. I feel an overwhelming attachment to black people.		
6. I involve myself in causes that will help all oppressed people.		
7. I feel comfortable wherever I am.		
8. I believe that white people look and express themselves better than blacks.		
9. I feel very uncomfortable around black people.		
10. I feel good about being black but do not limit myself to black activities.		
11. I often find myself referring to White People as hankies, devils, pigs, etc.		
12. I believe that to be black is not necessarily good.		
13. I believe that certain aspects of the black experience apply to me, and others do not.		
14. I frequently confront the system and the man.		

15. I constantly involve myself in black political and social activities.		
16. I involve myself in social actions and political groups even if there are no other blacks involved.		
17. I believe that black people should learn to think and experience life in ways which are similar to white people.		
18. I believe that the world should be interpreted from a black perspective.		
19. I have changed my style of life to fit my beliefs about black people.		
20. I feel excitement and joy in black surroundings.		
21. I believe that black people came form a strange dark and uncivilized continent.		
22. People, regardless of their race, have strengths and limitations.		
23. I find myself reading a lot of black literature and thinking about being black.		
24. I feel guilty and /or anxious about some of the things I believe about black people.		
25. I believe that a black person's most effective weapon for solving problems is to become part of the white person's world.		
26. I speak my mind regardless of the consequences (e.g., being kicked out of school, being imprisoned, being exposed to danger).		
27. I believe that everything blacks is good and consequently, I limit myself to black activities.		
28. I am determined to find my black identity.		
29. I believe that White people are intellectually superior to black people.		
30. I believe that because I am black, I have many strengths.		

Appendix B: Racial Identity Attitudes Scale – L (Long Form)

Instructions: 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 and be as honest as you can. Beside each statement, circle the number that best describes how you feel. Use the scale below to respond to each statement.

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

(circle here)

1	2	3	4	5	1. I believe that being Black is a positive experience.
1	2	3	4	5	2. I know through my personal experiences 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 believe that large numbers of Blacks are untrustworthy.
1	2	3	4	5	5. I feel an overwhelming attachment to Black people.
1	2	3	4	5	6. I involve myself in causes that will help all oppressed people.
1	2	3	4	5	7. A person's race does not influence how comfortable I feel when I am with her or him.
1	2	3	4	5	8. I believe that White people look and express themselves better than Blacks.
1	2	3	4	5	9. I feel uncomfortable when I am around Black people.
1	2	3	4	5	10. I feel good about being Black, but don not limit myself to Black activities.
1	2	3	4	5	11. When I am with people I trust, I often find myself referring to Whites as "honkies", "devils", "pigs", "white boys", and so forth.
1	2	3	4	5	12. I believe that being Black is a negative experience.
1	2	3	4	5	13. I believe that certain aspects of "the Black experience" apply to me, and others do not.

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

(circle here)

1	2	3	4	5	14. I frequently confront the system and the (White) man.
1	2	3	4	5	15. I constantly involve myself in Black political and social activities (such as art shows, political meetings, Black theater, and so forth).
1	2	3	4	5	16. I involve myself in social action and political groups even if there are no other Blacks involved.
1	2	3	4	5	17. I believe that Black people should learn to think and experience life in ways that are similar to White people's ways.
1	2	3	4	5	18. I believe that the world should be interpreted from a Black or Afrocentric perspective.
1	2	3	4	5	19. I am changing my style of life to fit my new beliefs about Black people.
1	2	3	4	5	20. I feel excitement and joy in Black surroundings.
1	2	3	4	5	21. I believe that Black people came from a strange, dark, and uncivilized continent.
1	2	3	4	5	22. People, regardless of their race, have strengths and limitations.
1	2	3	4	5	23. I find myself reading a lot of Black literature and thinking about being Black.
1	2	3	4	5	24. I feel guilty or anxious about some of the things I believe about Black people.
1	2	3	4	5	25. I believe that a Black person's most effective weapon for solving problems is to become art of the White person's world.
1	2	3	4	5	26. I speak my mind about injustices to Black people regardless of the consequences (such as being kicked out of school, disappointing my parents, being exposed to danger).
1	2	3	4	5	27. I limit myself to Black activities as much as I can.
1	2	3	4	5	28. I am determined to find my Black identity.
1	2	3	4	5	29. I believe that White people are more intelligent than Blacks.

1	2	3	4	5		
Strongly Disagree		Disagree	Uncertain	Agree	Strongly Agree	
(circle here)						
1	2	3	4	5	30.	I believe that I have many strengths because I am Black.
1	2	3	4	5	31.	I feel that Black people do not have as much to be proud of as White people do.
1	2	3	4	5	32.	Most Blacks I know are failures.
1	2	3	4	5	33.	I believe that White people should feel guilty about the way they have treated Blacks in the past.
1	2	3	4	5	34.	White people can't be trusted.
1	2	3	4	5	35.	In today's society if Black people don't achieve, they have only themselves to blame.
1	2	3	4	5	36.	The most important thing about me is that I am Black.
1	2	3	4	5	37.	Being Black just feels natural to me.
1	2	3	4	5	38.	Other Black people have trouble accepting me because my life experiences have been so different from their experiences.
1	2	3	4	5	39.	Black people who have White people's blood should feel ashamed of it.
1	2	3	4	5	40.	Sometimes, I wish I belonged to the White race.
1	2	3	4	5	41.	The people I respect most are White.
1	2	3	4	5	42.	A person's race usually is not important to me.
1	2	3	4	5	43.	I feel anxious when White people compare me to other members of my race.
1	2	3	4	5	44.	I can't feel comfortable with either Black people or White people.
1	2	3	4	5	45.	A person's race has little to do with whether or not he or she is a good person.
1	2	3	4	5	46.	When I am with Black people, I pretend to enjoy the things they enjoy.

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

(circle here)

1	2	3	4	5	47.	When a stranger who is Black does something embarrassing in public, I get embarrassed.
1	2	3	4	5	48.	I believe that a Black person can be close friends with a White person.
1	2	3	4	5	49.	I am satisfied with myself.
1	2	3	4	5	50.	I have a positive attitude about myself because I am Black

Appendix C: RIAS Long and Short Form Item Loading

	Pre-Encounter	**Encounter**	**Imm/Em**	**Internalization**
Short Form (30 – Item)	4, 8, 9, 12, 17, 21, 25, 29	3, 23, 24, 28	3, 11, 14, 18, 19, 23, 26, 27	1, 2, 5, 6, 10, 20, 28, 30
Long Form (50 – Item)	4, 8, 9, 12, 21, 25, 29, 31 32, 40, 41, 44, 46, 47	23, 24, 28, 33	3, 11, 18, 19, 26, 27, 34, 36, 39	1, 2, 5, 10, 20, 22, 30, 37, 42, 45, 49, 50

Appendix D: Permission to use RIAS scale

June 18, 2013

Aaronson Chew
Aaronson.chew@gmail.com

Dear Mr. Chew:

This constitutes my permission to use the RIAS scale. You may not duplicate the scale for any reason other than research purposes. Please send me a summary copy of the results once you complete your project. I am waiving the customary fee.

Best wishes in all of your research endeavors.

Sincerely,

Thomas A. Parham, Ph.D.
Vice Chancellor Student Affairs

Appendix E: Cross's Nigrescense Stages and Identities

Cross's Nigrescence Stages and Identities

Model	Stage	Identity
1971 original model	Pre-encounter	Pro-White/Anti-Black
	Encounter	
	Immersion-Emersion	Anti-White/Pro-Black
	Internalization	Humanist
	Internalization-Commitment	
1991 revised model	Pre-Encounter	Assimilation
		Anti-Black
	Encounter	
	Immersion-Emersion	Anti-White
		Intense Black Involvement
	Internalization	Black Nationalist
		Biculturalist
		Multiculturalist
2000 expanded model	Pre-Encounter	Assimilation[a]
		Miseducation[a]
		Self-Hatred[a]
	Encounter	
	Immersion-Emersion	Anti-White[a]
		Intense Black Involvement
	Internalization	Black Nationalist[a]
		Biculturalist
		Multiculturalist Racial
		Multiculturalist Inclusive[a]

[a]Subscale Included in the Cross Racial Identity Scale.

Appendix F: Summary and Purpose of Study

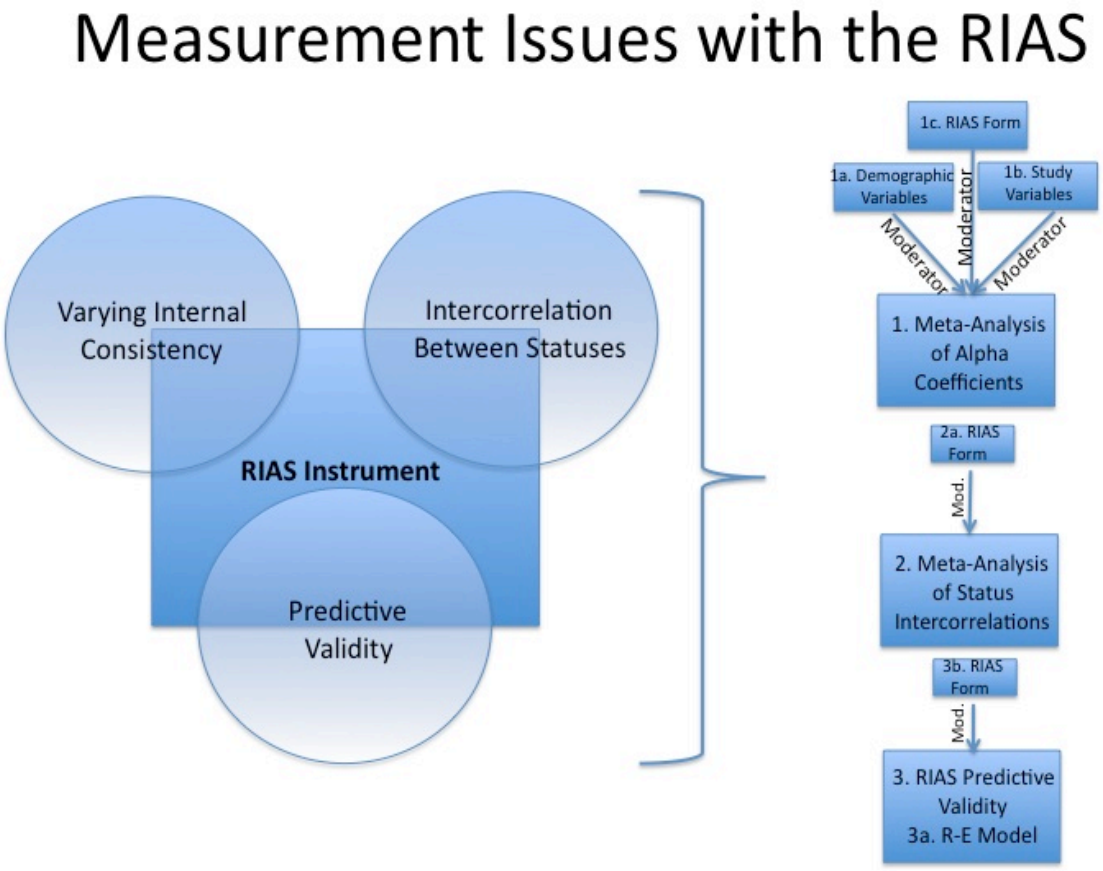
I. Measurement Issues with RIAS
   1. Alpha of RIAS subscales: Meta analysis of subscale alphas
      a. Moderator of study variables (% AfAm context, n, recruitment, study date)
      b. Moderator of demographic variables (% Female, Cohort year)
      c. Moderator of RIAS form
   2. Intercorrelation between statuses on RIAS: Meta analysis of intercorrelations
      a. Moderator of RIAS form

II. Equivocal Evidence on RIAS & RIAS Predictive Validity
   3. RIAS → Psychological functioning
      a. Meta analysis of RIAS and Psychological functioning (Random Effects)
      b. Moderator of RIAS form

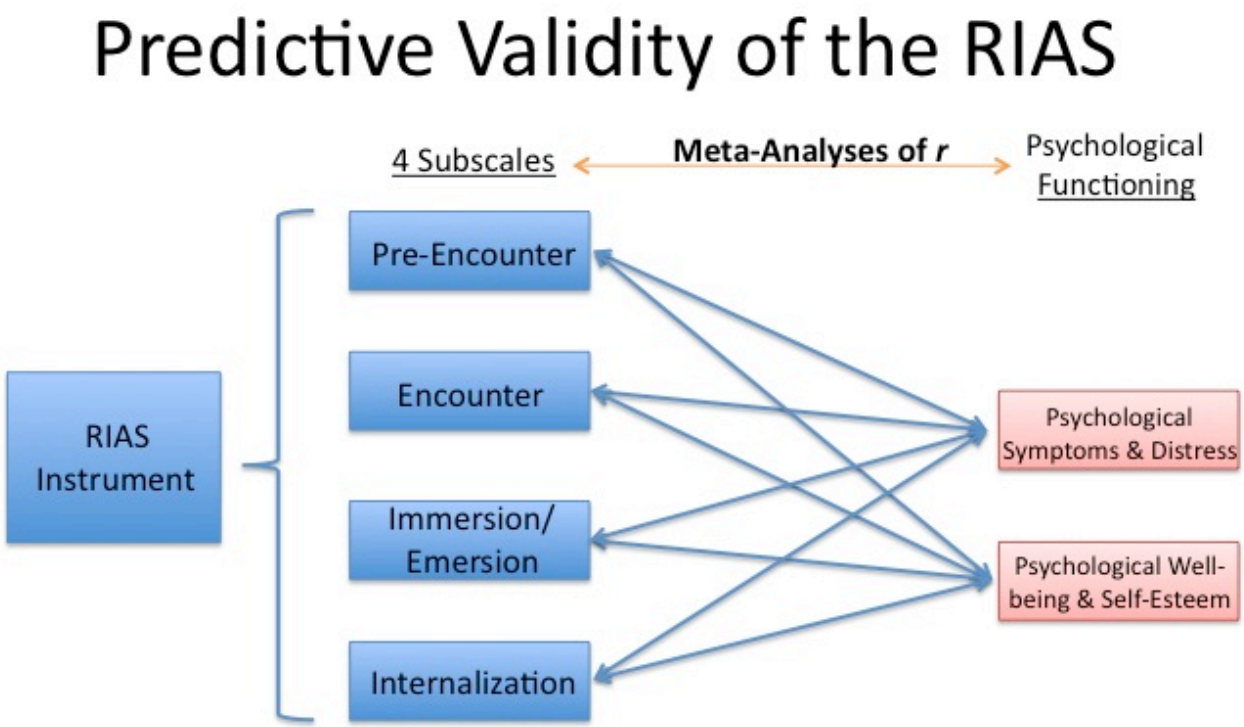
III. Demographic Factors
   4. Demographic factors affecting RIAS subscale levels
      a. Gender → RIAS subscales
      b. Age → RIAS subscales
      c. Cohort (Date-Age) → RIAS subscales
      d. Age+Gender+Age*Gender → RIAS

IV. Moderators of the RIAS – Psychological functioning relationship
   5. Given significant Q statistic:
      Date of Study
      a. RIAS → Psychological functioning
         % AfAm in Context
      b. RIAS → Psychological functioning
         % AfAm in Context & Date
      c. RIAS → Psychological functioning
         Cohort (Study Date-Age)
      d. RIAS → Psychological functioning
         College vs. Community & AfAm Focus Context
      e. RIAS → Psychological functioning

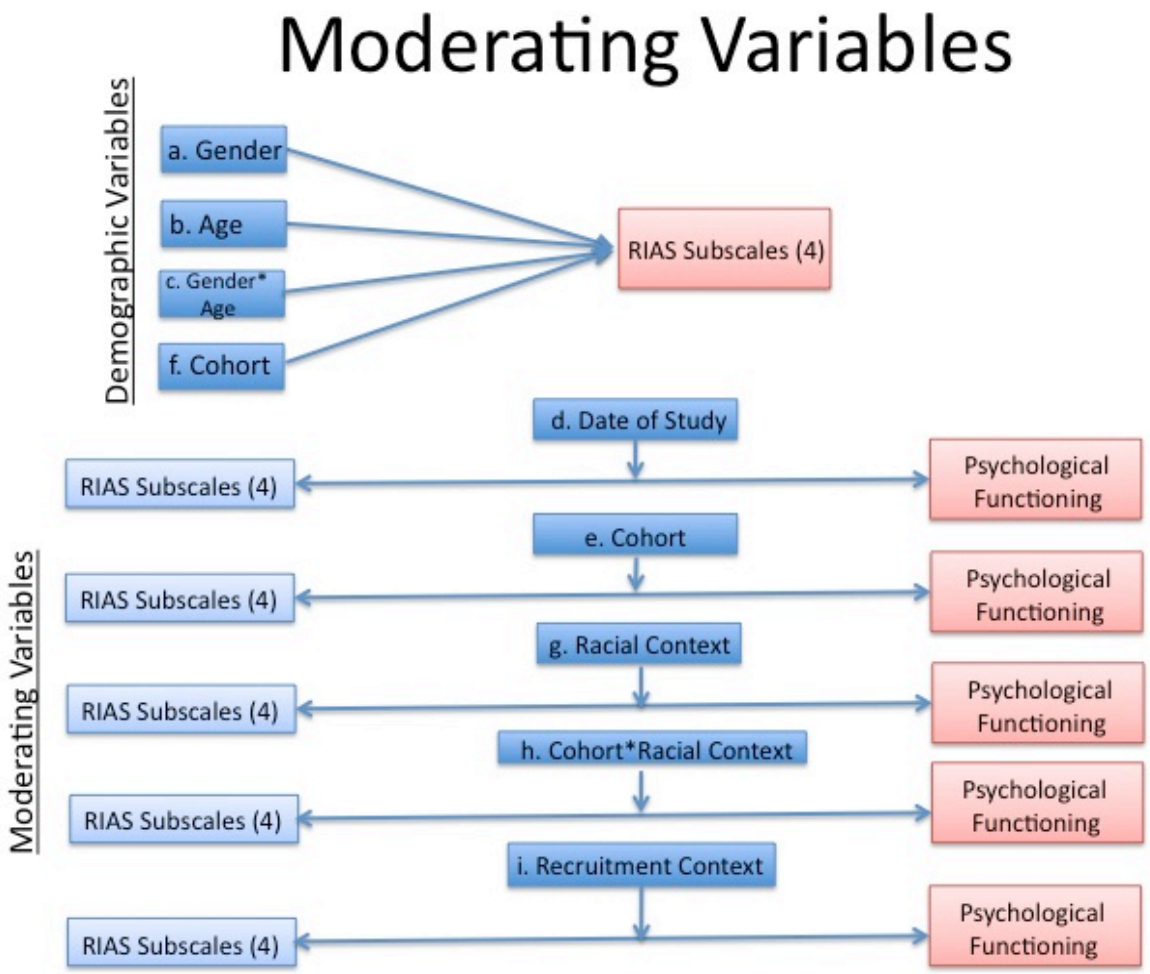
Appendix G: Measurement Issues with the RIAS



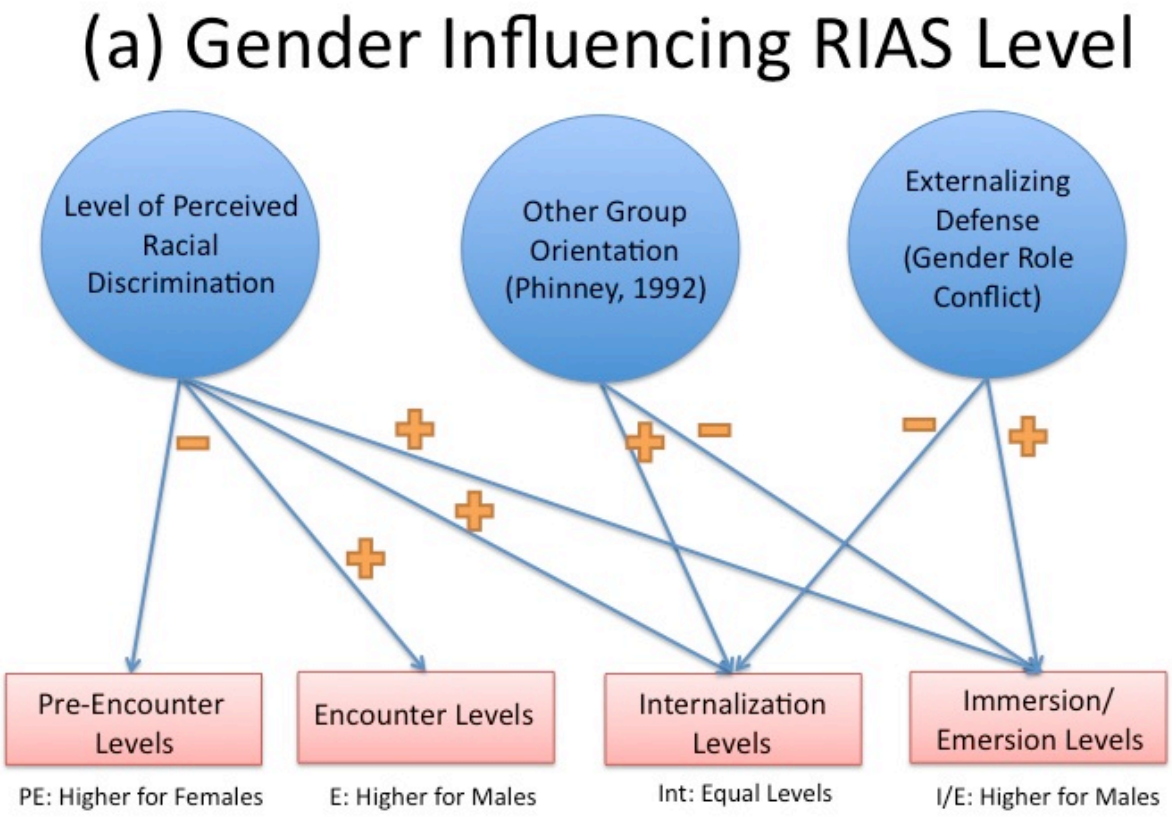
Appendix H: Predictive Validity of the RIAS



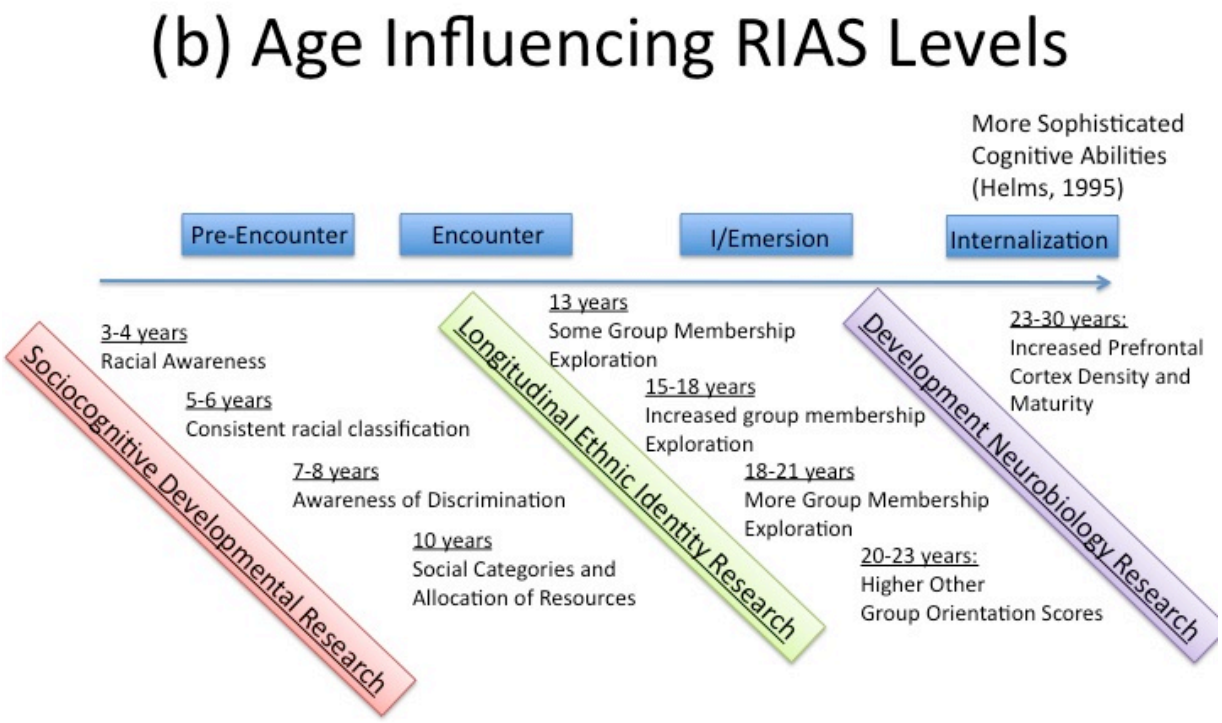
Appendix I: Moderating Variables



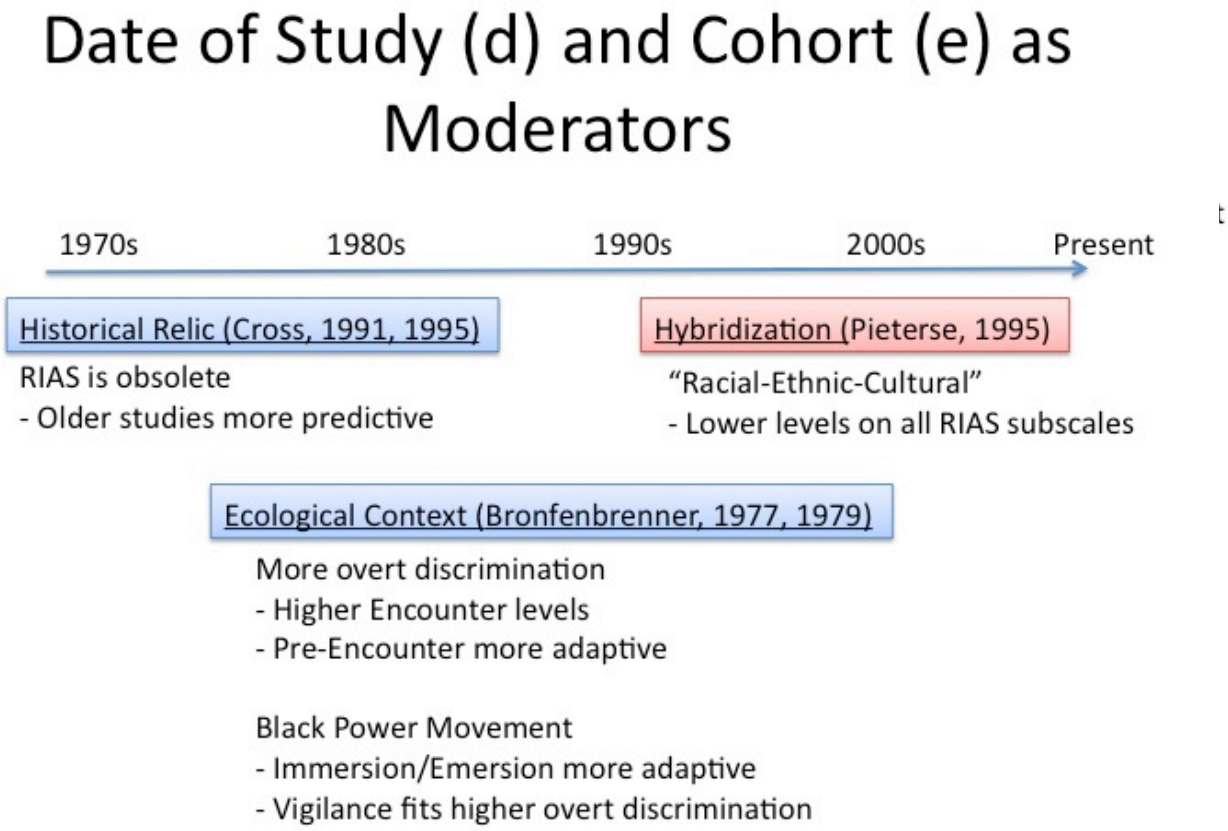
Appendix J: Gender Influencing RIAS Level



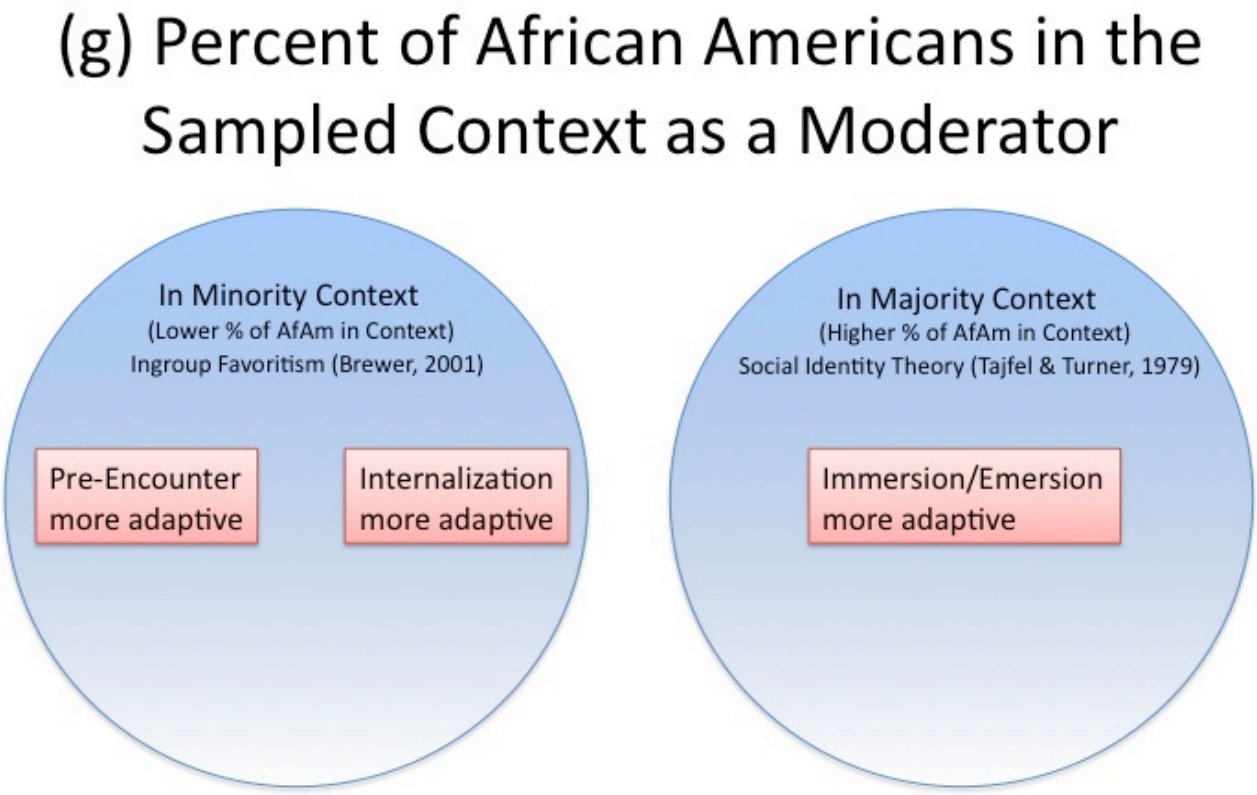
Appendix K: Age Influencing RIAS Levels



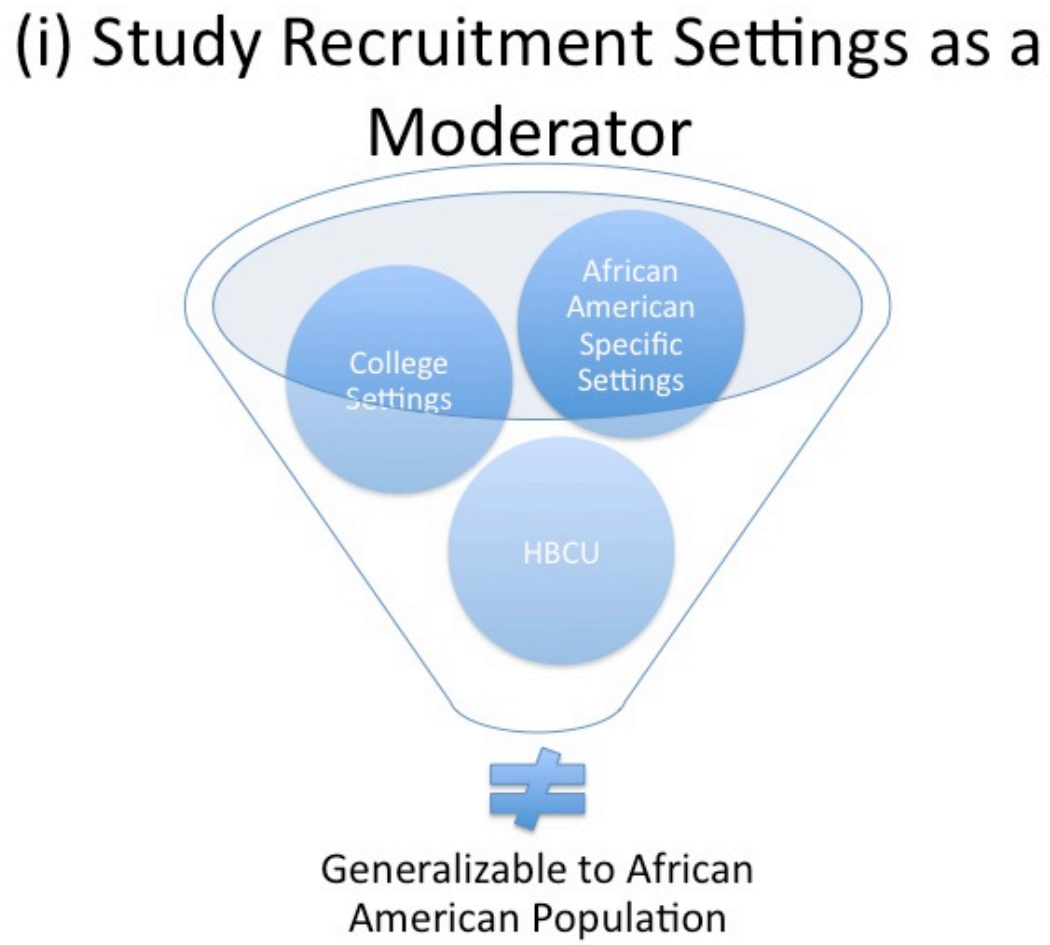
Appendix L: Date of Study and Cohort as Moderators



Appendix M: Percentage of African Americans in the Sampled Context as a Moderator



Appendix N: Study Recruitment Method as a Moderator



Appendix O: RIAS Meta-Analysis Coding Sheet

CODING SHEET

Study _____ Year: _____ Coder Initials____

Inclusion Criteria:	**Yes (1)**	**No (0)**
RIAS Measure AND Quantitative measure of Well-being/self-esteem/psychological symptoms/distress	( ) *If no, discontinue coding*	
Sample is composed of *African Americans*:	( ) *If no, discontinue coding*	

I. Study Characteristics

A. Pub. Status	Dissertation	Article
	0	1

B. *N* participants: _____
C. Date of Study: _____

II. Characteristics of Sample

A. Mean Age: _____
B. % Female: _____
C: % African American in Environment Sampled _____

**Note: If percentage African American in environment not stated, then N/A*

D. Population Sampled	College	Community	Mixed
	1	2	3

E. Recruitment of Sample	Non-Specific/ General College	African American Studies Course, Organizations, Barbershops, & Church	HBCU	PWI	HBCU & PWI	Non Af Am-Focused Community Agency
	0	1	2	3	4	5

III. Definition of Variables: Racial Identity and Well Being or Distress

A. Racial Identity Attitudes Scale Form	30 Item Form 1	50 Item Form 2	60 Item Form 3

Coefficient Alphas:

Pre-Encounter: _____
Encounter: _____
Immersion/Emersion: _____
Internalization: _____

B. Wellness Criterion Variable	Well-Being/ Satisfaction 1	Self-Esteem/Self-Concept 2

B1. Well-Being Measure (DV)	SPWB (Ryff, 1989) 1	MHI-18 (PWB Subscale) 2	Rosenberg Self-Estem Scale 3	Coopersmith Self-Esteem Inventory 4	Satisfaction with Life Scale 5	CPI : Well-Being subscale (Gough, 1974) 6	Personal Orientation Inventory (Self-regard subscale) 7	Tennessee Self-concept (Personal subscale) 8	Student Adjustment to College Questionnaire (SACQ) 9	Other: List 10

C. Distress Criterion Variable	Psychological Distress/Sxs 1	Depression 2	Anxiety 3	Stress 4

C1. Distress Measure (DV)	BDI 1	MHI 18 (Psyc Distress Subscale) 2 Any Subscales Omitted:	SCL-90-R (Derogatis, 1994) 3 Any Subscales Omitted:	CES-D 4	Other: (list)

D. Other Criterion Variable	List:	Measure Used:

VI. Correlations (reported in results or correlation matrix)

1. Intercorrelation (*r*) between RIAS statuses:

A. Pre-Encounter and Encounter: _____
B. Pre-Encounter and Immersion/Emersion: _____
C. Pre-Encounter and Internalization: _____
D. Encounter and Immersion/Emersion: _____
E. Encounter and Internalization: _____
F. Immersion/Emersion and Internalization: _____

2. Correlation between RIAS statuses and criterion variable:

A. Name of Criterion Variable 1: _____

i. Pre-Encounter and Criterion: _____
ii. Encounter and Criterion: _____
iii. Immersion/Emersion and Criterion: _____
iv. Internalization and Criterion: _____

B. Name of Criterion Variable 2: _____

i. Pre-Encounter and Criterion: _____
ii. Encounter and Criterion: _____
iii. Immersion/Emersion and Criterion: _____
iv. Internalization and Criterion: _____

C. Name of Criterion Variable 3: _____

i. Pre-Encounter and Criterion: _____
ii. Encounter and Criterion: _____
iii. Immersion/Emersion and Criterion: _____
iv. Internalization and Criterion: _____