A Dissertation Proposal
Submitted to the Faculty
of
Xavier University
In Partial Fulfillment of the
Requirements for the Degree of
Doctor of Psychology
By
Bianca M. Jones, M. A.
April 27, 2012

Approved:

Karl W. Stukenberg, Ph.D., ABPP
Chair, Department of Psychology

Anna L. Ghee, Ph.D.
Dissertation Chair
The Impact of a Culture-Gender Specific Brief Intervention in Decreasing Academic Risk Factors and Increasing Protective Factors for Urban Adolescent Girls
Dissertation Committee

Chair
Anna L. Ghee, Ph.D.
Assistant Professor of Psychology
Xavier University

Member
Cathy McDaniels-Wilson, Ph.D.
Assistant Professor of Psychology
Xavier University

Member
Lisa Mills, Ph.D.
Executive Director, Harmony Garden
Acknowledgements

I wish to thank, sincerely and from the bottom of my heart, Dr. Anna Ghee, my dissertation chair. I cannot fully express my gratitude for the countless hours, diligence, dedication, guidance, support and motivation she has provided in steering me through this process. She has truly been an example of what I aspire to be. I would also like to thank my committee members, Dr. Cathy McDaniels-Wilson and Dr. Lisa Mills for their time and expertise. I am truly honored to have had the opportunity to be exposed to, and learn from, such amazing women. I want to thank Dr. Mark Meyers and the College of Social Sciences, Health & Education for their support of this project. I would not have been able to fulfill my vision without the funding I received. Special thanks goes to the school, the wonderful students, local church community and research assistants that participated or assisted in my study and allowed me the use of their facilities; their enthusiasm inspired me on many levels. Finally, although he is not present in a physical sense, I know that my grandfather, Henry Steve Jones is with me and I hope that I have made him proud.
Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>i</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>ii</td>
</tr>
<tr>
<td>List of Appendices</td>
<td>iii</td>
</tr>
</tbody>
</table>

**Chapter**

1. Review of Literature | 1
2. Rationale and Hypotheses | 37
3. Method | 40
4. Proposed Analyses | 49

   References | 51
   Appendices | 62

5. Dissertation | 73

   References | 107
   Tables | 115
   Appendices | 125
List of Appendices

Proposal

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Intervention Group Schedule of Activities</td>
<td>62</td>
</tr>
<tr>
<td>B. Intervention Group Description of Activities</td>
<td>63</td>
</tr>
<tr>
<td>C. Control Group Description of Activities</td>
<td>67</td>
</tr>
<tr>
<td>D. Parental Announcement</td>
<td>68</td>
</tr>
<tr>
<td>E. Parental Consent Form</td>
<td>70</td>
</tr>
<tr>
<td>F. Student Assent Form</td>
<td>72</td>
</tr>
</tbody>
</table>

Chapter V

G. Institutional Review Board Approval Letter | 125   |
Chapter 1

Review of the Literature

Receiving an adequate education is generally viewed as providing access to significant societal resources (Hallinan, 2001). This access allows for more favorable opportunities with regard to employment and often results in an increase in income. For example, a large majority of individuals in managerial and professional positions held bachelor’s degrees or higher (Ryan, 2005), and adults with advanced degrees earned four times more than those without a high school diploma, an approximate difference of sixty thousand dollars per year (US Census Press Release, 2007). Throughout history, those with more education have received higher earnings, and this trend continues today (US Department of Labor, 2009). Moreover, individuals who do not complete high school are more likely to experience unfavorable life outcomes such as an increased tendency to be “unemployed, to earn less than those who graduate, to be on public assistance, and to end up in prison” (Christle, Jolivette, & Nelson, 2007). Therefore, it can be argued that in today’s world, achieving adequate educational success is the most valuable asset one can accomplish given the long lasting influence it has on one’s life.

Toward that aim, Chavous, Smalls, Rivas-Drake, Griffin and Cogburn (2003) believe that “educational achievement and attainment in American society have well-established links to life outcomes such as enhanced life satisfaction and well-being” (p. 1076). In light of such opinions, it may well be assumed that all capable persons would seek to maximize their educational opportunities and strive to exhibit optimal levels of academic performance. However, due to a number of disparities in our society, many individuals are not able to achieve this aim. Additionally, many individuals do not have
access to the proper resources that allow for such academic success. As a result, substandard academic performance effects individuals economically, and possibly psychologically as well.

Given the importance of academic achievement, research into education related disparities as experienced by African Americans warrants further investigation (Orr, 2003; Smalls, White, Chavous, & Sellers, 2007). In the realm of research, it has essentially been underscored that African American students “generally earn lower grades, drop out more often, and attain less education than do Whites” (e.g., Mickelson, 1990, p. 45). In previous literature aimed specifically at teasing out the variables that explain their lack of academic achievement in school, researchers have identified various aspects of African American adolescents’ lives that are contributing to this problem. These aspects include academic disengagement, academic self-concept, racial identification, educational aspirations, access to positive role models, appropriate educational resources, neighborhood quality and socioeconomic status, among others (Chavous, et al., 2003; Hallinan, 2001; Mello & Swanson, 2007; Orr, 2003; Smalls et al., 2007; Witherspoon, Speight, & Thomas, 1997; Wong, Eccles, & Sameroff, 2003).

Prior research into the performance of African American female adolescents exclusively, is not as plentiful as one might hope. In addition to the paucity of research, of the studies that are available, most primarily assess factors such as racial identity as academic protective factors in the lives of African American adolescents, both male and female. However, these studies do not necessarily seek to increase these factors (Chavous et al., 2003; Cokley & Moore, 2007; Smalls et al., 2007, Wong et al., 2003). Also, academic self-concept and educational aspirations have been noted as important factors in
academic achievement, but interventions specifically aimed at increasing these aspects for African American girls or African Americans adolescents in general, have not been created and implemented.

The purpose of this study is to investigate the effectiveness of a brief culture-gender specific intervention that will be implemented with African American females. We are going to assess whether the culture-and gender-specific intervention group will score higher from baseline to post-intervention on measures of academic disengagement, academic self-concept, racial identity and educational aspirations, when compared to the control group who will only be exposed to recreational activities with African American female college students.

A review of the literature on the academic achievement crisis of African American adolescents in general and African American adolescent females in particular is presented next. Following is the review of the literature on risk factors of academic achievement and the protective factors that will be investigated in the current study. The academic risk factor to be examined is academic disengagement. The academic protective factors are academic self-concept, racial identity and educational aspirations.

**Academic Achievement Crisis of African American Adolescents**

Extensive research has found that African Americans underperform in comparison to their White peers on several educational outcomes (Hallinan, 2001; Horton, 2007; Leach & Williams, 2007; Norman, Ault, Bentz & Meskimen, 2001; Orr, 2003, Zand & Thompson, 2005). Considered an enigmatic, longstanding problem, Orr (2003) stated that although the achievement gap has narrowed over the past 30 years, it is still quite extensive, and differences in achievement between African American and White students
have begun to widen again since the 1990s (Hallinan, 2001). For example, African American students evidence a lag in achievement when compared to age-equivalent White students’ achievement (US Department of Education, 2000). Moreover, some researchers assert that compared to their White peers, at all education levels African American students obtain significantly lower grades and achievement levels (Gonzales, Cauce, Friedman & Mason, 1996).

Long-term data from the National Center for Education Statistics (NCES) indicates significant improvement of all students in achievement over the past 30 years (NCES, 2006). For persons aged 25 years and older, the rate of graduation increased significantly during this time, especially for African Americans (US Census, 2001). Despite this finding African Americans still do not perform as well academically as their White counterparts. In addition, across all grades surveyed, African Americans scored lower on reading and math tests than their White counterparts (NCES, 2001) and scored lower than all other groups across grades 4, 8 and 12 (NCES, 2007). Specifically in the early education years (kindergarten through third grade), African American children had lower mean achievement scores than other racial groups at the start of kindergarten; differences that continued to grow wider each year through the third grade (NCES, 2004).

Differences continue on through the grade school years and through high school as well. Deficits in the performance of African American’s result in achievement test scores that continue to be lower than all other racial groups with a 50% higher dropout rate compared to White students (NCES, 2007). These findings illustrate the continued presence of the achievement gap between African American and White students, and unfortunately indicate that the gap can widen in certain grades (NCES, 2001).
To generate information regarding the performance of children in schools, academic achievement has been measured primarily through standardized testing. Analyses of these standardized tests have shown that African American adolescents consistently fare worse than their White counterparts (Orr, 2003). The United States General Accounting Office (2002) also found that in general, inner city student achievement, measured by the state reading assessment tests, were lower than those in the suburban schools. Other statistics have shown that 54% of children from low-income areas scored below proficiency in basic reading achievement (Save the Children, 2007). This is noteworthy given that many children in low-income areas are minorities (NCES, 2007).

The African American-White achievement difference, according to some, is still a defining mark of racial inequality in public education today (Hallinan, 2001). The fact remains that there exists a striking racial disparity in the academic achievement of our nation’s African American youth (Ceballo, McLoyd & Toyokawa, 2004). African American students continue to score below their peers in mathematics assessments, reading assessments, SAT tests, ACT tests, and are also enrolled in fewer advanced placement courses than any other race or ethnic group (NCES, 2007). Additionally, African American students are more likely to repeat a grade, less likely to enroll in college and less likely to be employed than Whites. Such statistics are further evidence of the influence of educational attainment on one’s economic capital.

Below average academic achievement has been established as a risk factor for a number of negative developmental outcomes including behavioral problems and dropping out of school; therefore, deficits in the performance of individuals in the realm of
academics is an important issue (Leach & Williams, 2007). As noted above, poor performance effects one’s life in a number of ways that in turn contribute to the likelihood of college attendance, employability and decent income earning potential.

The importance placed on academic achievement has led researchers from many fields, including sociology and psychology, to be concerned not only with disparities between the performances of African American and White students, but also with the underperformance of African American students in general (Hallinan, 2001). The academic achievement gap between African American and White students has long been a central tenet in research dealing with achievement as a whole (Orr, 2003), and has been cited as one of the most pressing challenges for urban education in the United States today (Norman et al., 2001). Consequently, it is imperative that researchers further investigate the factors contributing to the underperformance of African American students in comparison to their White peers, as well as their performance autonomously, in an effort to accurately decipher the contributing factors. Upon doing so, academic risk and protective factors can be delineated and targeted through prevention programs and interventions to positively impact the academic achievement of African Americans and thus, their future life outcomes.

In addition to the pre-existing achievement gap, many more African American adolescents live in poverty compared to their White counterparts. According to census data from 2001-2002, African American youth represented 32% of those in poverty (Proctor & Dalaker, 2003). Consistent with the analyses of Proctor and Dalaker (2003), by 2004, an astonishing 43% of all poor African Americans were children (Spriggs, 2006). Since 2000, Spriggs (2006) also notes that the number of African Americans in
poverty has been steadily increasing each year. From 2003 to 2004, the African American poverty rate rose to 24.7%, almost twice that of the general population (Spriggs, 2006). The most recent statistics from 2006 show that at the rate of 24.3%, African Americans still make up almost \( \frac{1}{4} \) of all those that are in poverty (DeNavas-Walt, Proctor, & Smith, 2007).

For students that attend school in impoverished areas, the lack of academic resources located in these areas must be considered (Stewart, 2007). These schools are likely to have limited resources and an overwhelming number of African American children (given their superfluous presence in lower socioeconomic status areas, as mentioned above), and probably a higher student-to-teacher ratio than in more affluent areas. It is well documented that public and private schools differ in terms of resources, racial and ethnic composition, and academic climate (Hallinan, 2001). This was evidenced by a study conducted by the United States General Accounting Office of 42 inner city and suburban schools. Data collected showed that the schools located in inner city areas were “older, had higher student enrollments and had fewer library books per pupil and less technological support” (U.S. General Accounting Office, 2002, p. 17). Of the 21 inner city schools in the study, 43-85% of them were below the poverty level, and only one school had 50% minority students, while all others were 79-100% minority (U. S. General Accounting Office, 2002).

According to a report by Kewal-Ramani, Gilbertson, Fox and Provasnik (NCES, 2007), “poverty poses a serious challenge to children's access to quality learning opportunities and their potential to succeed in school” (p. 16). When considering both the academic achievement gap between African American and White students and the high
number of African Americans living in impoverished areas, the educational values and achievement of those living in poverty is likely to be severely affected by their environment (Ceballo et al., 2004). In fact, beliefs about the utility of education may be directly and indirectly influenced by the shortage of up-to-date school materials, sufficient community libraries and adequate cultural and recreational centers in economically depleted areas (Ceballo et al., 2004).

Research in the area of school resources has shown that school resources do in fact have a significant effect on students’ achievement by way of motivation. Although it is not the only variable that affects achievement, school resources have an effect nonetheless (Hallinan, 2001). One article stated that neighborhood characteristics might affect adolescents’ educational values and motivation for schoolwork (Ceballo et al., 2004). Another article stated that wealth, and by extension socioeconomic status, can affect the academic achievement of a child through its effects on the child’s motivation, aspirations, and expectations (Orr, 2003). In Orr (2003), the assumption is that wealth impacts achievement because it alters the students’ expectations, quality of schooling, educational resources, cultural capital, social acceptance and self-esteem. Wealth directly affects the funding for schools given that funding comes primarily from local revenues and property taxes (Lewis et al., 1999). Therefore, differences in resources between an affluent area and an impoverished area become evident when information is obtained that indicate the differential funding available for the students. For instance, an affluent school district in New York State spent seven times more per student than the poorest school district, and in Illinois, the ratio was as high as eight times more per student (Parrish, Matsumoto, & Fowler, 1995). In the previous example, it is likely that the resources allotted to the more
affluent students would lead to a higher quality of schooling, resulting in higher educational attainment.

Mello and Swanson (2007) conducted a study examining the effect of perceptions of neighborhood quality on adolescent expectations. They defined neighborhood quality as “neighborhood level socioeconomic status including adult average income, education and occupation” (p. 152). The premise behind the significance of neighborhood quality was based on research that has found neighborhood socioeconomic status to be positively associated with academic outcomes (Harding, 2003). Mello and Swanson (2007) also wanted to assess whether these perceptions varied by gender and if they were moderated by gender. They found that African American adolescents with higher rankings of neighborhood quality, compared to those with lower quality, had an increased likelihood of positive expectations regarding education and future job attainment, especially for females. Therefore, one could reason that students in low-income areas may not have positive expectations given the circumstances of their surroundings, and would require additional facets to compensate for this constraint.

**African American Adolescent Females and Academic Achievement**

Previous studies have indicated a necessity to specifically study the academic achievement of African American males because they typically underperform compared to African American females (Mello & Swanson, 2007; Saunders, Davis, Williams & Williams, 2004). Additionally, some studies have indicated that African American males are the most vulnerable to neighborhood conditions (Ceballo et al., 2004). Despite such arguments, as noted above, the achievement of underprivileged African Americans, both males and females, is below standard. In one particular study comparing self-perceptions
and academic outcomes, although the achievement of African American males was below
a 2.0, the achievement of African American females yielded a grade point average of 2.20,
both well below what is expected of high school students (Saunders et al., 2004). The
challenges facing African American youth in low-income neighborhoods are varied, and
although males face their own set of challenges compared to females, the difficulties of
African American females should not be deemed less important or less detrimental to their
futures. Moreover, research that African American females’ academic achievement is
heavily influenced by self-perceptions, neighborhood quality, and racial and ethnic
identity is evidence necessitating research that aims to increase such factors (Mello &
Swanson, 2007; Saunders et al., 2004; Wong et al., 2003).

African American females, particularly those from low socioeconomic groups, are
confronted with several risk factors as they progress through adolescence (Belgrave,
Chase-Vaughn, Gray, Addison, & Cherry, 2000). One factor, the lower value that African
American females place on education, is influenced by their perception of the conditions
of their neighborhood and the availability of positive facilitators (Ceballo et al., 2004).
Ceballo et al. (2004) also stated that self-perceived ability in academic subjects could
predict adolescent educational values and the amount of effort invested in schoolwork.
They collected data from 262 single mothers and their 7th and 8th grade children. Using
hierarchical linear regression, their results showed that students with more perceived
ability in their studies resulted in higher values of education and an increased willingness
to engage in school and apply themselves fully. The African American females in their
sample that resided in more affluent areas placed a higher value on education, which may
be connected to future achievement. Therefore, for females in low-income areas, who are
more likely to be African American, scarce access to high achieving facilitators may have the opposite effect and result in a lower value being placed on education. In impoverished areas, access to role models outside of their neighborhood may allow for African American adolescents to believe that they can achieve a higher level of academic success, thereby influencing future achievement.

Additional research investigating gender differences in self-perceptions and academic outcomes of African American males and females found that having greater confidence in one’s academic abilities, which results in putting forth more effort in school, is associated with girls having higher grade point averages as compared to boys (Saunders et al., 2004). In the study by Saunders et al. (2004), a bivariate analysis was conducted by administering 169 student surveys that assessed levels of intention to complete school and acquiring grade points averages of the same students. Results revealed that females who reported significantly higher levels of academic self-efficacy and also had higher GPA’s compared to males (Saunders et al., 2004). It can be reasoned that their academic self-efficacy was one variable that was instrumental in their higher GPA’s.

This study also asserted that having greater confidence in their academic abilities is consistent with girls having higher grade point averages as compared to males. The importance of understanding such gender differences specific to African American adolescent females is warranted to inform programming and societal messages that also affect academic outcomes (Saunders et al., 2004). Such research is important not only to increase the understanding of disparate trends of high school completion between African Americans and White students, but also to better understand the unique needs of African American females compared to males (Saunders et al, 2004).
Honora (2002) sought to identify factors that contribute to the future outlook of low-income, urban adolescents in a qualitative study of African American males and females. In general, researchers have noted, “minority and low-income groups are particularly vulnerable to espousing a limited future outlook” (Zimbardo, 1994 as cited by Honora, 2002, p. 303). However, contrary to most information in the literature that explicitly details the difficulties of African American males, Honora (2002) cited research indicating that females tend to have foreshortened future beliefs regarding education and overarching career goals. They hypothesize that such views about their future may be influenced by societal demands placed on women to begin a family, and being more present focused in general. Their study posits that the future outlook of adolescents affects academic achievement because beliefs about what one can achieve affect the effort and involvement they place on school in the present. Additionally, research has shown that future outlook affects current grade point averages.

Results revealed that higher achieving girls were more oriented to future goals and had significantly more goals than lower achieving girls and higher achieving boys (Honora, 2002). For girls that were low achieving, they were not certain as to what their futures would be, or did not think about future goals at all. Such results reveal a need to incorporate the utility of having future goals, which in turn will effect current and future educational aspirations. The impact of future aspirations on current behavior was evident in the words of one high achieving girl who stated

“I work hard in all my classes to the best of my abilities. I make sure I have all my credits so I can graduate, make sure I go to all my classes, don't skip and make sure that I do my best or ask questions when I don't understand. I just make sure my mind is clear to go to college and make sure I do all my goals before I go to anything else” (p. 310, Honora, 2002).
For African American female adolescents that do not have higher educational aspirations, or are unsure of their future goals, the necessary effort to achieve such goals may not be invested in middle and high school. Interventions that seek to bolster such future educational aspirations would not only be beneficial in the present, but would also aid in the future of attainment of educational and career goals.

Research by Cokley and Moore (2007) showed that women high in ethnic identity experienced an increase in GPA and that a significant positive relationship existed between high ethnic identity and GPA for women. In their study, 274 college students completed measures on ethnic identity, racial centrality, devaluing academic success and level of academic self-concept. A series of ANOVAs were conducted using gender as the moderator, and regression analyses using devaluing academic success as the mediator. Statistical results showed that women valued academic success more than men, and as a result, women had higher academic self-concepts and GPAs. It should also be noted that despite women having higher GPAs than men, the average GPAs in the study for both men and women was below a 3.0, and as noted above, is not evidence of higher academic achievement (Cokley & Moore, 2007). Despite the use of a college sample in their study, similar trends have been found with adolescents in middle and high school (Saunders et al., 2004; Wong et al., 2003).

Neighborhood quality has been shown by a number of researchers to play a role in the educational attainment of young people, and is especially salient in African American youth (Ceballo et al., 2004). Leventhal and Brooks-Guinn (2000) state that during early childhood and adolescence, the most consistent finding of their review of the current
knowledge was that high socioeconomic status neighborhoods had a positive effect on school readiness and achievement outcomes. This finding, coupled with the importance that African American females place on the quality of their neighborhoods calls for an intervention that can supplement for the lack of economic capital in their surroundings.

**Risk Factors of Academic Achievement**

Risk factors are defined as variables that “have proven or presumed effects that can directly increase the likelihood of a maladaptive outcome” (Rolf & Johnson, 1990, p.387 as cited in Gutman, Sameroff, & Eccles, 2002). A maladaptive outcome is an all-encompassing term that may include poor academic achievement, substance use and abuse, dropping out of high school, negative psychological health, etc. For all adolescents, risk factors can significantly impede their academic performance, and this is especially salient in the lives of African American adolescents (Crosnoe & Elder, 2004; Gutman et al., 2002). Transitioning to middle school can be an especially tumultuous period for adolescents, and often, their academic performance is affected, usually negatively (Burchinal, Roberts, Zeisel, & Rowley, 2008). The ways in which they adapt to this transition will affect them not only in the present, but likely on through high school and future attainment both educationally and professionally.

As noted above, socioeconomic status and a negative perception of the quality of one’s neighborhood are risk factors for poor academic achievement. Additional risk factors include maternal education, parental income and occupational status, single parent homes, a greater number of children in the home, inconsistent discipline, parental neglect, emotionally distant relationships with parents, lack of social support, family life stresses, ethnic or racial discrimination, lack of a strong racial or ethnic identity, among others
(Burchinal et al., 2008; Chavous et al., 2003; Crosnoe & Elder, 2004; Gutman et al., 2002; Miller & MacIntosh, 1999; Wong et al., 2003).

Research has shown that increased numbers of risk factors, referred to as a cluster of risk factors, lead to more maladaptive outcomes such as lower academic achievement (Gutman et al., 2002). For example, Burchinal et al. (2008) conducted a study on the academic achievement of 74 African American adolescents. The aim of the study was to assess the influence of social risk and protective factors on performance. Results showed that the extent and amount of exposure to risk factors were related to lower scores in math and reading on standardized tests, and contributed to deficits in social skills and increased levels of problem behavior (Burchinal et al., 2008). One highlight of this study was the protective nature of language skills. Children with more advanced language skills, despite a significant presence of social risk factors, were able to perform better academically. This finding further highlights the importance of academic achievement.

**Academic Disengagement**

Psychological disengagement refers to the detachment of self-esteem from external feedback or outcomes in a particular domain. Therefore, feelings of self-worth are not dependent upon one’s performance in that area (Schmader, Major, & Gramzow, 2001). Researcher shows that psychological disengagement is motivated by a desire to maintain one’s self-esteem when feeling threatened in a particular area, or when faced with the possibility of receiving negative feedback that would otherwise make them feel badly about themselves (Cokley & Moore, 2007; Schmader et al., 2001). This process can occur specifically in the domain of academics and is termed academic disengagement.
Academic disengagement can occur via devaluing or discounting. Devaluing the importance of a particular domain alters one’s self-concept such that the domain is no longer a part of one’s basis for self-evaluation. For academics, devaluing academic success involves the students’ self-esteem becoming disconnected from grades and other markers of academic achievement (Cokley & Moore, 2007). Essentially, this allows the student to do poorly academically and not be too affected by such performance because devaluing success, or lack thereof, does not lead the individual to try harder to achieve. The devaluation of academic achievement has led them to completely disengage from their performance either way so that their self-esteem is not negatively affected.

Discounting is when the validity of the feedback is reduced such that external evaluation is disconnected from one’s internal assessment of personal ability or competence (Schmader et al., 2001). This form of academic disengagement leads to the student dismissing feedback about performance because they feel it is biased and inaccurate, such as standardized tests. Steele (1997) stated that this form of disengagement is more prevalent in students of color because of the stigma and stereotypes they experience in their lives. Such experiences cause them to associate the feedback they receive with discrimination and prejudice, rather than on their true ability.

Student engagement “is malleable and relevant for predicting and preventing school dropout, as well as facilitating positive educational outcomes for all students” (Appleton, Christenson, & Furlong, 2008). As noted above, engagement is influenced by previous educational experiences, and for minority students, particularly African American students, these experiences are more often negative (Bennett, Jr., 2006). As a result, their belief in the utility of school is diminished, leading to less involvement and
increased levels of disengagement. Unfortunately, disengaged students may eventually drop out of school, and eventually perpetuate the cycle of negative outcomes. Therefore, research is geared at understanding factors that prevent disengagement and developing interventions that decrease it, to positively impact academic achievement of African American adolescents (Cokley & Chapman, 2008; Cokley & Moore, 2007; Schmader et al., 2001).

In previous studies, African Americans have been found more likely to psychologically disengage from academic performance and outcomes, such as test scores and grades, than their White counterparts (Schmader et al., 2001). In their study, Schmader et al. (2001) surveyed the disengagement processes and perception of injustice in 676 undergraduates. The aim of the study was to assess the effect of one’s perceived injustices on psychological disengagement, and the correlation with their current grade point average. Using structural equation modeling (SEM), results showed that for African American students, the level to which they perceived ethnic injustices was correlated with devaluing and discounting (Schmader et al., 2001). They conceptualized these results in light of the consideration that students that perceive discrimination in their everyday lives would extend this to the tests they take and therefore devalue and discount their results. This assertion is further strengthened by the fact that European American students in their study did not hold such believes regarding discrimination, and thus did not devalue or discount tests based on that fact, whereas Hispanic American students discounted test results as did African Americans (Schmader et al., 2001). Incidentally, the African American adolescents in their study that had academically disengaged also had the lowest grade point averages (GPA’s) of all the groups (Schmader et al., 2001), and although this
was not the focus of the study, increased levels of academic disengagement may be a factor of their lower grade point averages. If this were the case, interventions that aim to decrease academic disengagement would be necessary.

Lower scores on academic disengagement, specifically devaluing of academic success (DAS), have also been correlated with higher GPAs in college students, which may extend to adolescents as well (Cokley & Moore, 2007). In Cokley and Moore’s (2007) study, data was obtained from 274 African American participants to determine the moderators and mediators of academic achievement by comparing gender and levels of psychological disengagement. They sought to identify possible differences in the amount of psychological disengagement, more specifically, how much participants devalued academic success, and their respective grade point average (GPA) between men and women.

Results from this study showed that DAS was a mediator for grade point average in that a higher level of DAS was correlated with a lower GPA, which was found in men, and a lower level of DAS was correlated with a higher GPA, which was found in women. In fact, when controlling for DAS, grade point averages did not differ between men and women. Additionally, for women, high ethnic identity was correlated with a higher GPA; whereas a high ethnic identity for men was correlated with a lower GPA (Cokley & Moore, 2007). Based on these findings, specifically for women, low levels of devaluing academic success, especially when combined with higher levels of ethnic identity, could contribute to more favorable academic achievement.

Another study examined the effects of devaluing academic success, academic self-concept, levels of ethnic identity and anti-white attitudes on resulting academic
achievement (Cokley & Chapman, 2008). The authors of this study hypothesized that increased amounts of devaluing academic success, and increased levels of anti-white attitudes would impact the academic self-concept of students and result in a lower GPA. Participants included 274 African American college students that attended a historically Black university. Cokley and Chapman (2008) conducted 13 path analyses to assess the effects of the independent variables on academic achievement and found that 9 of the paths analyzed yield significant results. Consistent with their hypothesis, the extent to which a student devalued academic success, and had anti-white attitudes, was negatively correlated with grade point average (Cokley & Chapman, 2008). Essentially, the students in their sample that did not place a high value on academic achievement did not perform well.

Important aspects of the study conducted by Cokley and Chapman (2008), specifically for academic achievement, academic self-concept and devaluing academic success, were correlated. In their model, a significant link was found between academic self-concept and devaluing academic success in that decreased levels of academic self-concept led to increased levels of devaluing academic success, and thus, lower levels of achievement. The authors in this study stress the necessity of further research that investigates the links between ethnic identity, academic self-concept and devaluing academic success given their effect on academic achievement in African Americans (Cokley & Chapman, 2008).

Although further research is needed to examine the multitude of factors at play in academic disengagement, some researchers have become conscious of the importance of this aspect in the lives of adolescents. For example, Sirin and Rogers-Sirin (2005)
assessed the impact of school engagement, above and beyond various background factors, on the academic achievement of 499 African American adolescents. Their conceptualization of school engagement is akin to psychological disengagement because they include participation, identification and expectations as components of engagement (Sirin & Rogers-Sirin, 2005). School engagement in this respect includes behaviors, emotions and expectations regarding school, as is the case with devaluing and discounting. The emotional component leads to the student to devalue, discount and overall disengage behaviorally in the present, which is also influenced by a lack of educational expectations, or aspirations.

Confirmatory factor analyses revealed that engagement with school was a significant predictor of academic performance (Sirin & Rogers-Sirin, 2005), specifically the participation and expectations aspect of engagement. Essentially, especially for African American students, the more involved the student was in the process of schooling, the better their performance was academically. Also, the higher the expectations the student had for their academic future, the more likely they were to have better academic performance. This is yet another example of the need for students to be engaged in the learning process given the resulting academic achievement they experience.

Researchers have noted that further research should be done to investigate the extent to which African American students disengage academically, and the resulting effects on their academic performance (Schmader et al., 2001). Additionally, the interaction of other factors correlated with academic achievement, such as academic self-concept, racial identity and future aspirations and expectations, should also be assessed for their influence (Cokley & Chapman, 2008). Also, it has been noted that research should
be conducted that would allow for transcendence from correlational conclusions to causal
statements (Cokley & Chapman, 2008; Cokley & Moore, 2007).

Crosnoe and Elder (2004) assessed the impact of an academic risk factor on the
educational resilience, measured as risk reduction, of adolescents. Using longitudinal
data, they sought to identify alternative protective factors for adolescents with emotionally
distant relationships with their parents. This emotional distance included a weak
emotional bond and lack of support that led them to disengage and detach from school
resulting in decreased achievement (Crosnoe & Elder, 2004). For adolescents that
experienced such distance from their parents, supportive non-parental relationships and
friends were found to decrease the impact of risk factors, especially for females. The
influence of emotional factors was thought to be unique to adolescent females because of
the importance that females place on relationships (Crosnoe & Elder, 2004). The authors
of this study also indicate the need for research that assesses the possible protective nature
of role models, mentors and other significant persons in the lives of adolescents. The
overarching theme of this study was the complex way in which different risk factors
interacted to affect the achievement of adolescents, specifically African American
adolescents given their greater likelihood of clusters of risk factors. As such, it is
imperative that one remains cognizant of interactions of the person with their immediate
environment, community, and society at large (Crosnoe & Elder, 2004).

Identifying the impact of risk factors on the lives of African American adolescents
is imperative to aid in the creation of interventions that serve to decrease the effect of such
risks. However, this is only half of the equation. It is also necessary to identify, and
then enhance protective factors to counteract the risks present (Chavous et al., 2003). The
goal would be to decrease risk factors and identify protective factors as early in the child’s life as possible so that interventions can be implemented to guard against maladaptive outcomes, one of the most important being poor academic achievement. As noted above, academic success provides access to a number of current and future opportunities and a strong educational foundation will impact many different areas of an adolescent’s life.

**Protective Factors of Academic Achievement**

Protective factors are defined as assets that can essentially buffer the effects of the risk factors experienced by female African American adolescents (Belgrave et al., 2000; Piko, Fitzpatrick, & Wright, 2004; Wong et al., 2003). One essential educational protective factor, academic self-concept, has been noted as a central aspect related to academic success among African Americans. In addition, racial identity has been identified as a general protective factor for African American adolescents, and can serve as a buffer to a number of risk factors (Chavous, Rivas-Drake, Smalls, Griffin, & Cogburn, 2008; Wong et al., 2003). Finally, educational aspirations are considered a protective factor because they have been linked to academic achievement and it is believed that higher aspirations result in adolescents investing more effort in their current educational pursuits, which then impact future occupational opportunities (Furlong & Cartmel, 1995; Uwah, McMahon, & Furlow, 2008).

A number of researchers consider the presence of protective factors beneficial attributes that help individuals become and remain academically resilient in the face of adversity (Gutman et al., 2002; Southwick, Morgan, Vythilingham, & Charney, 2005). Interestingly, for adolescents that experience a number of risk factors, as is the case of African American adolescents, the presence of protective factors becomes even more
important than those who experience fewer risks (Gutman et al., 2002). The following protective factors have been proven to buffer against below average academic performance in African American female adolescents.

**Academic Self-Concept**

Academic self-concept, (i.e. how a student feels about their academic ability compared to other students), has been found to be a positive force in overcoming risk factors for academic success. Defined as “attitudes, feelings and perceptions relative to one’s intellectual or academic skills” (Cokley, 2000, p. 149), many studies have assessed the influence of academic self-concept on academic performance, often with different variables.

Gerardi (2005) assessed 307 college students’ grade point averages, academic self-concept, college performance in general and educational background. Their research revealed that a positive self-concept in a particular domain has an important influence on the student’s academic success, especially among ethnically diverse and low SES individuals by serving as a buffer to past difficulties and environmental stressors (Gerardi, 2005). Increases in the academic self-concept of the students in their study yielded concurrent increases in reported grade point averages, leading them to contend that academic self-concept may be even more influential in the prediction of GPA than past academic measurements. Additionally, academic self-concept not only affects one’s current level of academic achievement, but also may affect how far they go academically. For their participants, Gerardi (2005) believed that a higher degree of academic self-concept led to them staying in college by serving as an academic protective factor, given
that many low SES individuals do not attend college, or do not remain in college. This would lead one to believe in the utility of increasing this factor in high-risk adolescents.

Another study, conducted by Witherspoon et al. (1997), also found that academic self-concept was the best predictor of GPA for their participants. 86 low-income African American adolescents completed measures of academic self-concept, racial identity and self-esteem to determine how these factors contribute to academic achievement.

Witherspoon et al. (1997) conducted a simultaneous multiple regression equation and used a forced-entry method to find that the best predictors for GPA were positive internalized racial identity and academic self-concept. Notably, the higher the academic self-concept of the student, the higher their grade point average, as was the case with the students in the study previously mentioned by Gerardi (2005). Unfortunately, causality cannot be determined due to the methodology of the study by Witherspoon et al., (1997); however, the results have been found in other studies as well.

Cokley (2000) conducted a study to assess the academic self-concept of African American students attending a historically Black college or university (HBCU), and African American students attending a predominantly White college or university (PWCU). The premise behind this article was based upon previous research, which is mentioned above, that has indicated a link between academic self-concept and academic achievement. More specifically, they sought to identify predictors of academic self-concept for students at the HBCU and the PWCU to identify potential differences based upon one's environment (Cokley, 2000).

206 African American undergraduates completed the Academic Self-Concept Scale (ASCS), a questionnaire to assess their level of academic self-concept and a
demographics questionnaire including grade point average, gender, year in school and their perception of faculty interactions (Cokley, 2000). Using multiple regressions, analyses revealed that for students that attended the HBCU, academic self-concept was significantly predicted by grade point average, quality of student-faculty interactions and class status (Cokley, 2000). For students at a PWCU, academic self-concept was significantly predicted by grade point average and quality of student-faculty interactions. However, academic self-concept did not differ as a result of the type of institution that the student was attending. Also, consistent with previous research, this study found that as academic self-concept increased, grade point average increased as well (Cokley, 2000). This is further evidence of the utility of higher levels of academic self-concept as an aspect to buffer against academic risk factors.

In another study, the author sought to examine both academic self-concept and academic disidentification (Cokley, 2002). The theoretical basis of this article was developed by Steele and Aronson (1995) and is centered on the idea of stereotype threat. Steele and Aronson (1995) conceptualized stereotype threat as an instance when African American student fears that their behavior, in this instance, poorer performance, would result in fulfilling negative stereotypes about African Americans. To counteract fulfilling these stereotypes, and maintain their self-esteem, the student begins to deidentify with academic success (Cokley, 2002). This disidentification is essentially synonymous with the disengagement that occurs as described above. Additionally, the author chose to examine the relationship between academic self-concept and academic disidentification. Cokley (2002) reasoned that if the self-esteem for Black and White students did not differ; yet the Black students were still underperforming, there must be another
process at work, and it is likely disidentification or disengagement. Through the use of a cross-sectional design, 688 African American and White students were assessed in the areas of academic self-concept, self-esteem, and grade point average. One-way ANOVAs were used to analyze the self-esteem of the respondents, and despite the White respondents having higher grade point averages; their self-esteem was lower than Black respondents (Cokley, 2002). In addition, the academic self-concept of Black respondents was significantly higher than that of White respondents. These findings are contradictory to previous findings of the correlation between high academic self-concept and higher academic achievement. As a result, one would expect the African American students to have a higher GPA given their higher levels of academic self-concept. However, upon further analysis, it was revealed that African American males had a lower academic self-concept, and also a lower GPA. For African American females, their academic self-concept was higher, as was their GPA. Grouping the males and females together paints a different picture than was actually the case, and when separating the two groups, the correlation between academic self-concept and academic achievement held true.

Research has shown that African American female students and other ethnic groups experience academic disidentification, which has been indicated to lead to less motivation to succeed and academic problems such as low grades and dropping out (Osborne, 1997). Osborne (1997) stated that when students lack enthusiasm, the students do not have strong, positive identifications with academics and are not intrinsically motivated to learn. This is yet another facet African American females must contend with, on top of issues of racial identity. As of yet, the literature has not specifically addressed increasing the academic self-concept of African American adolescent females.
Given the findings that lower levels of academic disengagement and higher levels of academic self-concept are correlated with higher academic achievement, interventions that aim to increase these aspects are definitely warranted.

**Racial Identity**

Sellers, Smith, Shelton, Rowley & Chavous (1998) defined racial identity in African Americans as the significance and qualitative meaning that individuals attribute to their membership within the Black racial group within their self-concept. This definition can essentially be broken down into “How important is race in the individual’s perception of self?” and “What does it mean to be a member of this racial group?” (Sellers et al., 1998). The ascription one assigns to race is different for every individual; therefore, racial identity will have different significance for each person (Sellers et al., 1998).

As a result of African American’s history of enslavement and experiences of oppression in this society, the concept of race has historically played a major role in their lives (Sellers et al., 1998). Such experiences of oppression, to include ethnic or racial discrimination, have been considered potential risk factors for the psychological functioning of African Americans (Sellers, Copeland-Linder, Martin, & Lewis, 2006). Few studies have been done on the experiences of African American adolescents with regard to racial discrimination, so the work of Sellers et al. (1998) and Wong et al. (2003) has essentially been the spark in this area.

Wong et al. (2003) studied the effects of perceived discrimination on academic, socioemotional and behavioral outcomes. The authors also wanted to assess whether ethnic identification could serve as a protective and promotive factor against experiences
of discrimination. Results from a partial correlation analysis of 629 African American adolescents showed that “perceived discrimination by peers and teachers were negatively related to adolescents’ reports of achievement motivation, self-competency beliefs, psychological resiliency, and self-esteem” (p. 1212). The study by Wong et al. (2003) also found that “as connection to ethnic group increased, greater perceived discrimination was associated with smaller decreases in self-concept or ability and smaller decreases in school achievement” (p. 1214). Based upon these results, it appears that ethnic identity works as a protective factor that maintains ones self-esteem despite the presence of discrimination in the lives of these adolescents.

One could argue that a possible impetus behind this particular area of research was due in part to a realization of the effects of discrimination and oppression that African Americans have faced in American society. Several researchers (Sellers et al., 1998; Sellers Copeland-Linder, Martin & Lewis, 2006; Wong et al., 2003) have shown that during adolescence, African Americans often experience racial discrimination in their lives and in the school setting, in particular. These experiences can potentially have a negative effect on academic outcomes. It is argued that racism and social injustices are chief macrosystems that have negative implications for student learning (Nblett, Philip, Cogburn & Sellers, 2006).

Nblett et al. (2006) built upon the research by Wong et al. (2003) and asserted that individuals’ personal experiences with racial discrimination may be a factor that impacts their academic performance. They used ordinary least squares regression on participant information from 548 African American adolescents. Measures of discrimination, racial socialization, and academic achievement outcomes were
administered, and results showed that adolescent discrimination experiences were negatively related to academic curiosity, persistence, and performance (Neblett et al., 2006). These findings provide evidence that adolescents’ perceptions of racial discrimination not only directly influence their current academic performance, but they may also influence their beliefs related to future academic performance, as well as attitudes and views about learning (Neblett et al., 2006). Additionally, research by Witherspoon et al. (1997) found that for some adolescents, racial identity tended to be positively related to high academic self-concepts, which was also reported to be an important mediator of academic performance.

Sellers et al. (2006) investigated the link between the daily hassles of discrimination faced by African American adolescents and their psychological functioning. The researchers found that the amount of hassles and discrimination did not completely determine their psychological distress, such as stress, depressive symptoms, and well-being. It was found that adolescents’ positive feelings towards their racial group served as a protective factor that may have helped prevent the internalization of inferiority beliefs. The basic contention held by Sellers and colleagues (2006) is that the positive feelings about African American adolescent’s racial group buffered the discrimination they experienced, which still allowed them to have positive psychological outcomes.

More specifically, the adolescents in the Sellers et al. (2006) study that exhibited higher positive private regard beliefs and lower public regard exhibited better psychological outcomes. Racial regard was defined as “a person’s effective and evaluative judgment of her or his race in terms of positive-negative valence” (p. 26), and has two subtypes (Sellers et al., 1998). Private regard in particular, is the extent to which
individuals feel positively or negatively towards African Americans and their membership in that group, and public regard encompasses how the individuals believes others perceive African Americans (Sellers et al., 2006). Essentially, the adolescents in this study were able call upon their internalized group pride (private regard) to buffer against discrimination experienced, likely from a source, which they believed perceived them negatively anyway.

Additionally, according to Chavous et al. (2003), different components of youth’s racial identity relate to academic outcomes in different ways. For example, having high centrality (the extent to which being African American was central to the respondents’ definition of themselves), strong group pride (private regard), and positive beliefs about society’s view of Blacks (public regard) were related to more positive academic beliefs (Chavous et al., 2003). Results from that study also indicated that African American youths’ beliefs about self and race relate to their educational and social development through their attitudes and self-evaluations around education. However, Chavous et al. (2003) found that youth who felt the most negative about their group, those who had low private regard, low public regard and low centrality, had the most negative academic outcomes. Moreover, a more positive racial identity has been positively related to higher academic self-concept, which can then lead to better achievement.

Much of the research that addresses racial identity deals with discrimination. Therefore, assessment of adolescent racial identity outside of the discrimination experienced within the school has not been adequately addressed. Interventions specifically created to address this aspect, in conjunction with decreasing academic
disengagement and increasing academic self-concept could provide another method of buffering the risk factors of academic achievement.

**Educational Aspirations**

Flowers et al. (2003) define educational aspirations as “a student’s perception of their intent to pursue higher education in the future” (p.40). Researchers have reported that when adolescents set higher educational aspirations, they are more likely to achieve such goals (Halle, Kurtz-Costes & Mahoney, 1997). Additionally, educational aspirations have been found to be one of the most significant predictors of future educational attainment (Mau & Bikos, 2000 as cited in Garg, Melanson, & Levin, 2007). Given such research, high educational aspirations can be classified as a protective factor for adolescents, particularly underprivileged African American adolescent females who face a significant amount of academic risk factors.

A qualitative study by Howard (2003) examined the beliefs of 20 African American students from urban schools. Howard sought to understand from a student’s perspective, how they felt about their academic identity in relation to college aspirations. Howard (2003) selected students that were at different achievement levels ranging from challenging to those with college potential both behaviorally and academically. This study highlighted the multitude of factors that contribute to the educational aspirations of African American adolescents. In particular, in the interviews conducted with the students, Howard (2003) found that issues of race, ethnicity, parents’ perceptions and teachers’ perceptions, affected the student’s academic identity and by extension, educational aspirations as well. For the students in these urban schools, many did not feel that they were encouraged to pursue higher educational opportunities, and as a result
college was not a likely option for them. Howard (2003) recommends having explicit conversations with African American adolescents about college as a viable option for the future, and for them to receive support from individuals in their environment, which may include positive individuals from the community.

As noted above, children from single-parent households fare worse than their counterparts from two-parent homes in a number of areas, educational aspirations being one such area. Garg et al. (2007) posited that this is due in part to socioeconomic status. They compared the educational aspirations of Canadian adolescents from single and two parent homes. There were 681 adolescents from single-parent households and 2,751 adolescents from two-parent households. Analyses of variance conducted revealed that the educational aspirations of the adolescents from the single-parent homes were significantly lower than those from two-parent homes. Results from this study also showed that adolescents from two-parent families were more likely to endorse plans for college, implying that there is likely a correlation between educational aspirations and college attendance. Garg and colleagues (2007) asserted that these results were due to lower levels of academic self-schema in adolescents from single-parent homes. These researchers conceptualized academic self-schema as a variable inclusive of academic grades, learning experience, and expectations of their parents. Despite the lack of African American students present in this study, the results that were found are consistent with findings from other studies involving African American participants (e.g., Halle, Kurtz-Costes, & Mahoney., 1997). The researchers also recommended instituting intervention programs aimed specifically at increasing educational aspirations, further highlighting their importance as an academic protective factor (Garg et al., 2007).
A study conducted by Kerpelman, Eryigit and Stephens (2007) sought to identify the impact of certain variables on the future education orientation of African American adolescents. Future education orientation is conceptualized as the “thoughts, dreams, and expectations one has for future events” (p. 998); and specifically for this study, they examined thoughts, dreams and expectations regarding their educational trajectory and achievement (Kerpelman et al., 2007). Participants of this study were 374 African American adolescent males and females from grade 7 through grade 12 (Kerpelman et al., 2007). Hierarchical multiple regression was used to analyze the data of the participants. Results revealed that a stronger ethnic identity, higher self-efficacy, and more parental expectations affected scores on future education orientation, with no significant gender differences. However, there was a difference with regard to gender based upon prior academic achievement. Females exhibited higher future orientation if they had previously succeeded academically (Kerpelman et al., 2007). These findings, especially in relation to the research cited above, indicate the importance of educational aspirations as an additional academic protective factor for at-risk students, especially minority and low-income adolescents (McCabe & Barnett, 2000 as cited by Kerpelman et al., 2007). African American adolescents with high educational aspirations, in addition to higher academic engagement, academic self-concept and racial identity, would likely perform better academically.

**Cultural Interventions**

Currently, there are a limited number of studies that assess the impact of cultural interventions specifically for African American females (Belgrave et al., 2000), and none that address interventions aimed specifically at decreasing academic risk factors and
increasing academic protective factors. Despite the lack of research and practice, the utility of such interventions is difficulty to ignore. For example, two studies have been conducted to specifically address the utility of cultural interventions (Belgrave et al., 2000; Belgrave et al., 2004). In Belgrave et al. (2000) the aim of the study was to assess the increase in African centered (Africentric) values, ethnic identity, androgynous gender identification and self-concept following a culture-gender specific intervention for African American adolescent females. Part of the premise behind Belgrave’s study was similar to the research that has been conducted by Sellers et al. (1998) on the buffering effect of racial identity. Based on analyses of covariance results, there were significant differences between pre-and-posttest scores on Africentric values, ethnic identity and the Physical Appearance scale on the self-concept measure (Belgrave et al., 2000). The authors noted that with Africentric values, the scores on the pre-and-posttest measures did not increase for the intervention participants; however, the comparison group scores decreased over the course of the 4-month-period. This provides evidence of the effects that culture-gender specific intervention can have by buffering against a decline in both cultural identity and self-esteem.

Although the researchers expected an increase in these variables for the intervention group, they reason that the time of post data collection (first year of junior high school) greatly affected their scores. Given that this is a tumultuous period, they stated that without the intervention, it was likely that all participants would have evidenced reductions on cultural identity and self-esteem. By extension, maintaining pride in one’s cultural identity and self-esteem would lead to better performance in the academic realm. As noted above (Chavous et al., 2003), higher levels of racial/cultural
identity often buffer risk factors to poor academic performance, as is also mentioned in this study.

Another study by Belgrave et al. (2004) implemented an intervention called *Sisters of Nia* that sought to impact the ethnic identity, androgynous gender identification (i.e. endorsement of both masculine and feminine traits), and relational aggression (e.g. gossiping, exclusion of others) of 59 African American adolescent girls. Results from a number of ANCOVA’s resulted in significant pre-post differences across all variables for the intervention participants. It was reiterated in this study that cultural beliefs and values are factors that increase resilience in the lives of African American adolescents (p. 340, Belgrave et al., 2004). Both studies by Belgrave et al. (2000; 2004) emphasized the multiple factors key to the resiliency of African American adolescents, specifically the protective nature of racial/ethnic identity.

A similar study assessed the impact of an intervention, called “Young Empowered Sisters” (YES!) on 74 African American girls (Thomas, Davidson, & McAdoo, 2008). YES! was a school-based, after school intervention specifically created for African American girls implemented during a 10-week period. Results from separate analyses of covariance showed increased scores on ethnic identity, racial awareness, collectivism, and activism (Thomas et al., 2008). The curriculum for the YES! Program was focused on African American culture both past and present, as well as African centered history. This content is believed to positively affect African American adolescents by increasing pride in their culture. Cultural pride, similar to the private and public regard aspects of racial identity, has previously been identified as an additional academic protective factor for African American adolescents (Sellers et al., 2006; Wong et al., 2003).
Summary

In conclusion, researchers have noted that there is still much to be learned regarding the complexity surrounding academic attitudes, racial identity, gender, and environmental variables in relation to academic success (e.g., Cokley and Moore; 2007). Psychoeducational interventions are needed to improve the academic achievement of African American adolescents (e.g., Belgrave et al., 2000). Moreover, interventions that aim to decrease risk factors and increase protective factors for educational achievement specifically among African American females can be particularly useful to the extent that focus can solely be on addressing their specific needs, as opposed to gender neutral or combined male and female formats. Unfortunately, such interventions are very limited in the literature and in practice. This project aims to contribute to this gap in the literature and practice through the implementation of a brief culture-specific intervention for African American female adolescents’ academic risk and protective factors.
Chapter II
Rationale and Hypotheses

The proposed intervention is aimed at reducing risk factors and bolstering protective factors for educational achievement within African American female students of an economically disadvantaged community by creating a link with African Americans from a student-led organization of women at a University who will serve as facilitators for the girls of the selected school. In addition, this link also includes participation from an adult woman from the community who will serve as a consultant to the process, and will help to facilitate the intervention along with the university students. Involving community members as consultants and facilitators enhances community engagement and is a central tenet of this project because it provides the opportunity to learn what is needed directly from the community we are seeking to serve. This facet will allow us to better understand the participants’ vantage point and therefore enable us to provide a better service to them. In addition, this method creates a collaborative link among the University, community, and students.

Given the pre-existing disparities between African American and White adolescents, and the lack of perceived neighborhood quality, there is a need for intervention that aim to counteract the effect of such risk factors of the academic performance of African American adolescents from underprivileged neighborhoods. The risk factor that the intervention aims to decrease is academic disengagement. Protective factors that the intervention will address include strengthening their academic self-concept, racial identity, and educational aspirations. The current study will include both
an intervention and control group and only the intervention group will receive the culture-gender specific brief intervention.

An abbreviated form of the research-supported manualized **Sisters of Nia** intervention (Belgrave et al., 2004) is being implemented to assess whether a brief version will be as effective as the full format. Given the limited amount of resources of many underprivileged neighbors, coupled with the significant amount of African American adolescents in need of academic help, a shortened version of the culture-gender intervention that yields results would be extremely beneficial. Not only would this be more cost-effective than the 16-week intervention, but it would also enable the intervention to be administered more often and just as effectively.

The intervention includes activities taken from **Sisters of Nia** where the facilitators and the participants will initially be together with the overall group, and in transition to breakout sessions of small groups that encourage personal interaction. Based on the rationale presented above, the following hypotheses will be tested:

**Hypothesis 1**

Participants in the intervention group will report less academic disengagement than those in the control group, therefore it is anticipated that the intervention group will show a greater increase in academic disengagement compared to the control group from baseline to post-intervention. For Hypothesis 1 the primary method for analysis will be the analysis of covariance (ANCOVA). Results will be determined by comparing the intervention and the control group on their post-intervention scores on the Disengagement Scale (Major, Spencer, Schmader, Wolfe & Crocker, 1998) (dependent variable), while controlling for their baseline scores (covariate).
Hypothesis 2

Participants in the intervention group will show a higher increase in their academic self-concept compared to the participants in the control group from baseline to post-intervention. The primary method for analyzing Hypothesis 2 will be the analysis of covariance (ANCOVA), comparing the intervention and control group on their post-intervention Academic Self-Concept Scale scores; Reynolds (1980) (dependent variable), while controlling for their baseline scores (covariate).

Hypothesis 3

Participants who receive the intervention will show a higher increase on the centrality and regard subscales of racial identity compared to the participants in the control group from baseline to post-intervention. Hypothesis 3 will be analyzed using the analysis of covariance (ANCOVA), comparing the intervention and control group on their post-intervention Multidimensional Inventory of Black Identity-Teen Regard and Centrality subscales (Sellers et al., 1997) scores (dependent variable), while controlling for their baseline scores (covariate).

Hypothesis 4

Participants who receive the intervention will report higher levels of educational aspirations; specifically a higher number of intervention participants will report aspirations to attend a 4-year college compared to the control group from baseline to post-intervention. Hypothesis 4 will be analyzed using an analysis of covariance (ANCOVA), comparing the mean scores for the intervention and control group at baseline and follow-up on their likelihood of future educational aspirations.
Chapter III

Method

Participants

This project will be conducted with African American adolescent females that attend a local elementary school. The school is comprised of students that live in an underprivileged area of Cincinnati, a neighborhood that warrants the classification as underserved and low-income. The demographics of the school indicate that approximately 99% the student population is African American, and 87% are eligible for free lunch (NCES, 2006). The criteria for participation in the study will be that a student must be a female in 6th, 7th or 8th grade, not in any other programs, in regular classes (i.e., not special education), and attend the designated school. Participants will be randomly selected into the intervention group or the control group. Female students at the designated school who are not African American may participate in the intervention, but will be excluded from the data analyses.

Measures

The Disengagement Scale. Academic disengagement was measured using the Disengagement Scale (Major, Spencer, Schmader, Wolfe & Crocker, 1998). The Disengagement Scale (DS) is a self-report measure designed to assess three academic disengagement processes: discounting standardized test scores, devaluing academic success (DAS), and disengagement from school. Lower scores are indicative of lower levels of academic disengagement. The measure has a total of 12 items that are rated on a Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). The first subscale, discounting standardized test scores, includes items such as “I feel that
standardized achievement tests are definitely biased against me.” Sample items from the second subscale, devaluing academic success, include “Being good at academics is an important part of who I am” (reverse coded). A relatively high Cronbach’s alpha value (acceptable levels are .70 or above) for the DAS subscale of .78 has been reported when used with undergraduates (Schmader et al., 2001). Finally, disengagement from school includes three items such as “I really don’t care what tests say about my intelligence.”

**Academic Self-Concept Scale.** Academic self-concept was measured with the Academic Self-Concept Scale (ASCS; Reynolds, Ramirez, Magrina, & Allen, 1980). This scale assessed how positively one feels about his or her academic ability. The scale was initially created for college level students, though in later studies, the word “college” was replaced with the word “school” to make it more applicable to the adolescent population (Witherspoon et al., 1997). This scale consists of 40 items that are answered based on a four-point Likert-type scale ranging from 1 (strongly disagree) to 4 (strongly agree). The higher the score on a scale of 40-160, the better is the adolescents’ academic self-concept. Reynolds et al. (1980) reported the internal consistency as .91 with adolescents and this measure has been found to correlate with grade point average.

**Multidimensional Inventory of Black Identity-Teen.** Racial identity was measured using the Multidimensional Inventory of Black Identity-Teen (MIBI-T; Scottham, Sellers, & Nguyen, 2005). The MIBI-T, the adolescent version of the Multidimensional Inventory of Black Identity (MIBI; Sellers, Rowley, Chavous, Shelton & Smith, 1997), consists of seven subscales comprised of three items each. For the current study, only the Centrality and Regard subscales of the MIBI-T were included in the interpretation statistical analyses. The centrality subscale refers to the extent to which a
person normatively defines her/himself with regard to race and regard refers to a person's affective and evaluative judgment of his/her race that has both a private and public component (Sellers et al., 1998). The centrality and regard subscales were selected for this study based on previous research which identified the connection between centrality, public and private regard being linked to future educational attainment (Chavous et al., 2003). Chavous et al. (2003) found that having high centrality, strong group pride (private regard), and positive beliefs about society's views of Blacks (public regard) were related to more positive academic beliefs. Overall, aspects of racial identity that include centrality and regard, as both risk and protective factors, are related to different academic beliefs and achievement (Sellers et al., 1997, Chavous et al., 2003). A specific aim of this study was to determine if a brief intervention would increase these aspects of racial identity. A sample item from the three-item centrality subscale is “I have a strong sense of belonging to other Black people.” Higher scores on centrality indicate that race is more central to the individual’s self-concept. The regard subscale includes two components, private regard and public regard. The private regard subscale assesses internal positive and negative feelings towards being African American such as “I am happy that I am Black”. The public regard subscale assesses the extent to which participants view the outside world to have positive views towards Blacks as a whole, including “Most people think that Blacks are as smart as people of other races” (Sellers et al., 1997; Sellers et al., 2006). Participants responded to this 15-item questionnaire on a five-point Likert-type scale ranging from 1 (really disagree) to 5 (really agree) for the centrality and regard subscales. Higher scores indicate more positive beliefs toward African Americans and the belief that other groups hold more positive attitudes towards African Americans as well.
Educational Aspirations. Educational aspirations will be assessed using a single item questionnaire from a previous study (Garg, Melanson and Levin, 2007) about the participant’s current feelings regarding how far they would go in school. The EDUCASP inventory asked the participants, how far they believed they would go in school with the responses ranging from 1 (less than high school graduation) to 9 (beyond the first college degree, master’s or higher). Higher scores indicate higher educational aspirations.

Setting

The research study will be conducted on the campus of local University in Cincinnati, Ohio and at a local community center in a neighboring community located approximately 1-½ miles from University. The intervention group will travel to the University, while the control group will remain at the community center. Bringing the intervention group to the campus of the University allows them to develop a context in which to imagine themselves belonging in the future, and may further impact educational aspirations. This setting will also further strengthen the community engagement aspect with the University community by inviting members from the neighboring community to participate in the facilitation of and to familiarize the participants with various aspects of the campus.

Seeking the participation from members of a neighboring community is important to the Jesuit mission of the selected University. Many initiatives have sought to fulfill this mission through adopting a service-learning stance, and by involving community members in programming initiatives on campus, or having members of the University community involved in activities in the community. Service learning seeks to join the campus and the surrounding community in a collaborative effort to combine service
objectives with learning objectives (NSLC, 2008). The goal of service learning is to allow students to participate in community service that not only benefits the community, but also enriches educational experience of all involved to enhance the connection and the learning that is taking place. This project seeks to accomplish both of these endeavors. The community center was selected as the site for the control group as recommended by Belgrave et al. (2004), the developer of the *Sisters of Nia* intervention, which is being adapted for this brief intervention. Belgrave et al. (2004) recommended using a community center or a church as an ideal location to carry out the intervention given the accessibility to individuals in the community. Also, for this particular neighborhood, it is also in close proximity to the elementary school and it will allow the adolescents to participate in activities in a positive environment that is outside their normal school setting. Finally, the community center has a history of offering community services at the building that are not religiously oriented, that are geared towards the overall betterment of family and children in the area.

**Procedures**

This study will first be approved by the University’s Institutional Review Board. The particular school was selected following communication with school officials at a Cincinnati Public School. The principal of the school has agreed to allow the students to participate in this study, pending parental consent. After meeting to finalize the details of the study, a letter will be generated describing the study and its purpose, and sent to all the parents or guardians of African Americans female adolescent students in the school that are in 6th, 7th or 8th grade. Following the mailing of the letter of intent, a social gathering will be held at the local community center to increase the likelihood of meeting all the
parents, and obtaining increased participation. During this meeting, parents will again be
informed of the purposes of this study, and given a chance to have any questions or
concerns they may have addressed. Consent forms will then be disseminated and
collected from each parent that agrees to allow their daughter to participate in the study.
After parental consent has been received, assent will be granted from the girls that have
been permitted to participate. An explanation of the intervention and control group will
take place, and the research assistants will collect baseline data during this meeting, one
week prior to the intervention.

Following the collection of baseline data, as well as demographic questionnaires,
the participants will be randomly assigned to either the intervention group or control
group. In an attempt to limit the number of participants that may drop out of the study if
the intervention would be held over a long period of time, the intervention will take place
as a daylong program over three consecutive Saturdays. This will occur one week
following baseline data collection and randomization. Post-intervention data will be
collected through dissemination of the measures again after the closing ceremony for the
intervention group, and during the last hour of programming for the control group.
Participants that complete all questionnaires, baseline and post-intervention, will receive a
$10 money equivalent for their participation.

The independent variable will be the random assignment to either the intervention
or control group, and the dependent variables will be the participants’ changed scores on
the academic disengagement, academic self-concept, racial identity (i.e. centrality and
regard), and educational aspirations measures.
Description of Intervention-Sisters of Nia

As noted above, the intervention will be arranged as a three week, brief, condensed intervention where the participants will be exposed to information designed to educate and enlighten them around the values of education and positive racial and ethnic identity. A condensed version of *Sisters of Nia* (a cultural intervention created specifically for African American girls; Belgrave et al., 2004) will be conducted with African American female undergraduate students at a University. These students will be volunteers from an organization that seeks to foster relationships among women that transcends racial, international, physical and social barriers to help individuals develop and maintain constructive relationships. When conducted by Belgrave et al. (2004), the program was done with all African American female facilitators. Current students from a campus organization will model this aspect of Belgrave’s intervention. *Sisters of Nia* was originally conducted utilizing 14 sessions over 16 weeks, whereas for this study, it will be condensed to 10 sessions over 3 weeks. Again, the abbreviated version is being adopted to assess whether the same impact can be achieved as with the original format. Also, it is likely that attrition will not be problematic given the abbreviated format.

The female participants that are randomized into the intervention group will be transported from their school to the site that the intervention will take place on the campus of a local University. Those who are randomized to the control group will be transported to the community center where alternative activities will be held.

The intervention will be described first and the control group’s activities will be discussed second. Intervention activities for the beginning of the program will be geared towards building a relationship between the student participants and intervention
facilitators to foster an open relationship predicated on bonding through gender and race. During this 3-week intervention, there will be ten sessions covered. The ten topics to be discussed will be (1) orientation, (2) Jamaa building, i.e., a time dedicated to getting to know each other and their facilitators, (3) introduction to relationships, (4) relationships continued, (5) introduction to Africa and African culture, (6) Africa and African culture continued, (12) leadership of African American women, (13) education awareness, (14) life course and a closing ceremony (Belgrave et al., 2004).

The program is predicated on three phases in accordance with Belgrave et al.’s (2004) structure. The initial phase focuses on development of a relationship, the second phase focuses on the introduction of concepts of worldview that impact race, gender and oppression, and the third phase concludes with a closing ceremony to commemorate the relationships that have been built and the wealth of information shared. Please refer to Appendix, A which lists the schedule of topics and activities according to each phase.

As prescribed by Belgrave et al. (2004), team-building activities to further strengthen the connection among the participants and the facilitators will be interspersed throughout the day. Please refer to Appendix B for the description of each team-building activity. At the conclusion of the sessions on each day, and following the closing ceremony on the final day, the small groups will reconvene into one large group and recite the Sisters of Nia creed that emphasizes positive ways of interacting with others. The conclusion of the retreat will take place on the final afternoon following a synopsis of the program in the final hours of the third day. During this time, parents will be invited to see their daughters receive a certificate to commemorate their participation and to thank the families for participating. At this time the parents will also be able to pick up their
daughters, and again, have any questions or concerns addressed. In the event that all parents are not able to attend, transportation back to the local community center will be provided for those participants that need it.

The control group will be transported to the community center to engage in recreational activities as is suggested in the initial study by Belgrave and colleagues (2004). The theme for the control group is health and fitness and will include fun activities including a dance competition. The aim of the activities for the control group is to keep them interested and invested to increase the likelihood that they will remain in the study, while limiting their interaction with the facilitators so as to not confound the results. The time spent at the recreation center will mirror the time that the intervention group participates in the intervention.
Chapter IV

Proposed Analyses

This is a between-subjects design comparing two groups (the X-ESP intervention group versus the control group) on the outcome variables of academic disengagement, academic self-concept, racial identity, and educational aspirations. It is expected that a total of 75 young ladies will be participants in this study, including 36 X-ESP intervention group participants and 36 control group participants. A total of 72 participants will ensure sufficient power (80%), according to Jaccard & Becker (1990) for a between-subjects design.

Main Analyses

For Hypothesis 1 the primary method for analysis will be the analysis of covariance (ANCOVA). This will be determined by comparing the intervention and control group on their post-intervention scores on the Disengagement Scale (Major, Spencer, Schmader, Wolfe & Crocker, 1998) (dependent variable), while controlling for their baseline scores (covariate). Hypothesis one states that participants in the intervention group will report less academic disengagement than those in the control group, therefore it is anticipated that the intervention group will show a greater increase in academic engagement compared to the control group from baseline to post-intervention.

The primary method for analyzing Hypothesis 2 will be the analysis of covariance, comparing the intervention and control group on their post-intervention Academic Self-Concept Scale scores; Reynolds (1980) (dependent variable), while controlling for their baseline scores (covariate). Hypothesis 2 states that participants in the intervention group
will show a higher increase in their academic self-concept compared to the participants in the control group from baseline to post-intervention.

Hypothesis 3 will be analyzed using the analysis of covariance, comparing the intervention and control group on their post-intervention Multidimensional Inventory of Black Identity-Teen Regard and Centrality subscales (Sellers et al., 1997) scores (dependent variable), while controlling for their baseline scores (covariate). Hypothesis 3 states that participants who receive the intervention will show a higher increase on the centrality and regard subscales of racial identity compared to the participants in the control group from baseline to post-intervention.

Hypothesis 4 will be analyzed using the analysis of covariance, comparing the mean scores for the intervention and control group at baseline and post-intervention on their likelihood of future educational aspirations. Hypothesis 4 states that participants who receive the intervention will report higher levels of educational aspirations; specifically a higher number of intervention participants will report aspirations to attend a 4-year college compared to the control group from baseline to post-intervention.

**Descriptive Analyses**

The demographics for the sample will be provided based on information received from the participants’ parents: age, grade, parental level of education, parental status, monthly income, source of income and number of siblings.
References


http://www.census.gov/newsroom/releases/archives/education/cb07-40.html


http://www.edweek.org/rc/issues/achievement-gap/


Appendix A

Intervention Group Schedule of Activities

Day One

- Phase One-Development of a Relationship
  - 10:45AM: Pick-up from local community center
  - 11:15AM-11:55AM: Session 1-Orientation
  - 11:55AM-12:35PM: Session 2-Jamaa building
  - 12:45PM-1:40PM: Lunch with speaker
    - Speaker Topic: *The importance of seeking a mentor*
  - 1:40PM -2:20 PM: Session 3-Introduction to relationships
  - 2:20 PM -3:00 PM: Session 4-Relationships continued
  - 3:00 PM -3:15PM: Read the creed, review of homework and dismiss (to be back at school by 3:30PM)

Day Two

- Phase Two-Introduction of Concepts Regarding Worldviews
  - 10:45AM: Pick-up from local community center
  - 11:15AM -11:55AM: Session 5-Introduction to Africa & African Culture
  - 11:55AM -12:35PM: Session 6-African Culture continued
  - 12:35PM -12:45PM Break
  - 12:45PM-1:40PM: Lunch with speaker
    - Speaker Topic: *Valuing education*
  - 1:40PM -2:20PM: Session 12-Leadership: African American women
  - 2:20PM -3:00PM: Session 13-Education Awareness
  - 3:00PM -3:15PM: Read the creed, review of homework and dismiss (to be back at school by 3:30PM)

Day Three

- Phase Three-Wrap-up and Closing Session
  - 10:45AM: Pick-up from local community center
  - 11:15AM -11:55AM: Session 14-Life course
  - 11:55AM -12:35PM: Wrap-up of previous sessions
    - Question and answer portion of what was learned
  - 12:35PM -12:45PM Break
  - 1:00PM -2:30PM: Session 14 cont-Moving on: Closing Ceremony with speaker
    - Speaker Topic: *Aspiring toward college*
    - Lunch will be provided
  - 2:30PM -3:00PM: Dissemination of assessment measures
  - 3:15PM Closing and dismiss (to be back at school by 3:30PM)
Appendix B

Description of Activities

All of the sessions described below are followed according to procedures from *Sisters of Nia: A Cultural Program For African American Female Adolescents* outlined by Belgrave et al. (in press). This cultural program includes manuals for implementation and participation in the intervention. Deviations from the manuals will be addressed when required.

Session 1: Orientation
- The objective of this session is to provide an overview of the project and allow the students to get to know each other.
- This session includes gathering in a circle to give a brief overview of the program, ceremonial activities and icebreakers.
- For this study, Belgrave et al. (in press) activities will be conducted, excluding the second icebreaker.

Session 2: Jamaa Building: Purpose, Introductions, and Rules
- The objective of this session is to begin creating an emotionally safe atmosphere within each group (Jamaa).
- During this session, the participants take part in Jamaa building activities and individual work geared towards preparing them for the intervention.
- To condense this session for the current study, and all sessions outlined below, the opening ceremony will only be done at the start of the day, instead of at the beginning of each session as noted in Belgrave et al. (2004). For this session in particular, the discussion and certain activities will have to be monitored by the *mzee* to stay on schedule (See Appendix A).

Session 3: Introduction to Relationships
- The objective of this session is to understand relationships and help them begin to develop positive relationships.
- In this session, the Nguzo principle and the topic of the session are discussed. During this session, relationships will be explained and the students will give their definition and discuss some types of relationships.
• In the Facilitator’s Manual, Belgrave et al. (in press) gives suggestions for time constraints, such as having the participants do the teambuilding activity by pairs, instead of one by one.

Session 4: Relationships continued
• The objective of this session is to increase cohesion and teamwork, and continue building relationships and trust among group members.

• In this session, the Nguzo principle and the topic of the session are discussed. For this study, this session includes discussion of how the participants can become good sister/friends and participation in an activity that facilitates trust amongst the Jamaa.

• To condense the material for this study, the discussion will have to be monitored by the mzee to stay on schedule (See Appendix A).

Session 5: Introduction to Africa and African Culture
• The objective of this session is to gain an understanding of participants’ feelings and knowledge of Africa.

• In this session, the Nguzo principle and the topic of the session are discussed. To assess their knowledge, the girls will be asked to write what they know about African in their journals. A discussion of their responses will then be facilitated by the mzees, and then discussion of the various attitudes about African culture will ensue.

• To condense the material for this study, the discussion will have to be monitored by the mzee to stay on schedule (See Appendix A).

Session 6: African Culture continued
• The objective of this session is to increase knowledge and appreciation of Africa and African culture.

• In this session, the Nguzo principle and the topic of the session are discussed. This session covers information about African culture. Following the dissemination of information, pictures will be collected from different sources (magazines, etc.) and put together for their viewing. This material is intended to provide a complete picture of the peoples that make up the many countries of Africa.

• To condense the material for this study, the discussion and activity will have to be monitored by the mzee to stay on schedule (See Appendix A).

Session 12: African and African American Women in Leadership
• The objective of this session is to introduce girls to African American women leaders and to assist the girls in identifying and examining leadership qualities.

• In this session, the Nguzo principle and the topic of the session are discussed. This will be followed by a discussion on leadership, a teambuilding activity, the Underground Railroad, and processing the activity. This activity will educate them about what the Underground Railroad was, and will require that they work with girls outside of their Jamaa to enhance community and effectively working with others.

• To condense the material for this study, this session will not involve an individual speaker, as is suggested by Belgrave et al. (in press). The speaker will be during the lunch hour instead.

Session 13: Education Awareness

• The objective of this session is to explore and clarify the purpose of pursuing an education and cultivating our knowledge; to discuss the importance of education as a tool in the advancement of African Americans, and to increase awareness of long-term consequences of under valuing education.

• In this session, the Nguzo principle is discussed in relation to knowledge and education. Different forms of knowledge are discussed, and the ways in which we learn. The participants will then come up with ways that their own knowledge can be cultivated individually, followed by planning skits/role plays to dramatize the importance of the scenario.

• To condense the material for this study, journal work will not be done at this time, and the speaker will be during the lunch hour.

Session 14: Life course

• The objective of this session is to help the students gain an understanding of faith’s role in achieving success.

• In this session, the Nguzo principle and the topic of the session are discussed. For this session, all of the participants will remain together as one large community to discuss the principle in relation to the skits from the previous day. The session ends with an activity to leave each participant with a positive word.

Session 14 cont: Moving On: Closing ceremony

• The objective of this session is to symbolize how far they have come on their journey as a “Sister of Nia”.
During the closing ceremony, one of the girls will be asked to volunteer to explain and perform the ceremony. Girls from each Jamaa will be asked to make a presentation on “What Sisters of Nia Means to Me”. Following the presentations, the mzees will present each of girls with a gift certificate and a small gift. The session continues with each mzee identifying what they have received from the girls and the closing ceremony. At this time, parents and other invited guests may participate. The session will close by encouraging the girls to continue to remember and practice what they have learned, and recitation of the creed.
Appendix C

Description of Activities for Intervention Group 2

As noted in Belgrave et al. (2004), activities for the intervention group 2 may include movies, discussion and interactive activities. The intervention group 2 will meet at the same time as the other intervention group; however, they will not participate in the same sessions. See below for a description of activities.

- Day One
  - 10:45AM: Meet at local community center
  - 11:00AM-12:45PM: Icebreakers and dance video
  - 12:45PM-1:45PM: Lunch
  - 1:40PM -3:00 PM: Break into teams and begin skit creation
  - 3:00 PM -3:15PM: Dismiss

- Day Two
  - 10:45AM: Meet at local community center
  - 11:00AM-1:00PM: Teams design and decorate t-shirts
  - 1:00PM-2:00PM: Lunch
  - 2:00PM -3:00 PM: Continue with talent show practice
  - 3:00 PM -3:15PM: Dismiss

- Day Three
  - 10:45AM: Meet at local community center
  - 11:00AM-1:15PM: Talent show final practice
  - 1:15PM-2:00PM: Lunch and post data collection
  - 2:00PM -3:00 PM: Talent Show competition
  - 3:00 PM -3:15PM: Dismiss
Appendix D

Girls Day Out Announcement

Attention Students, Parents and Guardians!

I am excited to inform you of an upcoming program and research study that will be conducted at your daughter's school through the Department of Psychology at Xavier University in Cincinnati, Ohio. This opportunity has been designed just for girls.

To make this program a success, we first need to tell you and your daughter more about the program. We would like to invite you and your daughter to a special gathering where we will provide food, games and activities while we describe the research study and what your child will be doing during the project. During this gathering, you and your child may ask questions. Also, we will ask for your written permission for your daughter to take part in this great opportunity. You and your child may choose not to participate without consequences.

There is no cost to you or your family at all. There is no harm, either. All we ask is that you come to this special gathering if you have a daughter in the 5th, 6th, 7th, or 8th grade. To bring our program and research study to your daughter's school, we really need to have parents attend our special gathering so they can receive all the information.

What: Parent and Daughter Gathering for the Culture-Gender Study
Date: January 30, 2010
Time: 12:30pm-2:30pm
Location: Xavier University-Kelley Auditorium

Please RSVP to 513-766-2258 so we can have enough food and prizes!!!!
Purpose of the Program

This study aims to build up the following for the students:

- Future educational goals and aspirations;
- Knowledge of and appreciation for African and African American culture;
- Ethnic pride and identity;
- Interactions with African American female leaders from a local University;
- Leadership skills and creativity

Questions???

If you have questions at any time during this study, you may contact me, Bianca M. Bronson, M. A. at 513-766-2258, or my supervisor, Dr. Anna Ghee, at 513-745-3463.
Appendix E

Parental Consent Form

Culture-Gender Study

Dear Parents and Guardians,

You are being asked to consent for your child to participate in a project to research factors related to school performance conducted through Xavier University in Cincinnati, Ohio. The researcher will explain to your child what she will be doing during the project, and your child may ask her questions. Your child may choose not to participate and it will not affect your child at school in any way. A brief explanation of the project is provided below.

What Helps To Improve School Performance?

Researchers have stated that there is still much to be learned regarding racial identity, gender, environmental variables, and feelings about school in relation to school performance. Workshops that decrease risk factors and increase factors that improve school performance, specifically among African American girls, can be especially useful for them because the focus is on their specific needs. Researchers have also reported that educational workshops are needed to improve the school performance of African American adolescents. This study seeks to add to research on the usefulness of these workshops.

The Workshop

Your child will be asked to fill out surveys before the study begins. The students that agree to participate will be randomly assigned to one of two groups. Group I will take part in the workshop at Xavier University, while Group II will participate in alternative fun activities at a community center close to the school. The project will be for 4 hours each Saturday over a 3-week period (i.e., three consecutive Saturdays). During these days, students will be provided lunch and snacks and will take part in different activities (such as crafts, skits, discussion, etc.). The surveys will be given out prior to the start of the study, and again during the last hour of activities for both groups. The surveys ask about their feelings about their school abilities, motivation for school, beliefs about their race and how far they want to go in school. It is estimated that data collection will take approximately 30-45 minutes to finish each time. Again, the purpose of this study is to compare the groups on factors that improve school performance.

The Study Data Will Be Confidential

There are no anticipated risks of participation in this study. Your child’s name will not be used on any of the questionnaires that she completes and instead will be assigned a number on all the forms to protect her identity. Only the main researcher will be able to
see the list linking the names to their study number. Also, this list will be destroyed at the end of the study.

What To Do With This Form

Please check below to let us know whether you are willing to let your child participate. Afterwards, please give it to one of the researchers. Results from the study will guide future research and community programs on factors that improve school performance for African American adolescents.

Questions

If you have questions at any time during this study, you may contact Bianca M. Bronson, M. A. at 513-766-2258, or her supervisor, Dr. Anna Ghee, at 513-745-3463, or the Chair of the Institutional Review Board at 513-745-3278.

Parental Consent

I understand that my child’s participation is voluntary. My child does not have to participate if she chooses not to do so and she can stop at any time. Refusal to allow my child to participate in this study will have no effect on my child’s participation in other school activities, my relationship with the school, or my child’s situation at school. At the end of the study, students who have done the following three actions will receive a $10 credit card: (1) students who complete (or at least start to answer) the questionnaires (written questions) at the beginning of the study; and (2) students who attend all three Saturday workshops; and (3) students who complete (or at least start to answer) the questionnaires (written questions) at the end of the study. Signing below means that I have been given a copy of this document, had an opportunity to read it and ask any questions, and agree to let my child participate.

_____ Yes, it’s okay if my child participates in the Culture-Gender Study.

Child’s Name (please print)  Child’s Date of Birth  Phone Number

Parent or Legal Guardian’s Name  Parent or Legal Guardian’s Signature  Date

NOTE: IF YOU DO NOT WANT YOUR CHILD TO PARTICIPATE, YOU DO NOT NEED TO SIGN THIS FORM. JUST RETURN YOUR BLANK FORM TO THE RESEARCHER.
Appendix F

Student Assent Form

Culture-Gender Study

I, ___________________________ understand that my parent/guardian has given permission (said it's okay) for me to take part in a project about school performance. This project is under the direction of Bianca M. Bronson, M. A., a graduate student of Xavier University and Dr. Anna Ghée, her supervisor.

I have been told that if I agree to participate, I would take part in some activities over 3 weeks (3 Saturdays in a row) either at Xavier University or at a community center close to my school, and give answers to written questions about myself. During the activities, lunch and snacks will be provided. The surveys will be about my feelings about my school abilities, motivation for school, beliefs about my race and how far I want to go in school. Taking these surveys will take about 30-45 minutes to finish each time. At the end of the study, students who have done the following three actions will receive a $10 credit card: (1) students who complete (or at least start to answer) the questionnaires (written questions) at the beginning of the study; and (2) students who attend all three Saturday workshops; and (3) students who complete (or at least start to answer) the questionnaires (written questions) at the end of the study.

I will not be asked to put my name on any of the forms. Instead I will be assigned a number on all of my forms to protect my identity. Only the main researcher will be able to see the list linking my name to the study number. I can ask questions at any time if I don't understand something.

Do you agree to participate?

_____ Yes, I agree to take part in the Culture-Gender study.

_____ No, I do not agree to take part in the Culture-Gender study.

Did someone explain to you that you have the right to stop after you start?

_____ Yes, it was explained to me that once I start the Culture-Gender study, if I want to quit, I have the right to do so and it won't affect me at school in any way.

________________________________________           ____________
Signature of Participant                                      Date
Chapter V: Dissertation

Abstract

African American females are confronted with several risk factors as they progress through adolescence including barriers to their academic success (Crosnoe & Elder, 2004). Thirty-three adolescent girls from an impoverished neighborhood volunteered to participate in a study to assess the effectiveness of a culture-gender specific intervention. Participants were randomly assigned into either the intervention (a brief version of Sisters of Nia originally created by Belgrave et al., 2004, which was modified for this pilot study to emphasize the importance of education), or the comparison group that focused on health. Results from the 21 girls who completed the study revealed that the intervention group evidenced a decrease on the academic risk factor, school disengagement, while academic protective factors did not change for both groups. Also, racial identity (public regard) increased for the comparison group, though these results were likely confounded due to baseline differences. The findings are considered preliminary due to the small sample size, and future studies are recommended with larger samples that aim to replicate these findings.
The Impact of a Culture-Gender Specific Brief Intervention in Decreasing Academic Risk Factors and Increasing Protective Factors for Urban Adolescent Girls

Given the importance of academic achievement, research into education-related disparities evidenced by African American adolescents warrants further investigation (Orr, 2003; Smalls, White, Chavous, & Sellers, 2007). Extensive research has found that African Americans underperform in comparison to their White peers on several educational outcomes, including grades and level of education attained (Hallinan, 2001; Gonzales, Cauce, Friedman & Mason, 1996; Horton, 2007; Leach & Williams, 2007; Mickelson, 1990; Norman, Ault, Bentz & Meskimen, 2001; Orr, 2003, Zand & Thompson, 2005). Differences in achievement between African American and White are considered an enigmatic, longstanding problem Orr (2003), and the gap seems to have widened since the 1990s (Hallinan, 2001). For example, African American students evidence a lag in achievement in multiple educational areas when compared to age-equivalent White students’ achievement (US Department of Education, 2000).

Previous researchers have identified various aspects of African American adolescents’ lives that contribute to this problem. These aspects include academic disengagement, academic self-concept, racial identity, educational aspirations, access to positive role models, educational resources, neighborhood quality and socioeconomic status, among others (Chavous, Smalls, Rivas-Drake, Griffin & Cogburn, 2003; Hallinan, 2001; Mello & Swanson, 2007; Orr, 2003; Smalls et al., 2007; Witherspoon, Speight, & Thomas, 1997; Wong, Eccles, & Sameroff, 2003).
Further, Mello and Swanson (2007) found that for African American adolescent girls, neighborhood quality had a stronger impact as compared to boys, i.e., African American adolescents with higher rankings of neighborhood quality had an increased likelihood of positive expectations regarding education and future job attainment, especially for girls. Therefore, one could reason that students in low-income neighborhoods may not have positive expectations given the circumstances of their surroundings, and would require factors to buffer against this constraint.

**Risk Factors of Academic Achievement**

Risk factors “have proven or presumed effects that can directly increase the likelihood of a maladaptive outcome” (Rolf & Johnson, 1990, p. 387 as cited in Gutman, Sameroff, & Eccles, 2002). For all adolescents, risk factors can significantly impede their academic performance, which is especially salient in the lives of African American adolescents (Crosnoe & Elder, 2004; Gutman et al., 2002). Socioeconomic status and negative perceptions of the quality of one’s neighborhood are risk factors for poor academic achievement. Additional risk factors include maternal education, parental income and occupation, single parent homes, a greater number of children, inconsistent discipline, parental neglect, emotionally distant relationships with parents, lack of social support, family life stresses, ethnic or racial discrimination and lack of a strong racial or ethnic identity (Burchinal et al., 2008; Chavous et al., 2003; Crosnoe & Elder, 2004; Gutman et al., 2002; Miller & MacIntosh, 1999; Wong et al., 2003).

**Academic Disengagement**

Psychological disengagement refers to the detachment of self-esteem from external feedback or outcomes such that feelings of self-worth are not dependent upon one’s
performance in that area (Schmader, Major, & Gramzow, 2001). Previous research supports the contention that psychological disengagement is motivated by a desire to maintain one’s self-esteem when negative feedback leading to decreased self-efficacy (Cokley & Moore, 2007; Schmader et al., 2001). This can occur specifically in the domain of academics and is termed academic disengagement.

Academic engagement is “malleable and relevant for predicting and preventing school dropout, as well as facilitating positive educational outcomes for all students” (Appleton, Christenson, & Furlong, 2008, p. 369) and is influenced by previous educational experiences. For minority students, particularly African American students, these experiences are more often negative resulting in increased levels of disengagement (Bennett, Jr, 2006). African Americans have been found more likely to psychologically disengage from academic performance and outcomes, such as test scores and grades, leading to lower grade point averages (Schmader et al., 2001). In their study, Schmader et al. (2001) surveyed the disengagement processes and perception of injustice in 676 undergraduates and results showed that for African American students, the level to which they perceived ethnic injustices was correlated with increased academic disengagement. Disengaged students may eventually drop out of school, perpetuating the cycle of negative academic outcomes. Therefore, research geared at understanding factors that prevent disengagement to allow for the development of interventions that positively impact the academic achievement of African American adolescents is needed (Cokley & Chapman, 2008; Cokley & Moore, 2007).
Protective Factors of Academic Achievement

Protective factors are assets that can buffer the effects of risk factors experienced by adolescents (Belgrave, Chase-Vaughn, Gray, Addison, & Cherry, 2000; Piko, Fitzpatrick, & Wright, 2004; Wong et al., 2003). Researchers consider the presence of academic protective factors beneficial attributes that help individuals become and remain academically resilient in the face of adversity (Southwick, Morgan, Vythilingham, & Charney, 2005). Logically, for African American adolescents who experience a myriad of risk factors, the presence of protective factors becomes even more important than those who experience fewer risks (Gutman et al., 2002). Academic self-concept, racial identity and educational aspirations have been identified as protective factors for African American adolescents, and can serve as a buffer to a number of risk factors to improve academic achievement (Chavous, Rivas-Drake, Smalls, Griffin & Cogburn, 2008; Furlong & Cartmel, 1995; Uwah, McMahon, & Furlow, 2008).

Academic Self-Concept

Academic self-concept, “attitudes, feelings and perceptions relative to one’s intellectual or academic skills” (Cokley, 2000, p. 149), has been assessed to determine its influence on academic performance with a myriad of different variables. For example, Witherspoon et al. (1997) found that the best predictors for GPA were positive internalized racial identity and academic self-concept. Notably, the higher the academic self-concept of the student, the higher their grade point average, as was the case with the students in a previous study by Gerardi (2005). While causality could not be determined due to the methodology of this study; similar results were found in follow-up studies as well (Cokley & Chapman, 2008).
The literature has yet to specifically address interventions that aim to increase the academic self-concept of African American adolescent females. Given the findings that lower levels of academic disengagement and higher levels of academic self-concept are correlated with higher academic achievement, interventions that aim to increase these aspects are most certainly warranted.

**Racial Identity**

Adolescents’ racial discrimination experiences are negatively related to academic performance curiosity, and persistence (Neblett, Philip, Cogburn & Sellers, 2006). Racial identity is influenced by experiences of ethnic or racial discrimination and will have different significance for each person (Sellers, Copeland-Linder, Martin, & Lewis, 2006). Smith, Shelton, Rowley and Chavous (1998) defined racial identity as the significance and qualitative meaning that individuals attribute to their membership within the Black racial group within their self-concept. Few studies have been done on the experiences of African American adolescents with regard to racial identity and discrimination so the work of Wong et al. (2003) and Sellers et al. (2006) has essentially been the spark in this area.

Wong et al. (2003) studied the effects of perceived discrimination on academic, socioemotional and behavioral outcomes. Results showed that the connection to ethnic group was correlated with less decrease in self-concept or ability, resulting academic achievement, even with higher perceived discrimination. Sellers et al. (2006) investigated the link between the daily hassles of discrimination faced by African American adolescents and psychological functioning and found that adolescents in the study that exhibited higher private regard beliefs (personal beliefs about African Americans) and
lower public regard (beliefs about society’s view of African Americans) exhibited better psychological outcomes. Essentially, the adolescents in this study were able call upon their internalized group pride to buffer against discrimination experienced, likely from a source they believed perceived them negatively anyway, similar to results in Wong et al. (2003). Chavous et al. (2003) investigated the relationship between racial identity and academic beliefs within African American youth and found that youth with strong private regard, positive public regard, and high centrality (the extent to which being African American was central to their definition of themselves) had more positive academic beliefs. The influence of racial identity on academics was further proven by the results of youth who felt the most negatively about their group and had low private regard, low public regard and low centrality, also had negative academic outcomes.

Research by Neblett et al. (2006) showed that adolescent discrimination experiences were negatively related to academic curiosity, persistence, and performance. These results provide evidence that adolescents’ perceptions of racial discrimination not only directly influence their current academic performance, but they may also influence their beliefs related to future academic success.

**Educational Aspirations**

Educational aspirations are defined as “a student’s perception of their intent to pursue higher education in the future” (Flowers, Milner, & Moore, 2003 p. 40). Researchers have reported that when adolescents set higher educational aspirations, they are more likely to achieve such goals (Halle, Kurtz-Costes & Mahoney, 1997). Additionally, educational aspirations have been found to be one of the most significant predictors of future educational attainment (Mau & Bikos, 2000 as cited in Garg.
Melanson, & Levin, 2007). Given such research, high educational aspirations can be classified as an academic protective factor for at-risk students, especially minority and low-income adolescents (McCabe & Barnett, 2000 as cited by Kerpelman et al., 2007).

Girls may tend to have foreshortened future beliefs regarding education and overarching career goals compared to boys (e.g., Zimbardo, 1994 as cited by Honora, 2002). However, Honora (2002) found that among urban African Americans, higher achieving girls were more oriented to future goals, and they had significantly more goals than both lower achieving girls and higher achieving boys. In a study conducted by Kerpelman, Eryigit and Stephens (2007) of 374 African American adolescent males and females from grade 7 through grade 12, girls exhibited higher future orientation if they had previously succeeded academically. Also, results revealed that stronger ethnic identity, higher self-efficacy, and more parental expectations affected scores on future education orientation, with no significant gender differences. Interventions that seek to bolster future educational aspirations would not only be beneficial in the present, but would also aid in the future of attainment of educational and career goals for African American adolescent girls.

Cultural Interventions

Currently, there are a limited number of studies (e.g., Belgrave et al., 2000, Belgrave et al., 2004, Thomas, Davidson, & McAdoo, 2008) that assess the impact of cultural interventions specifically for African American females, especially interventions aimed specifically at decreasing academic risk factors and increasing academic protective factors. Despite the dearth of research and practice, the utility of such interventions warrants attention. To address this gap, Belgrave et al. (2000) assessed the increase in
African-centered (Africentric) values, ethnic identity, gender role beliefs and self-concept following a culture-gender specific intervention for African American adolescent females. Part of the premise behind Belgrave’s study was similar to the research that has been conducted by Sellers et al. (1998) on the buffering effect of racial identity. Results from baseline to follow-up were significant for Africentric values, ethnic identity and the physical appearance aspect of self-concept (Belgrave et al., 2000). The authors noted that for Africentric values, the scores on the pre-and-posttest measures did not increase for the intervention participants; however, the comparison group scores decreased. These results indicate that further research is needed to better understand the effects that culture-gender specific intervention may have on both cultural identity and self-esteem.

Belgrave et al. (2004) created a manualized culture-gender intervention called *Sisters of Nia*. This intervention sought to investigate its impact on the ethnic identity, gender roles and relational aggression of 59 African American adolescent girls. Results showed significant pre-post differences across all variables for the intervention participants. Both studies by Belgrave et al. (2000; 2004) emphasized the multiple factors key to the resiliency of African American adolescent females, specifically the protective nature of racial/ethnic identity.

**Gaps in Previous Research**

Researchers have noted that there is still much to be learned regarding the complexity surrounding academic attitudes, racial identity, gender, and environmental variables in relation to academic success (e.g., Cokley and Moore; 2007). Psychoeducational interventions are needed to improve the academic achievement of African American adolescents (e.g. Witherspoon et al., 1997). Moreover, interventions
that aim to decrease risk factors and increase protective factors for educational
achievement specifically among African American females can be particularly useful to
the extent that the focus can solely be on addressing their specific needs, as opposed to
gender neutral or combined male and female formats. Unfortunately, such interventions
are very limited in the literature and in practice. This project aims to contribute to the
literature through the implementation of a brief culture-specific intervention for African
American female adolescents’ academic risk and protective factors.

Purpose & Hypotheses

A brief form of *Sisters of Nia* was implemented to assess whether a condensed
version would be as effective as the full format on cultural outcomes (racial identity).
Given the limited amount of resources of many underprivileged neighborhoods, coupled
with the significant amount of African American adolescents in need of academic help, an
abbreviated version of *Sister of Nia* that yielded results would be extremely beneficial.
The intervention was reduced from 14 sessions over 16 weeks to 10 sessions over 3
weeks. Not only would this be more cost-effective than the original 16-week intervention,
but it would also enable the intervention to be administered more often with equal
effectiveness. Also, the culture-gender specific brief intervention, *Sisters of Nia* (Belgrave
et al., 2004), was reduced following guidelines from the author to maintain the cultural
and gender integrity of the intervention’s contents and process. The intervention was
modified from 14 sessions to 10 sessions with a specific emphasis on the importance of
education through African American female guest speakers whose topics were consistent
as they underscored the importance of education; facilitators who were African American
female undergraduates from a student-led organization; and the intervention was held on the university campus.

In addition, an African American woman from the girls’ community served as a consultant to the process and helped to facilitate the intervention with the university students. Involving all African American women (community members as consultants and undergraduate facilitators) enhanced community engagement, and culture- and gender-relevance. Community engagement was a central tenet of this project because it provided the opportunity to learn what was needed directly from the community served to better understand the participants’ vantage point and provide a relevant service to them.

Given the pre-existing educational-related disparities between African American and White adolescents, there is a need for interventions that aim to counteract the effects of risk factors on the academic performance of African American adolescents. The risk factor that the intervention aimed to decrease was academic disengagement. Protective factors that the intervention addressed included strengthening academic self-concept, racial identity, and educational aspirations. The current study included both an intervention and control group.

Based on the rationale presented above, the following hypotheses were tested:

(H1) It was hypothesized that participants in the intervention group would show a greater decrease in academic disengagement compared to the control group from baseline to post-intervention. (H2) It was hypothesized that participants in the intervention group would show a higher increase in academic self-concept compared to the participants in the control group from baseline to post-intervention. (H3) It was hypothesized that participants who received the intervention would show a higher increase on the centrality
and regard subscales of racial identity compared to the participants in the control group from baseline to post-intervention. (H4) It was hypothesized that participants who received the intervention would report higher levels of educational aspirations compared to the participants in the control group from baseline to post-intervention.

Method

Participants

Thirty-three African American girls who attended an elementary school in an underprivileged neighborhood located in a large Midwestern city enrolled in the present study. All of the girls resided in the neighborhood where the elementary school was located. The school is comprised of students who live in a low-income neighborhood that warrants the classification as underserved with a high percentage of single parent families. The demographics of the school indicate that approximately 99% the student population is African American, and 87% are eligible for free lunch (NCES, 2006). Please refer to Table 1 for the baseline data. Their ages ranged from 10-14 years old with a median age of 12 and a modal age of 12. Their median grade level was 7 and modal grade level was 6. Of the 33 girls who enrolled in the study, 21 completed the study and provided both baseline and post-intervention data. These 21 girls are referred to as the participants in the study. The participants ranged in age from 10-14 years old with a median age of 13 and modal age of 12. The seventh grade was the median and modal grade of the participants.

Measures

The Disengagement Scale (DS). Academic disengagement was measured using the Disengagement Scale (Major, Spencer, Schmader, Wolfe & Crocker, 1998). This
measure has a relatively high Cronbach’s alpha value (acceptable levels are .70 or above) and lower scores are indicative of lower levels of academic disengagement. This 12-item measure is rated on a Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree).

**Academic Self-Concept Scale (ASCS).** Academic self-concept was measured with the Academic Self-Concept Scale (ASCS; Reynolds, Ramirez, Magrina, & Allen, 1980), which assessed how positively one feels about his or her academic ability. Initially created for college level students, the word “college” was replaced with the word “school” to make it more applicable to the adolescent population (Witherspoon et al., 1997). This 40-item measure uses a Likert-type scale ranging from 1 (strongly disagree) to 4 (strongly agree). This measure has been found to correlate with grade point average and the higher the score on a scale of 40-160, the better is the adolescents’ academic self-concept.

**Multidimensional Inventory of Black Identity-Teen (MIBI-T).** Racial identity was measured using the Multidimensional Inventory of Black Identity-Teen (MIBI-T; Scottham, Sellers, & Nguyen, 2005). The MIBI-T is the adolescent version of the Multidimensional Inventory of Black Identity (MIBI; Sellers, Rowley, Chavous, Shelton & Smith, 1997). For the current study, only the Centrality and Regard subscales of the MIBI-T were included in the statistical analyses. The centrality subscale refers to the extent to which a person normatively defines her/himself with regard to race and regard refers to a person’s affective and evaluative judgment of his/her race that has both a private and public component (Sellers et al., 1998). Participants responded to this 15-item questionnaire on a five-point Likert-type scale ranging from 1 (really disagree) to 5 (really agree) for the centrality and regard subscales. Higher scores are indicative of more
positive beliefs toward African Americans and the belief that other groups hold more positive attitudes towards African Americans as well.

**Educational Aspirations (EDUCASP).** Educational aspirations was assessed using a single item questionnaire from a previous study (Garg, Melanson and Levin, 2007) about the participants current feelings regarding how far they would go in school. The EDUCASP inventory asked the participants, how far they believed they would go in school with the responses ranging from 1 (*less than high school graduation*) to 9 (*beyond the first college degree, master’s or higher*). Higher scores indicate higher educational aspirations.

**Procedure**

Prior to data collection, the Xavier University Institutional Review Board (IRB) approved the study protocol to ensure compliance with human subjects standards (see Appendix D). In addition, the principal of the elementary school where participants were recruited provided approval. Although originally the intent was to include children grades sixth through eighth grade only, the grade level was expanded to fifth through eighth to allow the opportunity for a larger sample size. Following approval, the participants were recruited via announcements to the classrooms and flyers that were distributed at the school. Informational flyers were posted describing the social gathering for baseline data collection, "Girls Day Out" (see Appendix E). These flyers also described the criteria to be included in the study: the participants were to be females in fifth through eighth grades, not in any other school programs, in regular classes (i.e., not special education), and attend the designated school. The researchers planned to allow students at the designated school, who met the study’s criteria but were not African American, to participate in the
intervention should they have chosen to do so, but they would have been excluded from the data analyses. However, all the girls who enrolled in the study were African Americans.

To assist with recruiting participants, the researcher utilized a consultant from the community. Utilizing a community consultant was consistent with a collaborative model designed to develop and enhance connections amongst the community residents and institutions in the surrounding area. The consultant was an African American woman with an established relationship with the school, students and parents. She helped the researcher advertise the date and purpose of the social gathering to parents and students. The consultant also informed parents of the purpose of the study, aided in the coordination to collect parental consent, student assent and announce the location and date of the social gathering (baseline data collection) to students in their classrooms.

The social gathering was held at a church in the local area in close proximity to school and the neighborhood where the participants lived. In order to increase the number of potential participants, advertisement for the social gathering included that there would be food served, fun activities and prizes. During the social gathering, the parents that had not yet completed consent forms via the community consultant were informed of the purposes of the study and given a chance to have any questions or concerns they may have had addressed. Consent forms were then disseminated and collected from each parent that agreed to allow their daughter to participate in the study (see Appendix F). After parental consent was received, written assent was granted from the girls that were permitted to participate (see Appendix G).
Thirty-six girls provided parental consent and assented to participate in the study. After being randomly assigned to either the Nia (n = 18) or the comparison group (n = 18), three of the girls who were initially assigned to the comparison group rescinded their assent, and their baseline data was shredded and was not included in the study. These three girls periodically came to the study’s comparison group site, which was located at a local church. They again completed the post-intervention measures but their data was not included in the study. Of the remaining 33 girls, 12 girls were inconsistent in their attendance, including seven girls from the Nia group and five girls from the comparison group. These girls did not attend the last day of the study and missed the administration of the post-intervention measures. Several efforts were made by the researcher to contact the consenting parents, but these efforts were unsuccessful. In conclusion, there were 21 girls who completed baseline measures, the study’s activities, and the post-intervention measures. The data analyses are based on these 21 participants, which included 11 participants that completed the Nia intervention and 10 participants that completed the comparison group activities. Those who were randomized to the comparison group remained at the same local church where the data collection took place. The participants that were randomized into the Nia group were transported from the local church to the University campus.

The program occurred for five-hours per day over three consecutive Saturdays. This occurred one-week following the social gathering when baseline data collection and randomization occurred. Post-test data was collected through dissemination of the measures after the closing ceremony for the Nia group and during the last hour of programming for the comparison group. Participants that completed all questionnaires,
pre-intervention and post-intervention, received a $10 cash equivalent for their participation.

The condensed version of Sisters of Nia was conducted by the principal investigator with assistance from six African American female undergraduate students from an organization on campus that seeks to foster relationships among women that transcend racial, international, physical and social barriers to help individuals develop and maintain constructive relationships. Again, the condensed version was adopted to assess whether the same impact could be achieved as with the original 16-week format. Also, it was hypothesized that attrition would be less problematic given the brief format.

The specific topics utilized for the Nia participants were derived following email consultation with Dr. Belgrave concerning the aim of the study and the best sessions to cover (July 27, 2008). The Sisters of Nia program was predicated on three phases in accordance with Belgrave et al.'s (2004) structure. The initial phase focused on development of a relationship and included activities geared towards building a relationship between the student participants and intervention facilitators to foster an open relationship predicated on bonding through gender and race. The participants were also exposed to African American women who served as guest speakers from the University for each of the three days. The speakers came during the lunch hour and spoke about education related topics. The initial phase included the following sessions: (1) orientation, (2) Jamaa building, i.e., a time dedicated to getting to know each other and their facilitators and (3) introduction to relationship building and (4) relationship building continued.
The second phase focused on the introduction of concepts of worldview that impact race, gender and oppression. The sessions covered in the second phase included the following topics from the Nia intervention: (5) introduction to Africa and African culture, (6) Africa and African culture continued, (12) leadership of African American women, and (13) education awareness. The third phase aimed to commemorate the relationships that have been built and the wealth of information shared. This phase included the topic (14) life course and a closing ceremony. Please refer to Appendix A for the schedule of topics and activities according to each phase. As prescribed by Belgrave et al. (2004), team-building activities to further strengthen the connection among the participants and the facilitators were interspersed throughout the day. Please refer to Appendix B for the description of each team-building activity.

Description of Intervention

As noted above, the intervention occurred over three consecutive Saturdays as a brief, condensed intervention where the participants were exposed to material designed to inform them of the values of education and positive racial and ethnic identity. As reported by Belgrave and colleagues, (2004), the Sisters of Nia intervention was originally conducted once per week for two hours over 16 weeks as a cultural intervention created specifically for African American girls. The condensed version of Sisters of Nia was conducted utilizing undergraduate women acted as research assistants and were specifically responsible for helping the participants complete the assessments and co-facilitating the groups during programming. When conducted by Belgrave et al. (2004), the program was also implemented with all African American female facilitators.
Therefore, including students from the campus organization, modeled this aspect of Belgrave’s intervention.

**Description of Comparison Group**

The comparison group remained at the local church, as was suggested in the initial study by Belgrave et al (2004), they engaged in recreational activities. The theme for the control group’s activities was health and fitness. Their activities included skits about physical exercise, healthy lifestyle choices (avoiding drugs, eating healthy), designing posters about healthy food choices, and preparing dance routines. The aim of the activities for the comparison group was to keep them interested and invested in order to increase the likelihood that they would remain in the study, while limiting their interaction with the facilitators so as to not confound the results. The time spent at the church mirrored the time that the Nia group participated in the intervention.

**Results**

Based on the literature, this study hypothesized that participants in the Nia group would obtain lower scores on the academic risk factor measured (academic disengagement) and higher scores on the academic protective factors (academic self-concept, racial identity, educational aspirations) measured from baseline to follow-up. In addition the study hypothesized that the decrease in academic risk factors and increase in academic protective factors would be greater for the Nia group compared to the comparison group. This was a mixed design study comparing two groups (the intervention group versus the control group) on the outcome variables of academic
disengagement, academic self-concept, racial identity, and educational aspirations at two separate time periods, baseline and post-intervention.

Due to the small sample size of participants, nonparametric tests were utilized. As preliminary analyses, the nonparametric test, Mann Whitney U, was used to compare the two groups at baseline on participant variables and on the study's variables. The Mann Whitney U is used to determine if there are differences between two separate groups on one continuous measure. This preliminary strategy was employed to test whether differences found between the two groups on their baseline to post-intervention scores were due to pre-existing differences at baseline. If significant results were obtained when comparing the two groups at baseline on the demographic and study variables, then the main analyses would proceed. However, the results from the main analysis could have been attributed to the differences in the scores at baseline and would need further interpretation. If non-significant results were obtained when comparing the two groups at baseline on the demographic and study variables, then the main analysis and interpretations would proceed as usual.

For the main analyses, the nonparametric test, the Wilcoxon Signed Rank test, was used to compare the study's baseline variables to post-intervention variables. Instead of comparing means, in the Wilcoxon Signed Rank test, scores are converted to ranks and compared (Pallant, 2005).

**Descriptive Statistics**

The means, standard deviations and medians and for the study variables, academic disengagement (DS), academic self-concept (ASCS), the three racial identity subscales (MBICEN, MBIPRI, MBIPUB), racial identity total scale (MBI), and educational
aspirations (EDUCASP), are presented in Table 2 (baseline descriptive statistics for the all participants) and Table 3 (post-intervention descriptive statistics for the all participants).

**Preliminary Analysis**

Please refer to Tables 4-10 for the Nia and comparison groups’ baseline and post-intervention descriptive statistics for each measure. Baseline comparisons were conducted between the girls in Nia intervention \( (n = 11) \) and the comparison group \( (n = 10) \). First, the two groups were compared on their baseline participant variables; age and grade level, using the Mann-Whitney U test. The results indicated that there were no significant differences between groups for age \( (p = .513) \) or grade level \( (p = .659) \).

Next, the two groups were compared on their baseline study variables (academic disengagement, academic self-concept, the three racial identity subscales, educational aspirations). The non-parametric independent samples test, Mann Whitney U test, was utilized. The results indicated that the two groups were not significantly different at baseline on academic disengagement \( (p = .245) \), academic self-concept \( (p = .458) \), the centrality subscale of racial identity \( (p = .859) \), the private regard subscale of racial identity \( (p = .724) \), and educational aspirations. \( (p = .082) \). The results indicated that the two groups were significantly different at baseline \( (p = .021) \) on the public regard subscale of racial identity.

**Hypothesis 1**

It was predicted that participant scores on academic disengagement (as measured by the disengagement scale, DS) would show a greater decrease from baseline to follow-up for those in the intervention group versus the comparison group. To test whether there was a larger decrease in academic disengagement for the Nia group as compared to the
comparison group, the nonparametric-paired samples test, the Wilcoxon Signed Rank test, was conducted for the two groups. The results for the Nia group were significant ($p = .029$), indicating that the Nia group reported less disengagement at post intervention ($M = 44.09$, $SD = 13.56$, $Mdn = 47$) compared to baseline ($M = 57.82$, $SD = 7.77$, $Mdn = 58$).

In order to test the effect size, the eta-squared statistic was obtained from SPSS software. The eta-squared statistic ($.08$) indicated a moderate effect size. The results for the comparison group ($p = .109$) were not significant, indicating that the comparison group did not have a significant decrease at post intervention ($M = 43.30$, $SD = 11.98$, $Mdn = 38$) compared to baseline ($M = 52.70$, $SD = 10.13$, $Mdn = 55.5$). Whereas, the Nia group showed a statistically significant decrease in their self-report of academic disengagement from baseline to post-intervention, and the comparison group did not experience a significant decrease from baseline to post-intervention, these results supported the hypothesis. The Nia group, having received the brief, condensed intervention, reported a greater decrease in disengagement following the intervention than the comparison group who did not receive the intervention.

Additionally, to check the reliability of the academic disengagement measure used in this study, the Cronbach’s alpha coefficient was calculated and yielded an alpha level of .736; this is deemed sufficient given that .7 is the generally accepted value.

**Hypothesis 2**

It was predicted that participant scores on academic self-concept (as measured by the academic self-concept scale, ASCS) would show a greater increase from baseline to follow-up for those in the Nia group versus the comparison group. To test whether there was a greater increase in academic self-concept for the Nia group as compared to the
comparison group, the nonparametric-paired samples test, the Wilcoxon Signed Rank test, was conducted for the two groups. The results for the Nia group were not significant \( (p = .155) \), indicating that the Nia group did not report higher academic self-concept at post intervention \( (M=119.45, SD = 20.42, Mdn = 112) \) compared to baseline \( (M = 116.36, SD = 16.13, Mdn = 118) \). The results for the comparison group \( (p = .514) \) were not significant, indicating that scores at post intervention \( (M = 119.10, SD = 17.55, Mdn = 121.50) \) compared to baseline \( (M = 120.60, SD = 9.94, Mdn = 118.50) \) did not significantly increase. For both groups, their academic self-concept scores did not significantly change from baseline to post-intervention. These results did not support the proposed hypothesis that the Nia group, after receiving the brief, condensed intervention, would report higher academic self-concept following the intervention than the comparison group who did not receive the intervention.

**Hypothesis 3**

It was predicted that participants in the Nia group would show a higher increase in the centrality and regard subscales of racial identity (on the multi-dimensional inventory for teens measure, MIBI-T) compared to the comparison group participants from baseline to post intervention. To test whether there was a larger increase in the centrality and regard subscales for the Nia group as compared to the comparison group, the nonparametric-paired samples test, the Wilcoxon Signed Rank test, was conducted for the two groups on the centrality subscale, private regard subscale, and public regard subscale. The results for the Nia group on the centrality subscale (MBICENT), \( (p = .380) \), private regard subscale, (MBIPRIT), \( (p = .157) \), and public regard subscales (MBIPUBT), \( (p = .306) \) were not significant. The results for the comparison group on the centrality subscale
(MBICENT), \(p = .492\) and private regard subscale (MBIPRIT), \(p = .833\) were not significant. The results for the comparison group on the public regard subscale (MBIPUBT), \(p = .017\) were significant indicating that scores at post intervention \(M = 9.70, SD = 3.33, Mdn = 9.50\) compared to baseline \(M = 7.70, SD = 3.65, Mdn = 7.50\) evidenced a statistically significant increase. However, because the two groups were significantly different at baseline \(p = .021\) on the public regard subscale (MBIPUBT), these results suggest that the significant change evidenced by the Wilcoxon Signed Rank test in the public regard scores may be attributed to the differences in the subscale scores at baseline. These results from the Wilcoxon Signed Rank tests on the Nia and comparison groups did not support the proposed hypothesis that the Nia group, after receiving the brief, condensed intervention, would report higher racial identity on the centrality and regard subscales, following the intervention, than the comparison group who did not receive the intervention.

**Hypothesis 4**

It was predicted that Nia group participants would report a higher level of educational aspirations (as measured by the educational aspirations item, EDUCASP) than the comparison group from baseline to post intervention. To test the hypothesis of whether there was a larger increase in educational aspirations for the Nia group as compared to the comparison group, the nonparametric-paired samples test, the Wilcoxon Signed Rank test, was conducted for the two groups. The results for the Nia group were not significant \(p = .079\), indicating that the Nia group did not report higher educational aspirations at post-intervention \(M = 7.73, SD = 2.45, Mdn = 9\) compared to baseline \(M = 7.27, SD = 2.72, Mdn = 9\). The results for the comparison group \(p = .276\) were not
significant indicating that scores at post intervention ($M = 6.30$, $SD = 3.30$, $Mdn = 7.50$) compared to baseline ($M = 5.60$, $SD = 2.84$, $Mdn = 7$) did not evidence a statistically significant increase. For both groups, their educational aspirations scores did not significantly change from baseline to post-intervention. These results did not support the proposed hypothesis contention that the Nia group, after receiving the brief, condensed intervention, would report higher educational aspirations following the intervention than the comparison group who did not receive the intervention.

**Discussion**

This pilot study sought to examine the possible impact of a brief version of *Sisters of Nia* (Belgrave et al., 2004), which was modified to emphasize the importance of education on academic risk and protective factors of urban African American adolescent girls. The original study on the outcomes of *Sisters of Nia* intervention investigated gender roles, relational aggression and Africentric-based cultural values. The present study sought to replicate the focus on Africentric-based cultural values with an additional educational emphasis. The educational focus and investigating academic variables (academic engagement, academic self-concept and educational aspirations) were not included in the manualized *Sisters of Nia* study, though researchers have indicated that academic variables are impacted by racial identity, a main feature of Africentric-based cultural values (Sellers et al., 1997, Chavous et al., 2003).

There were two potential ways that participants in the present study’s intervention might benefit: the Africentric cultural content and process of *Sisters of Nia*; and the educational benefits from being exposed to the university campus setting and the African American female facilitators and guest speakers who were associated with the university.
Thus, the content comprised both Africentric and educational foci, as the facilitators focused on the Nia content and the guest speakers focused their topics on education. Overall, the findings from this pilot study indicated that there is some cursory evidence that the brief version of *Sisters of Nia* with an educational focus was effective at decreasing an academic risk factor (academic disengagement), but not effective in increasing the academic protective factors that were investigated.

The first hypothesis assessed the academic risk factor academic disengagement. It was hypothesized that participant endorsement of academic disengagement would evidence a greater decrease from baseline to follow-up for those in the Nia (intervention) group versus the comparison group. Consistent with the hypothesis, results showed that the Nia group had a statistically significant decrease in disengagement from baseline to post-intervention, while the comparison group did not. These results indicate that participants who received the brief *Sisters of Nia* intervention, which focused on African American culture and the additional aspect of the importance of education, reported less disengagement in academics following the intervention. Academic disengagement assessed the degree to which participants discounted standardized test scores, devalued academic success and disengaged from school. Overall, the responses at post-intervention suggest that these participants showed increased belief in school in terms of the validity of testing and the value of succeeding and remaining engaged in school.

The favorable outcome regarding change in disengagement scores for the Nia group in light of no significant change for the comparison group whose activities were geared around the theme of health indicates an advantage to the brief version of *Sisters of Nia* that was fortified with an educational focus. Whereas both the intervention and
comparison group were exposed to educated African American females associated with the university, the results suggest that the improvement in academic engagement is not explained by mere exposure to the college educated African American females. Given that the Nia and comparison groups were both exposed to college-educated African American female facilitators associated with the university, the same number of hours over the same period of time, it is more likely that improvement in academic engagement is explained by factors inherent in the brief version of *Sisters of Nia* that was fortified with an educational focus. However, future studies are needed to determine whether a particular aspect of the educational focus of the intervention (educational topics delivered by African American female professionals or university setting) had more influence than the other. Previous research (Kolvin et al., 1981 as cited by Bulkeley & Cramer, 19900) has addressed the impact of different settings on the resulting efficacy of the intervention. Additionally, research has underscored the necessity of creating engaging classrooms that serve to facilitate the learning process for students on a day-to-day basis so it is likely that environments that mirror this aspect in an intervention result in the same connections (Center for Mental Health in Schools, 2011), to what extent remains to be determined.

For hypothesis two it was predicted that participant scores on academic self-concept would show a greater increase from baseline to follow-up for those in the Nia group versus the comparison group. Contrary to this hypothesis, there were no significant differences obtained from baseline to post-intervention for either the Nia or the comparison group.

The third hypothesis predicted that participants in the Nia group would show a higher increase in the centrality and regard subscales of racial identity versus the
comparison group participants from baseline to post intervention. Results did not support this hypothesis. There was no statistical difference in scores from baseline to post-intervention on the centrality or private regard subscales for the Nia or comparison groups.

These results suggest that the brief, modified, *Sisters of Nia* intervention format did not produce a statistical change in participant scores with regard to the emphasis they placed on being African American and internal group pride. In addition, centrality and private regard scores for the Nia group and private regard scores for the comparison group were negatively skewed at baseline indicating that the participant responses were primarily loaded above the mean. This may have reduced the likelihood that there could be a statistically significant increase at post-intervention due to a potential ceiling effect at baseline. The baseline centrality and private regard scores for the Nia group and the private regard scores for the comparison group suggest that participants in the Nia group placed a relatively high value on the importance of being African American and both groups had positive internal beliefs about being African American prior to the intervention. This is further illustrated that given the participants in this study at baseline already had higher scores on the racial identity measure compared to the adolescent sample in which the measure was developed (Scottham, Sellers, & Nguyen, 2008).

Conversely, there was a statistically significant difference between baseline and post-intervention scores on the public regard subscale of racial identity for the comparison group only. These results are in the opposite direction of the proposed hypothesis due to the lack of statistically significant change for the Nia group. Of importance are the results of the additional baseline analysis. These results revealed that the Nia group public regard
scores were significantly higher than the comparison at baseline, indicating that the seemingly change in scores following the comparison group activities were confounded due to the pre-existing difference in the scores at the outset as opposed to some aspect of the comparison group activities acting as the catalyst for change. Finally, there was no statistical difference from baseline to post-intervention for the scores on the total racial identity measure (all three subscales combined).

It is also imperative to note that of the three racial identity subscales, participant scores across both groups were lowest on this measure compared to centrality and private regard. This suggests that participants’ perceptions of how they are viewed publicly as an African American (public regard) were lower than the importance they placed on being African American (centrality) and how they personally viewed themselves as an African American (private regard).

In sum, these results reveal a participant group who placed significant importance on being African American, and viewed African Americans in a positive light prior to the study; did not improve their racial identity after the intervention.

The findings that this study’s intervention did not support the hypothesis that racial identity would improve were not similar to the findings of the culture-gender intervention of Belgrave et al. (2000) or the manualized version of *Sisters of Nia* by Belgrave et al. (2004). Results from Belgrave et al. (2000) revealed that the intervention group scored significantly higher on the cultural identity measures when compared to the control group, at post-intervention. However, this change was likely the result pre-existing differences in scores at baseline. Upon closer review, Belgrave et al. (2000) stated that post-intervention scores results were indicative of intervention group scores of cultural identity starting
higher and remaining the same from baseline to post-intervention and control group scores of cultural identity decreasing from baseline to post-intervention. In Belgrave et al. (2004) results yielded statistically significant findings on global ethnic identity for the intervention group when controlling for baseline scores.

The fourth hypothesis predicted that Nia group participants would report a higher level of educational aspirations than the comparison group from baseline to post intervention. Analysis revealed no significant differences in the scores of either the Nia or comparison groups. Despite the random assignment into the intervention and comparison group, the Nia group aspirations were higher at the outset than the comparison group.

Of note, the distribution of baseline educational aspiration scores reported by all participants in the Nia and comparison groups was negatively skewed, indicating that all scores were grouped above the mean. As a result, it is possible that despite the multiple risk factors for poor educational aspirations (Garg, Melanson, & Levin, 2007) likely facing the participants (parental income and occupational status, family life stresses, ethnic or racial discrimination) their educational aspiration scores on this measure were relatively high, possibly resulting in a decreased likelihood that scores would increase significantly over the course of the intervention due to a possible ceiling effect. Additionally, the scores of the participants in this study are similar to those found in the original sample by Garg, Melanson and Levin (2007).

The lack of statistical change in educational aspirations could be due to several factors. Previous research has underscored the importance of access to positive role models to enhance the educational aspirations of female adolescents (Howard, 2003) and the limitations of such role models in underprivileged areas. On average, the post-
intervention responses for the Nia group indicated that they aspired to complete either a three or four year degree, or possibly beyond to a Masters Degree or equivalent whereas the comparison group aspired to achieve the equivalent of an Associate’s degree. Therefore, it may not have been a direct result of the intervention not impacting the participants, but more-so a lack of belief in achieving a 4-year-degree or beyond as a viable option due to previously ingrained viewpoints related to what they could, and could not, achieve based on what they have witnessed in terms of role models. Had the intervention been longer, there may have been more time to impact such beliefs.

Limitations and Future Studies

There are limitations of this study that need to be addressed. The first limitation is the small sample size. There were a small number of participants enrolled in the study, and a smaller subset of those that did enroll who completed all three days of the program leading to a decreased likelihood of smaller sample size. A small sample size leads to insufficient power and increased difficulty detecting significant results for the variables measured; small sample size was similar to Belgrave et al. (2004) implementation of a culture-gender intervention.

A key factor that contributed to the small sample size was the closing of the original elementary school. The principal investigator originally received information on the number of students at the study’s school from a local website and through communication with the administrative assistant at the school. It was believed that the school had a larger number of students because a nearby school in the area had closed and the school chosen was to be the combined location for two schools. After approval was received and recruiting began at the school, it was determined that the students that were
to attend had gone to another school. The principal investigator attempted to obtain approval from another school; however, there was no school in close proximity to the identified neighborhood where the intervention was to be held. Additionally, there were a number of participants that completed baseline data but did not return for the intervention.

Another limitation relates to the external validity of the results. This pilot study utilized a convenience sample by selecting the participants that attended one school in the local area. Therefore, the girls who consented to participate may not represent the population as would be the case with random sampling. Also, due to the high dropout rate, 36%, the remaining girls may not have represented the population. Given the aspects of being unprivileged and residing in an impoverished community, coupled with the race and gender of the participants, even if the study were to be replicated with a large sample size, generalizability would not extend beyond matched race and gender pairs. The material presented to the participants is geared specifically for adolescent African American females and utilizing this material on other genders or races would likely be invalid.

Utilization of self-report measures, and therefore, the responses of the participants on the assessments given at baseline and post-intervention must also be considered as a potential limitation. Self-report measures can result in participants responding to the questionnaire in a manner they deemed to be more socially appropriate, such as by endorsing items as they “should” versus endorsing their true belief. Additionally, they may have become fatigued when responding (there were 4 measures administered) or they may not have sufficiently read and reviewed the items to allow for acute responses, and as a result were careless or inconsistent in their response patterns. Finally, although the
research assistants were utilized to help the participants complete the assessments and were available to answer any questions they may have had with regard to the assessment items, it is possible that the participants had questions that were not asked, did not ask questions to a research assistant, leading to incorrect responding due to misunderstanding the item.

There are several explanations that warrant future research on the intervention using a larger sample. First, the duration of time from pre-to-post intervention may not have allotted sufficient time to impact participant beliefs on the variables studied. The academic risk and protective factors studied may not be as amenable to change over a 3-week period as one might hope. As noted above, in the original study, 14 sessions were conducted over a 16-week period, whereas this study conducted 10 sessions over 3 weeks. Therefore, a future study that examines these variables over a longer period of time is recommended. Secondly, the intervention itself did not impact the academic variables studies. This pilot study was amended to include the academic focus to determine if they could be impacted and a replicated study would aid in deciphering this factor. Finally, the possibility of a type 2 error due to the small sample size, (Jaccard & Beckerm, 1990) necessitates future replication. Suggestions for future research include redoing this study with a larger sample size. It may be possible to replicate and expand on the findings of this study with appropriate power that could lead to causal statements.

Additionally, it may be helpful to conduct this study with three groups, an intervention group on campus, a comparison group on campus and a comparison group off campus. This may be beneficial in teasing out the impact of the setting on results as
previously noted. Further, it is uncertain whether additional time lapse between completion of the study and post-measurement may have produced the same results.

The present study showed that a condensed version of *Sisters of Nia*, consisting of ten sessions, did not significantly increase academic protective factors. This study did show a statistically significant decrease in the academic risk factor of academic disengagement. Despite this finding, there were slight changes in scores, generally in the direction of increasing protective factors, though not statistically. As a result, it is possible that perhaps with a large sample size, there may have been statistically significantly change from baseline to post-intervention responses.
References


http://smhp.psych.ucla.edu/pdfdocs/implementingrti.pdf


Crosnoe, R., & Elder, H. (2004). Family dynamics, supportive relationships, and


Halle, T. G., Kurtz-Costes, B., & Mahoney, J. L. (1997). Family influences on school


framework for understanding youth's externalizing problem behavior in two

development and validation of Academic Self-Concept Scale. *Educational and
Psychological Measurement*, 40, 1012-1016.

differences in self-perceptions and academic outcomes: A study of African

Schmader, T., Major, B., & Gramzow, R. H. (2001). Coping with ethnic stereotypes in
the academic domain: Perceived injustice and psychological disengagement.

African American adolescents: The development of the Multidimensional
Inventory of Black Identity--Teen. *Cultural Diversity and Ethnic Minority
Psychology*, 14(4), 297-306.

Multidimensional Inventory of Black Identity: A preliminary investigation of
reliability and construct Validity. *Journal of Personality and Social Psychology*,
73, 805-815.

reconceptualization of African American racial identity. *Personality


aspirations, and academic self-efficacy among African American male high school students: Implications for school counselors. Professional School of Counseling. 11, 296-305.


Table 1

Demographic Breakdown of Participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Nia n = 11</th>
<th>Comparison n = 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>12.64 years</td>
<td>12.40 years</td>
</tr>
<tr>
<td>Median</td>
<td>13.00 years</td>
<td>12.00 years</td>
</tr>
<tr>
<td>Range</td>
<td>10-14 years</td>
<td>11-14 years</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>6.91</td>
<td>6.70</td>
</tr>
<tr>
<td>Median</td>
<td>7\textsuperscript{th} grade</td>
<td>7\textsuperscript{th} grade</td>
</tr>
<tr>
<td>Range</td>
<td>4\textsuperscript{th}-8\textsuperscript{th} grade</td>
<td>5\textsuperscript{th}-8\textsuperscript{th} grade</td>
</tr>
</tbody>
</table>
### Table 2

Baseline Descriptive Statistics – Combined Nia and Comparison Group Participants

<table>
<thead>
<tr>
<th>Measure</th>
<th>$M$</th>
<th>$Mdn$</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>DST</td>
<td>55.38</td>
<td>57.00</td>
<td>9.12</td>
<td>-.643</td>
<td>.170</td>
</tr>
<tr>
<td>ASCT</td>
<td>111.38</td>
<td>118.00</td>
<td>13.38</td>
<td>.014</td>
<td>-.299</td>
</tr>
<tr>
<td>MBICENT</td>
<td>11.10</td>
<td>12.00</td>
<td>3.36</td>
<td>-.458</td>
<td>-.827</td>
</tr>
<tr>
<td>MBIPRIT</td>
<td>13.62</td>
<td>15.00</td>
<td>2.38</td>
<td>-1.45</td>
<td>2.59</td>
</tr>
<tr>
<td>MBIPUBT</td>
<td>9.67</td>
<td>10.00</td>
<td>3.76</td>
<td>-.518</td>
<td>-.937</td>
</tr>
<tr>
<td>MBIT</td>
<td>34.38</td>
<td>34.00</td>
<td>7.02</td>
<td>-.446</td>
<td>-.268</td>
</tr>
<tr>
<td>EDUCASPT</td>
<td>6.48</td>
<td>15.00</td>
<td>2.84</td>
<td>-.885</td>
<td>-.819</td>
</tr>
</tbody>
</table>
Table 3

Post-Intervention Descriptive Statistics – Combined Nia and Comparison Group Participants

<table>
<thead>
<tr>
<th>Measure</th>
<th>M</th>
<th>Mdn</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>DST</td>
<td>43.71</td>
<td>43.00</td>
<td>12.52</td>
<td>.319</td>
<td>-.950</td>
</tr>
<tr>
<td>ASCT</td>
<td>119.29</td>
<td>119.00</td>
<td>18.63</td>
<td>-.374</td>
<td>.268</td>
</tr>
<tr>
<td>MBICENT</td>
<td>11.48</td>
<td>11.00</td>
<td>2.89</td>
<td>-.323</td>
<td>-1.02</td>
</tr>
<tr>
<td>MBIPRIT</td>
<td>13.81</td>
<td>15.00</td>
<td>1.83</td>
<td>-2.00</td>
<td>4.18</td>
</tr>
<tr>
<td>MBIPUBT</td>
<td>10.33</td>
<td>10.00</td>
<td>3.25</td>
<td>-.515</td>
<td>.234</td>
</tr>
<tr>
<td>MBIT</td>
<td>35.62</td>
<td>37.00</td>
<td>5.88</td>
<td>-.706</td>
<td>-.745</td>
</tr>
<tr>
<td>EDUCASPT</td>
<td>7.05</td>
<td>9.00</td>
<td>2.91</td>
<td>-1.23</td>
<td>-.152</td>
</tr>
</tbody>
</table>
Table 4

Means, Median and Standard Deviations for the DST totals scores at baseline, post-intervention

<table>
<thead>
<tr>
<th>Group</th>
<th>Time</th>
<th>M</th>
<th>SD</th>
<th>Mdn</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nia</td>
<td>Baseline</td>
<td>57.82</td>
<td>7.77</td>
<td>58.00</td>
<td></td>
</tr>
<tr>
<td>Comparison</td>
<td>Baseline</td>
<td>52.70</td>
<td>10.13</td>
<td>55.50</td>
<td></td>
</tr>
<tr>
<td>Nia</td>
<td>Post</td>
<td>44.09</td>
<td>13.58</td>
<td>47.00*</td>
<td>.029</td>
</tr>
<tr>
<td>Comparison</td>
<td>Post</td>
<td>43.30</td>
<td>11.98</td>
<td>38.00</td>
<td>.109</td>
</tr>
</tbody>
</table>

* Indicates significant difference from baseline to post-intervention at $p < .05$. 
Table 5

Means, Median and Standard Deviations for the ASCT totals scores at baseline, post-intervention

<table>
<thead>
<tr>
<th>Group</th>
<th>Time</th>
<th>$M$</th>
<th>$SD$</th>
<th>$Mdn$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nia</td>
<td>Baseline</td>
<td>116.36</td>
<td>16.13</td>
<td>118.00</td>
<td></td>
</tr>
<tr>
<td>Comparison</td>
<td>Baseline</td>
<td>120.60</td>
<td>9.94</td>
<td>118.50</td>
<td></td>
</tr>
<tr>
<td>Nia</td>
<td>Post</td>
<td>119.45</td>
<td>20.42</td>
<td>112.00</td>
<td>.155</td>
</tr>
<tr>
<td>Comparison</td>
<td>Post</td>
<td>119.10</td>
<td>17.55</td>
<td>121.50</td>
<td>.514</td>
</tr>
</tbody>
</table>
Table 6

*Means, Median and Standard Deviations for the MBICENT totals scores at baseline, post-intervention*

<table>
<thead>
<tr>
<th>Group</th>
<th>Time</th>
<th>$M$</th>
<th>$SD$</th>
<th>$Mdn$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nia</td>
<td>Baseline</td>
<td>10.91</td>
<td>3.70</td>
<td>12.00</td>
<td></td>
</tr>
<tr>
<td>Comparison</td>
<td>Baseline</td>
<td>11.30</td>
<td>3.13</td>
<td>11.00</td>
<td></td>
</tr>
<tr>
<td>Nia</td>
<td>Post</td>
<td>12.09</td>
<td>2.59</td>
<td>12.00</td>
<td>.380</td>
</tr>
<tr>
<td>Comparison</td>
<td>Post</td>
<td>10.80</td>
<td>3.19</td>
<td>10.50</td>
<td>.492</td>
</tr>
</tbody>
</table>
Table 7

*Means, Median and Standard Deviations for the MBIPRIT totals scores at baseline, post-intervention*

<table>
<thead>
<tr>
<th>Group</th>
<th>Time</th>
<th>$M$</th>
<th>$SD$</th>
<th>Median</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nia</td>
<td>Baseline</td>
<td>14.18</td>
<td>0.98</td>
<td>14.00</td>
<td></td>
</tr>
<tr>
<td>Comparison</td>
<td>Baseline</td>
<td>13.00</td>
<td>3.27</td>
<td>15.00</td>
<td></td>
</tr>
<tr>
<td>Nia</td>
<td>Post</td>
<td>14.36</td>
<td>0.81</td>
<td>15.00</td>
<td>.157</td>
</tr>
<tr>
<td>Comparison</td>
<td>Post</td>
<td>13.20</td>
<td>2.44</td>
<td>14.50</td>
<td>.833</td>
</tr>
</tbody>
</table>
Table 8

*Means, Median and Standard Deviations for the MBIPUBT totals scores at baseline, post-intervention*

<table>
<thead>
<tr>
<th>Group</th>
<th>Time</th>
<th>$M$</th>
<th>$SD$</th>
<th>$Mdn$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nia</td>
<td>Baseline</td>
<td>11.45</td>
<td>2.98</td>
<td>12.00</td>
<td></td>
</tr>
<tr>
<td>Comparison</td>
<td>Baseline</td>
<td>7.70</td>
<td>3.65</td>
<td>7.50</td>
<td></td>
</tr>
<tr>
<td>Nia</td>
<td>Post</td>
<td>10.91</td>
<td>3.21</td>
<td>11.00</td>
<td>.306</td>
</tr>
<tr>
<td>Comparison</td>
<td>Post</td>
<td>9.70</td>
<td>3.34</td>
<td>9.50*</td>
<td>.017</td>
</tr>
</tbody>
</table>

* Indicates significant difference from baseline to post-intervention at $p < .05$. 
Table 9
Means, Median and Standard Deviations for the MBIT totals scores at baseline, post-intervention

<table>
<thead>
<tr>
<th>Group</th>
<th>Time</th>
<th>M</th>
<th>SD</th>
<th>Mdn</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nia</td>
<td>Baseline</td>
<td>36.55</td>
<td>5.50</td>
<td>38.00</td>
<td></td>
</tr>
<tr>
<td>Comparison</td>
<td>Baseline</td>
<td>32.00</td>
<td>7.99</td>
<td>33.00</td>
<td></td>
</tr>
<tr>
<td>Nia</td>
<td>Post</td>
<td>37.36</td>
<td>3.80</td>
<td>40.00</td>
<td>.721</td>
</tr>
<tr>
<td>Comparison</td>
<td>Post</td>
<td>33.70</td>
<td>7.27</td>
<td>34.50</td>
<td>.574</td>
</tr>
<tr>
<td>Group</td>
<td>Time</td>
<td>$M$</td>
<td>$SD$</td>
<td>$Mdn$</td>
<td>$p$</td>
</tr>
<tr>
<td>----------</td>
<td>--------</td>
<td>------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>Nia</td>
<td>Baseline</td>
<td>7.27</td>
<td>2.72</td>
<td>9.00</td>
<td></td>
</tr>
<tr>
<td>Comparison</td>
<td>Baseline</td>
<td>5.60</td>
<td>2.84</td>
<td>7.00</td>
<td></td>
</tr>
<tr>
<td>Nia</td>
<td>Post</td>
<td>7.73</td>
<td>2.45</td>
<td>9.00</td>
<td>.786</td>
</tr>
<tr>
<td>Comparison</td>
<td>Post</td>
<td>6.30</td>
<td>3.30</td>
<td>7.50</td>
<td>.276</td>
</tr>
</tbody>
</table>
Appendix G
IRB Approval Letter
October 2, 2009

Ms. Bianca M. Bronson, MA
2620 Duck Creek Road, Apt. 3
Cincinnati, OH 45212


Dear Ms. Bronson:

Thank you for your thorough and detailed protocol modification as requested by the IRB on August 25, 2009.

The Board had approved your study in the expedited category contingent on one small additional change in the consent form. That modification has been received, and therefore your study is approved in the expedited category under Federal Regulation 45CFR46. Approval expires on October 2, 2010 and a Progress Report is due by that date. The form can be found online at [www.xavier.edu/irb/forms](http://www.xavier.edu/irb/forms).

Please note that if you wish to further modify your study, it will be necessary to obtain IRB approval prior to implementing the modification. If any adverse events occur, please notify the IRB immediately.

We truly appreciate your efforts and attention to compliance within the spirit of human subject’s protection. Great success with your research!

Sincerely,

Kathleen J. Hart, Ph.D., ABPP
Interim Chair, Institutional Review Board
Xavier University

KH/DM

c: Anna K. Ghee, Ph.D.
Faculty Advisor