# **Running Head: Validating the CCAM and Building PCI Theory**

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**ABSTRACT**: The present study presents evidence regarding the reliability and validity of the Cultural Connectedness Achievement Measure (CCAM). The CCAM consist of three subscales representing three cultural dimensions of African American identity. Responses to the CCAM were collected from 201 African American high school students from a predominantly Black high school. Using factor analysis, evidence was found for the three predicted subscales (Oppositional Identity, Raceless Identity and Primary Cultural Identity) measuring unique cultural identifications for African American students. Results provided evidence for the validity of the classifications from the CCAM. Additionally, results indicated two new patterns of identity, one a combination of primary cultural and raceless identities and the other a combination of having primary cultural and oppositional identities. Distinct motivational patterns were found for the three cultural identities of the CCAM and for the two blended or combined identities.

## I. CULTURAL IDENTIFICATION AND ACADEMIC ACHIEVEMENT

One of the most pressing issues confronting educators, researchers, and policy makers is the underachievement of African American children and adolescents. Taylor, Casten, Flickinger, Roberts, and Fulmore (1994) summarized data from past and recent large-scale surveys and showed that achievement differences between African American and White students begin in elementary school and persist throughout all grade levels. Further, their research revealed that by  $8^{th}$  grade, almost half of the African American and Hispanic students were performing below grade level and were not likely to catch up (Taylor et al., 1994). The discrepancy between African American and White achievement is especially distressing in light of current and expected shifts in the labor market toward jobs requiring higher skills and higher levels of education, which ultimately will negatively affect African Americans immensely in their pursuit of upward mobility.

Too often educators and the public think in very stereotypical ways of racial and ethnic minorities, who, as a group, perform poorly in school. The stereotype maintains that African American students are unmotivated, do not value school, have no support from home, and do not care about learning, and so on. However, such stereotypical thinking is inherently wrong since African American students' exhibit considerable variation in their motivation and valuing of school, the support they receive from home, and the amount they care about their learning, and, as a result, in the level of academic achievement they attain. Hence, thinking about students stereotypically masks the characteristics of students who defy the stereotype. By accepting the stereotype as applicable to all members of a group, educators are tempted to throw up their hands in despair, or simply just give up in their attempts to change what they see as inevitable. Consequently, this stops educators from asking very important questions such as: Why do some African American students succeed while others do not? What sets them apart? Can we learn things from those who succeeded that will help us understand and improve the lot of those who have failed or who are at risk of failure?

There have been countless attempts to analyze and explain the academic achievement, underachievement, and higher achievement of African American students. Undeniably, advances in civil rights legislation opened up a myriad of opportunities for African Americans in the period of the 1960s and 1970s. During this period, the number of African Americans attending schools and institutions of higher learning mushroomed and a period of general optimism in the academic progress of this traditionally marginalized group of Americans ensued (Maehr, 1984). However, this legislation and the accompanying optimism did not fully mitigate the damage done by generations of oppression. According to Ogbu (1992), the impact of this historical oppression is often expressed as an oppositional attitude among many involuntary minority students. The *oppositional culture* explanation for racial disparities in school performance posits that individuals from historically oppressed groups (involuntary minorities – such as African Americans) signify their antagonism towards the burden of "acting White" and White cultural frames of reference by resisting school goals (Fordham & Ogbu, 1986; Ogbu, 1992; Ainsworth-Darnell, & Downey, 1998).Several researchers have analyzed conflicts and oppositional processes between involuntary minority groups (African Americans, Native Americans, and Mexican Americans) and majority culture within the school context (Bergin & Cooks, 2002; Fordham & Ogbu, 1986; Ogbu, 1992).

They concluded that conflicts and opposition often cause involuntary minorities to form oppositional social identities, and oppositional cultural frames of reference that discourage motivation for doing well in school (Ogbu, 1992).In contrast to Ogbu's (1992) oppositional identity, Fordham (1988) suggested that within the structure of schools, African American adolescents consciously and unconsciously sense that they are expected to give up aspects of their identities and cultural systems in order to achieve success as defined by the dominant group's terms. In conforming to these terms, their resulting social selves and cultural identification are defined by the notion of *racelessness*. This concept connotes the adoption of a Eurocentric value system by African American individuals who perceive this as rejecting their culture and minimizing relationships with their cultural community. African American students with a raceless identity seek to maximize their success potential by minimizing their relationship to the African American community and to the stigma attached to 'Blackness" in order to succeed in school and in life (Fordham, 1988). Individuals who have adopted a raceless persona believe firmly in "the American dream" (Fordham, 1988). They willingly, and in some instances not so willingly, seek to distance themselves from the fictive-kinship in the Black community in order to receive school rewards. Individuals with a raceless identity feel this is the primary way to achieve vertical mobility and success.However, there also are serious social and emotional costs to developing a raceless identity or persona. Fordham argued that African American adolescents' attempts to succeed often distance them from their African American community, resulting in feelings of cultural alienation, depression, and anxiety (Fordham, 1988).

Arroyo and Zigler (1995) support these claims in their study of racial identity, academic achievement, and the psychological well being of economically disadvantaged adolescents. Their analyses of the patterns of correlations between the RS (Raceless Scale) and measure of depression and anxiety showed that among African American students, racelessness was positively related to introjective depression. Specifically, those African Americans who reported higher RS scores also expressed greater concerns about losing the approval of others (Arroyo & Zigler, 1995). Oppositional and raceless identities need not be the only options for African American students. A sense of *cultural connectedness* may provide a way to foster a healthy form of academic motivation for African American students. A third potential cultural identity for African American students, the cultural connectedness perspective, contends that students who have a working knowledge of their culture of origin (Africa) as a part of their self-schema have improved self-concepts and hence are confident in their abilities to do well in school (Bass & Coleman, 1997). These students are able to demonstrate persistence in achieving school goals because having a positive primary cultural identity allows them to see possible long-term benefits of schooling (Spencer, Noll, Stoltzfu, & Harpalani, 2001). Having a positive primary cultural identity allows African Americans to further experience accommodation without assimilation since they no longer risk losing their identity (Bass & Coleman, 1997). Accommodation involves participation in the dominant culture without becoming a member. Assimilation involves emulating the dominant culture and attempting to become apart of the dominant culture. Thus, accommodation without assimilation allows an individual to maneuver within the dominant culture without sacrificing their cultural identity (Ogbu, 1992).

Students with a primary cultural identity compare their conditions to that of their cultural heritage in Africa, and African American heritage. They have favorable perceptions towards working hard in school because education is viewed as important not only to self but also to the group as a whole. African American students who have a positive primary cultural identity maintain optimistic attitudes regarding both their chances for success in America and the payoff for efforts aimed at promoting achievement, just as voluntary immigrants are able to do (Chavous, Bernat, Cone, Caldwell, Kohn-Wood, & Zimmerman, 2003). One purpose of the present study was to validate a new measure of the three cultural identities just reviewed (oppositional, raceless, and primary cultural identity). No quantitative measure exists that differentiates these three cultural frames of reference (oppositional, racelessness, primary cultural identification). Research concerning these cultural frames of reference has been explored primarily through qualitative research methods or through instruments measuring a single identity type (Racelessness by Arroyo & Zigler, 1995; Ethnic Identity by Taylor et al., 1994). Thus, a major goal of this study is to validate an instrument that will provide a quantitative means for educators to recognize different cultural frames of reference and their influences on the achievement of African American students. Research with such a measure may help educators and researchers understand why some African American students perform well in school, and why some do not.

A second purpose of this study is to begin exploring the relationships among the different cultural identities and the academic motivation of African American students. In this study two of the many aspects of academic motivation will be explored, students' achievement goals, and their self-efficacy. These aspects of academic motivation were chosen because they have been shown to affect students' academic persistence and success (e.g., Greene & Miller, 1996; McGregor & Elliot, 2002; Meece & Holt, 1993; Pintrich, 2000). Additionally, previous research examining the achievement goals of African American students yielded inconsistent results.

For example, Freeman et al., (2002) found African American students in their sample had high mastery goals and high extrinsic goals (wanting good grades, wanting to pass); however, this did not correspond to higher achievement. The performance goals of African American students were equivalent to those of white students in the sample. Freeman et al., also reported the results of an unpublished qualitative study by Freeman in which African American students reported high extrinsic goals, but few if any performance goals or mastery goals. In a study by Midgley, Arunkumar, and Urdan (1996), African American students' performance goal scores (approach) were significantly positively correlated with self-handicapping; however, neither mastery goals nor performance goals were significantly related to GPA. In a study by Guttman (2005), African American 8<sup>th</sup> and 9<sup>th</sup> grade students' mastery goals were positively correlated with math self-efficacy, but not with math GPA. Only for the 9<sup>th</sup> grade African American students were performance goals significantly negatively correlated with math GPA. Although these inconsistencies may be the result of small sample sizes, it may also be the case that the samples varied in terms of the students' patterns of cultural identity. Perhaps variations in the proportions of students with oppositional, raceless or primary cultural identities could account for the varied picture regarding students' achievement goals. The third purpose of this study was to examine the achievement goal and self-efficacy of students classified in the three cultural identity groups. For Ogbu and other researchers, the motivation of African Americans for academic success is clouded by this problem of opposition. It is therefore incumbent upon researchers to better illuminate the construct of academic motivation among involuntary minorities such as African Americans so that we can overcome the detrimental effects of the development of oppositional attitudes that have been shown to exist among these involuntary minorities.

#### II. PURPOSES OF THE STUDY

The purposes of this study are to (1) describe and validate a new instrument that will help identify three different forms of cultural identification among African American students that correspond to the research and theory reviewed; and (2) to further refine our understanding of the motivational characteristics that distinguish these three groups of students. The research previously reviewed is valuable to the educational process because it promotes a greater understanding of the psychological impact of cultural identification on academic motivation for African American high school students. However, no quantitative measure has yet been developed differentiating these three cultural frames of reference (oppositional, racelessness, primary cultural identification) and their expected academic outcomes. Research concerning these cultural frames of reference has been explored primarily through qualitative research methods or through instruments measuring a single identity type (Racelessness by Arroyo & Zigler, 1995; Ethnic Identity by Taylor et al., 1994). Thus, an important goal of this study is to validate an instrument, the Cultural Connectedness and Achievement Measure (CCAM), through quantitative means in order for educators to be able to better identify different influences on student motivation among African American students. This study will be reported in two parts. The first part of the study describes the validation of the Cultural Connectedness and Achievement Measure (CCAM). The second part of this study took an exploratory approach focusing on the achievement goals and self-efficacy for African American students falling into the three cultural identity groups, oppositional, raceless, and primary cultural.

- [1] The study was guided by the following research questions:
- [2] To what extent do the three subscales of the CCAM demonstrate reliability? To what extent does the CCAM demonstrate construct validity?
- [3] Do the subscales on the CCAM correlate with the validation measures as
- [4] predicted?
- [5] Do students classified as having oppositional, raceless, and primary cultural
- [6] identities differ significantly in their mean scores on the validation measures as
- [7] predicted?
- [8] Are there significant differences between or among the three types of African American identities on the following motivational constructs: academic self-efficacy, achievement goals (mastery, performance-approach, and performance-avoidance) or self-handicapping?

## III. DATASOURCES

The data sources discussed below were used in this study. On all the subscales, the respondents rated themselves on a Likert-scale with (1) not true at all and (6) very true. The following subscales were used in the validation study (study 1):

**Cultural Connectedness and Achievement Measure :** The CCAM (Columbus, 2000b)consists of twelve items designed to measure three aspects of African American students' cultural identity: oppositional and racelessness, and primary cultural identification. Sample items for this scale are "I work hard in school for Black

people" (primary cultural item); "It is good for people of color to assimilate into mainstream culture" (raceless item) and "Most Blacks who do well in school act white" (oppositional item).

Multidimensional Inventory of Black Identity : Three subscales from the Multidimensional Inventory of Black Identity (MIBI) (Sellers, Rowley, Chavous, Shelton, & Smith, 1997) were used to provide construct validity evidence. The Centrality subscale consists of eight items that assess the extent to which being African American is central to respondents' definition of themselves. A sample item include for this measure is: "Being Black is a major part of my identity". The Assimilation subscale consists of eight items that assess the extent to which an African American student seeks to blend in with White culture. A sample item for this measure is "A sign of progress is Blacks are in the mainstream of America more than ever". The Nationalist subscale consists of eight items that assess the extent to which an African progress is important. A sample item for this measure is "Blacks would be better off if they adopted Afro-centric values".

**Identification with Academics :** I used 16 items based on the Identification with Academics scale (Osborne, 1997a; Walker, Greene, and Mansell, 2004) to measure the extent to which students identified with being a good student. A sample item for this scale is "Being a good student is an important part of who I am." Stereotypical Beliefs The four-item stereotypical beliefs subscale from the Raceless Scale (Arroyo & Zigler, 1995) was used to assess students' who adopt behaviors and attitudes that distance them from their culture of origin. A sample item for this scale is "Most Blacks are no longer discriminated against."

**Motivation and Academic Engagement :** Seven variables were measured with subscales from the Patterns of Adaptive Learning Scales (PALS) (Midgley et al. 2000). These seven subscales were:

- [1] TheMasterygoalssubscale. A sample item for this scale is "It's important to me that I learn a lot of new concepts this year"
- [2] The Performance Approach Goals subscale. A sample item for this scale is "It's important to me that other students in my class think I am good at my class work".
- [3] The Performance-Avoidance Goals subscale. A sample item for this scale is "It's important to me that I don't look stupid in class".
- [4] TheAcademic Efficacy subscale. A sample item for this scale is "I'm certain I can master the skills taught in class this year".
- [5] TheSkepticism about the Relevance of School for Future Success. A sample item for this scale is "Even if I do well in school, it will not help me have the kind of life I want when I grow up".
- [6] The Self handicapping subscale. A sample item for this scale is "Some students fool around the night before a test. Then if they don't do well, they can say that is the reason. How true is this of you?"
- [7] The Disruptive behavior subscale A sample item for this scale is "I sometimes behave in a way during class that annoys my teacher."

Achievement/Grades : Achievement was assessed by students' self-reported overall grade point average (GPA).

Procedures : The participants in the study were contacted for data collection while they were attending their scheduled English class. The data collection took place over a three-day period. Participants were given a packet containing all questionnaires for the study. After distributing the packet to students, I explained to them that they would be answering questions regarding things they sometimes feel about school and culture. The participants then were asked to read each item, and circle the number that best described them. The participants took from 45 to 70 minutes to complete the packet.

#### IV. RESULTS AND DISCUSSION – PART I: VALIDATION

The first part of the study involved providing evidence of the construct validity of the results of the CCAM subscales. We did this in two phases. First we examined the factor structure of the CCAM to determine whether the items loaded on the predicted subscales. Additionally, we examined the internal consistency reliabilities of the results of the CCAM subscales. Second we examined the relationships among students' scores on the CCAM subscales and six of the subscales described previously: centrality, assimilation, nationalism, identification with academics, stereotypic beliefs, and disruptive behavior. We also examined the relationships among students' performances on the CCAM subscales and their self-reported achievement (GPA). The following predictions guided the validation:

**Correlation Expectations :** In accordance with theoretical inferences, the following correlation hypotheses would provide supportive evidence for the construct validity of the CCAM: Oppositional subscale scores will have a negative correlation with identification with academics. Raceless subscale scores will have a strong

positive correlation with identification, and primary cultural identity subscale scores will also have a strong positive correlation with identification with academics. Oppositional subscale scores will have a negative correlation with stereotypical beliefs. Raceless subscale scores will have a strong to moderate correlation with stereotypical beliefs while primary cultural identity subscale scores will have a negative correlation with stereotypical beliefs. Oppositional subscale scores will have a positive correlation with disruptive behavior. Raceless subscale scores will have a negative correlation with disruptive behavior, and primary cultural identity subscale scores will also have a negative correlation with disruptive behavior. Oppositional subscale scores will have a negative correlation with grades. Raceless subscale scores will have a positive correlation with grades, and primary cultural identity subscale scores will have a positive correlation with grades. Oppositional subscale scores will have a negative correlation with assimilation. Raceless subscale scores will have a strong positive correlation with assimilation, and primary cultural identity subscale scores will have a negative correlation with assimilation. Oppositional subscale scores will have a moderate to high correlation with nationalist. Raceless subscale scores will be negatively correlated with nationalist, and primary cultural identity subscale scores will have a strong positive correlation with nationalist. Oppositional subscale scores will be positively correlated with centrality. Raceless subscale scores will be negatively correlated with centrality, and primary cultural identity subscale scores will be positively correlated with centrality.

Expectations for Group Differences : In accordance with theoretical inferences, the following ANOVA hypotheses would provide supportive evidence for the construct validity of the CCAM: Oppositional students will score significantly lower on identification with academics than raceless students and students with a primary cultural identity. Raceless students will score significantly higher on stereotypical beliefs than students with a primary cultural identity or oppositional students. Oppositional students will score significantly higher on disruptive behavior than raceless students and students with a primary cultural identity. Oppositional students with a primary cultural identity. Raceless students and students with a primary cultural identity. Raceless students and students with a primary cultural identity. Raceless students will score significantly higher on assimilation than students with a primary cultural identity or students with a primary cultural identity. Raceless students will score significantly lower on nationalism than students with a primary cultural identity. Oppositional students will score significantly higher on assimilation than students with a primary cultural identity will score significantly lower on nationalism than students with a primary cultural identity will score significantly higher on centrality than raceless students.

**Factor Structure and Reliability of the CCAM:** A principle components extraction with varimax rotation was conducted on the twelve items of the CCAM. The factor analysis resulted in a three-factor solution with each factor corresponding to one of the intended CCAM subscales. Three of the raceless items displayed negative crossloadings with oppositional items but they were consistent with the conceptual definition of the groups. The coefficient alpha reliability coefficients for the subscales were: oppositional (.84), raceless (.77), and primary cultural (.76), indicating very strong internal consistency for the scores.

**Validity of the CCAM :** Correlational Findings. The correlations among the three CCAM subscales and each of the validation instruments (see Table 1) matched the theoretical predictions in every case. As expected, the scores on the centrality of being African American and nationalism (Afro-centrism) subscales were positively correlated with both primary cultural identification and oppositional scores, but negatively related to racelessness. Additionally, raceless scores were positive correlated with assimilationist scores, whereas oppositional scores were negatively correlated. Scores on the stereotypical beliefs subscale were positively correlated with scores on the raceless subcale, but were negatively correlated with both oppositional and primary cultural identification scores. Also consistent with the definition of the constructs, the scores on both racelessness and primary cultural identity subscales were positively correlated with identification with academics, while oppositional scores on the disruptiveness subscale, whereas both raceless and primary cultural identification. Scores on the oppositional scores on the disruptiveness subscale, whereas both raceless and primary cultural identification subscales subscale, whereas both raceless and primary cultural identification subscales.

**Differences Among Identity Groups :** To determine whether the CCAM results can be used to produce meaningfully distinct classifications of students by identity type, we used median-splits (all slightly above the mid-point of the scales) to identify high and low scores on each scale. Participants who had a high score on the oppositional subscale and low scores on the other two were classified as oppositional (n = 35) those who scored high on only the raceless scale were classified as raceless (n = 56), and those scoring high on only the primary cultural identification scale were classified as primary culture (n = 13). In forming these groups we discovered that this accounted for only 104 cases in our sample of 201. Upon examining the remaining cases we discovered that two other groups existed, groups that had high scores on two scales and low on the third. These "blended" groups combined primary culture + oppositional (PC+OP, n = 42), and primary culture + raceless

(PC+RAC, n = 26). The remaining participants had low scores on all three subscales and were not used in the subsequent analyses.

A series of ANOVAs were run to determine whether theoretically grounded differences among the three identity groups would be found (see Table 2). The two blended groups were also included in order to gain some understanding of their characteristics. A bonferroni adjustment was made to control type-1 error. Oppositional students scored significantly lower on identification with academics than students from any of the other groups, and the other groups did not differ from each other. Raceless students scored significantly higher on stereotypical beliefs than students with a primary cultural identity or oppositional students. Oppositional students cored significantly higher on disruptive behavior than raceless students and students with a primary cultural identity.

Oppositional students had significantly lower GPA's than raceless students and students with a primary cultural identity. Raceless students scored significantly higher on assimilation than students with a primary cultural identity or students with an oppositional identity. Raceless students scored significantly lower on nationalism than students with a primary cultural identity. Oppositional students and students with a primary cultural identity scored significantly higher on centrality than raceless students. These findings provide additional validity evidence for the CCAM and its utility for classifying the identities of African American high school students.

In addition to these predicted findings, the ANOVA analysis provided some insights regarding two new blended identity types. Most interesting were the differences between PC+RAC groups and the PC (primary culture) and RAC (raceless) groups, and those between PC+OP and the PC and OP (oppositional) groups. The PC+RAC group had significantly higher centrality and nationalist scores than the RAC group, but scored essentially the same on all other variables. Compared to the PC group, PC+RAC scored significantly higher on assimilation, stereotypical beliefs, and GPA. The PC+OP group scored significantly differently than the OP group on all but one validation variable, stereotypical beliefs. On all the other variables, except disruptive behavior, the PC+OP group scored higher. On disruptive behavior PC+OP scored significantly lower. Compared to the PC group, PC+OP scored significantly lower. and GPA (almost more surprising).

In summary, the research reported here has accomplished two important aims. First, solid validity evidence has been provided for the CCAM. Base on this evidence we believe the CCAM will be useful in studying the characteristics of African American students with different cultural identities and will provide a foundation for studying the effectiveness of interventions designed to improve the academic orientation of oppositional students. Second, the discovery of two new cultural identities refines our understanding of the complexity of such African American students' identities. All of these outcomes will be valuable in the continued effort to understand and improve the academic motivation of African American students.

#### V. RESULTS AND DISCUSSION – PART II: MOTIVATION

This phase of the study took an exploratory look at the relationship between students' type of identification, as measured by the CCAM, and following indices of academic motivation from the PALS (Midgely, et al., 2000): mastery goals, performance approach goals, performance avoidance goals, academic efficacy, skepticism about the relevance of school, and self-handicapping. We also looked to see if there were mean differences on these motivation variables for students classified into one of the five CCAM categories that had emerged in the first phase of the study.

**Reliability Indices:** Cronbach alphas for each of the scales were computed. All of these reliability values were sufficiently high to provide evidence of internal consistency, suggesting that the items for each scale are measuring the same construct. The Cronbach  $\alpha$  coefficients, along with other descriptive statistics, are shown in (Table 1).

**Correlations :** To determine whether the CCAM identity subscales were related to the motivation variables we examined correlations among these variables. Based on the characteristics of oppositional students, we expected negative correlations between oppositional scores and mastery and performance-approach goals, and positive correlations with self-handicapping and skepticism about the relevance of school; however, we had less confidence making theoretical predictions about the other CCAM identities. As a result, the correlational analyses were largely exploratory. As can be seen in Table 2, our expectations concerning oppositional scores were supported. The positive correlations found for both the raceless and primary cultural identification subscales and mastery goals, performance-approach goals and self-efficacy make sense given the positive, moderate correlations found between raceless and primary culture scores and GPA in the first phase of this

study. The same is true for the negative correlations both raceless and primary cultural scores had with selfhandicapping and skepticism about the relevance of school. Interestingly the data revealed a positive correlation between raceless scores and performance-avoidance but a negative correlation between primary culture scores and performance-avoidance. This finding makes us wonder whether raceless students might be more susceptible to performance anxiety than students with a primary cultural identification.

**Mean Differences Among CCAM Groups :** To determine whether there were motivational differences among the CCAM identity types we used the median-splits described in the first phase of the study. This produced five groups: *oppositional* (OP, n = 35), *raceless* (RAC, n = 56), *primary culture* (PC, n = 13), *primary culture+oppositional* (PC+OP, n = 42), and *primary culture + raceless* (PC+RAC, n = 26). The remaining participants had low scores on all three subscales and were not used in these analyses. The means and standard deviations for the five CCAM identity groups on the six motivation variables are reported in Table 1. We used ANOVA with Bonferoni adjustments for the planned comparisons among the CCAM identity groups for each motivation variable (alpha = .005 for the collection of comparisons). As can be seen in the table, oppositional students scored significantly lower on mastery goals and self-efficacy than students in the other four identity groups, while the other four groups did not differ from each other. Oppositional students also scored significantly higher than the other four identity groups on both self-handicapping and skepticism. Students in the blended PC+OP scored significantly lower than the other four groups on performance-avoidance goals.

## VI. GENERAL DISCUSSION

Implications for Pedagogical Approaches : The purpose of this study was to (1) to describe and validate a new instrument (CCAM) that will help identify three different forms of cultural identification among African American students; and (2) to extend our understanding of the three groups and their motivation for learning and academic achievement. The results provide evidence that the CCAM is a reliable and construct valid measure of cultural identification. The results suggest that the CCAM measures three different forms of cultural identification and may be useful in identifying two other forms of cultural identification.

**Validity of the CCAM :** The results of the three validity analyses provided solid support for the subscales of the CCAM. The factor analysis provided a three-factor solution, with each factor corresponding to one of the intended CCAM subscales. Three of the raceless items displayed negative crossloadings with oppositional items but they were consistent with the conceptual definition of the groups. The correlations among the three CCAM subscales and each of the validation instruments matched the theoretical predictions. Finally, the pattern of statistically significant differences among the subscales of the CCAM on the validation instruments was consistent with the theoretical predictions. Overall, this collection of evidence indicates that the results obtained from the CCAM are useful for identifying students' cultural identities and that these identities are distinct from one another and are consistent with theoretical predictions.

**New Identity Patterns :** The ANOVA analysis in the validation part of the study yielded two unexpected identity types. These new identities were in fact *blended* identities. Students that displayed these blended identities exhibited combined characteristics of two of the other three identities: a combination of primary cultural & raceless identity (Pc-rp) and a combination of primary cultural & oppositional identity (Pc-op). In terms of their cultural beliefs, PC-RP students were similar to the raceless students in some ways and similar to students with a primary cultural identity in others. Like the raceless students but unlike students with a primary cultural identity, the PC-RP students had moderately high stereotypical beliefs and high assimilationist beliefs. Like students with a primary cultural identity, but unlike raceless students, they had high centrality and moderate nationalist beliefs. So these students appear to represent a synthesis of two distinct cultural identities. Being African American is a central aspect of their identity yet they simultaneously maintain some modest stereotypical beliefs about African Americans in general and believe that assimilating with White culture would be a good thing.

The academic perspectives and behavior of PC-RP also represented a synthesis of both raceless students and those with a primary cultural identity. The PC-RP students identify with academics at a high level, one equal to that of students in the raceless and primary cultural groups. Consistent with identification with academics, they reported a low rate of disruptive behavior, which was equal to raceless and primary cultural groups. Given these two characteristics, it is not surprising that they reported high GPAs, ones equal to that of the raceless students, and higher than that of students with a primary cultural identity.Conversely, in terms of their cultural beliefs, PC-OP students were similar to the oppositional students in some ways and similar to students with a primary cultural identity in others. Like the oppositional and primary culturally connected students, but unlike students with a raceless identity and combined PC-RP, the PC-OP students had low

stereotypical beliefs. Like students with a primary cultural identity, an oppositional identity or a combined PC-RP identity, but unlike raceless students, the PC-OP students had high centrality. Like students with a primary cultural identity and unlike oppositional, raceless and combined PC-RP students, students with combined PC-OP identity scored high on nationalism. As a result these students appear to represent a synthesis of two distinct cultural identities. Being African American is a central aspect of their identity and they believe that assimilating with White culture would not be a good thing for them.

Surprisingly, the academic perspectives and behavior of PC-OP was most similar to raceless students and those with a primary cultural identity. The PC-OP students identify with academics at a high level, one equal to that of students in the raceless and primary cultural groups and the combined PC-RP group. Consistent with identification with academics, they reported a low rate of disruptive behavior, which was equal to the raceless and primary cultural groups and the combined PC-RP group. Given these two characteristics, it is not surprising that they reported moderately high GPAs; however ones lower than those of the raceless students and students with combined PC-RP identity, but significantly higher than those of students with a primary cultural identities (Pc-rp and Pc-op) sheds new light on the notions of African American identity and academic motivation. At the outset of this study, a fundamental concern was whether there were ways to engage African American students who had developed identities that were opposed to school and learning. The notion of an identity that could be at once fully and authentically black but not opposed to school and learning would lead to hope that a pro-learning identity could be fostered in African American students.

The finding of a blended oppositional and primary cultural identity lends empirical evidence to the idea that the development of such an identity is not only possible, but has already been cognitively generated by some African American youth. It is imperative that this discovery is followed by more research into whether the negative effects of an oppositional identity maybe mitigated by blending it with a primary cultural identity. Furthermore, while racelessness and oppositional identities are inherently mutually antagonistic, a primary cultural identity is compatible with both. Any acrimony between raceless and oppositional students may be minimized by fostering a primary cultural identity. These findings are very important for gaining a better understanding of African American high school students.

**Identity Categories and Motivation :** With the validity of the CCAM established, we will now discuss how the CCAM identities are related to motivation variables and whether the identities differ from one another in their patterns of motivation. Oppositional students have low mastery, moderate performance avoidance, low self-efficacy, and high skepticism about the long-term payoff of school. Given this motivational framework, we would expect the students to be engaging in self-handicapping, and school disruption as strategies to protect self-esteem or self-worth, which is exactly what was found in this study for oppositional students. As a result of these self-defeating, yet self-protective strategies, we would also expect their identification with academics to be low and school performance (GPA) to be low, which is what was found with this sample.Raceless, primary cultural and PC-RP students all had the same motivational profile. They had high mastery and self-efficacy, moderate performance avoidance, and low skepticism about the long-term payoff of school. Given this motivational framework, we would expect the students to have low rates of self-handicapping, and school disruption. As a result of their high identification with academics, we would also expect school performance (GPA) to be high, which was found with this sample.

Pc-op students have high mastery and self-efficacy, significantly lower performance avoidance goals than primary cultural, raceless or PC-RP students, and low skepticism about the long-term payoff of school. Given this motivational framework, we would expect the students to have low rates of self-handicapping or school disruption. As a result of their high identification with academics, we also would expect school performance (GPA) to be high, which was the case with this sample. What sets the combined primary cultural & oppositional (Pc-op) group apart from the other four groups (Op, Rp, Pc, Pcrp) is that they have significantly lower performance-avoidance goals. This suggests that they would be the group least affected by stereotype threat. Stereotype threat is a situational experience in which an individual feels vulnerable and pressured by the possibility of confirming or being judged by a stereotype (Steele, 1997). This threatening experience elicits heightened performance anxiety (performance avoidance goals) and leads to poorer performance even among highly skilled individuals (Smith, 2004). Future research should examine the susceptibility of the various cultural identity groups to the effects of stereotype threat. Another interesting finding in this motivational analysis was the motivational profile of the oppositional group. These students had the lowest self-efficacy of all groups and moderately high performance avoidance goals. This combination of motivational characteristics is usually associated with high levels of self-esteem protecting behavior such as self-handicapping. These

oppositional students scored significantly higher than the other groups on self-handicapping. It may be the case that the oppositional stance of these students is another way in which they can protect self-esteem. By not cooperating in class and refusing to do class work, oppositional students could mask incompetence or avoid putting their competence up for assessment.Because centrality proved to be high in both oppositional and primary cultural students, they may view blackness differently. These two groups may have different conceptions about what it means to be black. For the oppositional group, blackness means lack of effort within school settings while for students with a primary cultural identity blackness increases the likelihood that these students will exhibit effort within classroom settings. More research will be needed to verify whether opposition is a form of self-esteem protection and how these groups view the essence of blackness.

#### VII. LIMITATIONS

In this study, a number of issues emerged as salient with respect to its limitations. First of all, five respondents had to be removed from the study. In short, these African American high school students were so oppositional that they would not cooperate with the study. One asked, "Didn't you say this is voluntary? Well I auit" he tersely responded and that was the end of his participation. Another problem emerged when respondents were told that, "It's important that you answer the questions in a meaningful way and not just fill in anything because then I can't use your data." One student responded, "My teacher just said we got to fill it out so I guess that's on you Cuz." Another student kept asking his friends questions like, "Hey Tommy, whatcha get on numba fivel?" A qualitative study could explore this further but it is possible that some of the data in this study is polluted by oppositional students just putting down any answer so that they could finish the instrument. These oppositional students opposed the administration of the instrument just as they oppose the school environment in general. Future research must find ways of measuring oppositional students that feel less like the "White" school activities they so oppose.Literacy is a potential factor we did not account for. It may be that more oppositional students have lower literacy skills again presenting a potential problem here. The literacy level of respondents is always an issue with studies that use written instruments and this may be compounded here with the notion that raceless students do better in school than oppositional students. Future research must find ways to account for this. We also acknowledge that things are more complex then they may appear here. Identities are complex and are not completely static. It is problematic to say that people are essentially this or that. Although we found evidence of five categories of identity, it is problematic to say that someone is essentially this or that. The question could always arise, might they be something else? Might there be identities not included in the CCAM? Still, this research quantitatively identifies three African American identity types and does so reliably. Plus the CCAM can be used to identify two other identity categories. The validation of the CCAM provides a tool for exploring issues related to African American identity but does not solve all the problems related to this complex area of concern.

Another problem was that data was collected in a high school that was 98% African American. Data might look very different in different contexts, such as schools that are 98% White or in schools that are more diverse. This might also look different in different regions of the country such as in the deep-south or in very large cities. Finally, grades were self-reported. Future research should look at the actual grades of participants rather than self-reported grades which are somewhat less reliable. While these are all significant problems, the successful validation of the CCAM is hopefully an important step in the illumination of the role cultural identification plays in academic success for African American students.

**Future Research**: There are three central areas with respect to future research that are logical next steps in this work. The continued validation of the CCAM, studying new aspects of the three identities and studying the effectiveness of fostering a primary cultural identification are very important to future research concerns.

The continued validation of the CCAM : Although this study provided solid evidence for the validity of the results of the CCAM with this high school sample, it remains to be seen whether the results of the CCAM are valid for older and younger samples. This could be done in colleges and middle schools to expand both validity and applicability of the scales and related findings. This is important in a university setting because we want to be able to paint accurate portraits of successful African American university students. We would expect that most African American university students would have either raceless, primary cultural, primary cultural & oppositional or primary cultural & raceless identifications. What are the proportions of each? Might it be that almost all African American college students are raceless? If so, what does this say about American society? What about students attending historically Black colleges and universities (HBCUs)? Are they different from African American students attending predominantly White institutions of higher learning?

It also is important to replicate this study among middle school students and possibly even younger so that we might potentially view the onset of these identity types and possibly identify a critical period for

intervention. This could also help us to understand who is adopting what cultural identity and why. Indeed there may be many other identity types. How might these account for success or lack thereof? Another way of continuing the validation of the CCAM and its subscales is by classifying *known* groups of African Americans. This might be done by administering the CCAM to juvenile delinquents as well as school drop outs and gang members. We would expect that such individuals would exhibit an oppositional identity and that their opposition has become manifest in their behavior resulting in school failure. Similarly, we might expect that African Americans in organizations such as "Young Americans for Freedom" or the "Black Republicans" would likely exhibit a raceless identity. If such expectations are borne out, then this would do more to support the validity of the CCAM.

We also need to correlate teacher judgments about their students to bolster the validity of the CCAM. Teachers who spend a lot of time with students and administer continual assessments would be likely to have robust assessments of their students. If we could administer the CCAM to students and successfully correlate the findings with teacher assessments or expectations of how their students would identify, the validity of the instrument would be enhanced. We also need to correlate the classifications of the CCAM with the actual behavior of students. For example, if students take the CCAM at the beginning of the school year and exhibit an oppositional identity, we would expect that these students would be more likely to do poorly in school and perhaps even drop out. We might also expect that students who take the CCAM at the beginning of the school year and exhibit a raceless or primary cultural identity would be more likely to do well in school and be less likely to drop out. This would, again, improve the validity of the CCAM.

**Study New Aspects of the Three Identity Types and Combinations of Them :** We also need to pursue other motivational characteristics of the three identity types. The current study looked only at mastery goals, performance approach and avoidance goals, academic efficacy, self-handicapping strategies, and skepticism about the relevance of school for future success. At present, this is all we know about the motivational characteristics of students who fall into these three identity types. We need to further elaborate these identity types by looking at other motivational variables such as intrinsic/extrinsic motivation, future oriented motivation, self- regulation, and attribution.

We also must reexamine these identities and stereotype threat in light of both Steele's work and the CCAM. The replication of Steele & Aronson's (1995) work in light of these identity types is important because it may be that stereotype threat operates for all students except those who are identified as having a combined primary cultural & oppositional identity. These students were the only students found not to have a moderate concern about failure and embarrassment associated with failure. Educators need to determine whether or not performance avoidance goals moderate underperformance for African Americans at test taking time and which African American students run the highest risk of stereotype threat. Understanding the elements that make up stereotype threat is extremely important in lowering anxiety for these stigmatized students in the future. Those who were raceless in this study both were identified with academics and had moderately high performance avoidance goals, which is extremely negative on the future academic challenges they will incur.

**Study the Effectiveness of Interventions :** Also, we need to look at the effectiveness of interventions directed at fostering primary cultural connections among oppositional students as well as raceless students. This study indicates that both of these groups could benefit from interventions addressing either integrating primary cultural identification or motivation. This is the central goal of this work particularly since we know that primary cultural identification offers a possible intervention angle for students who are oppositional as well as raceless. This may serve to improve their motivation for school and perhaps then their academic achievement if they are oppositional, and reduce alienation and being called a "sell-out" if they are raceless. Future research should include naturalistic studies of interventions currently underway that seek to foster a primary cultural identity. Additionally, such studies should explore instructional products or curricula that seek to do the same.

One example of such a curricular intervention is the Philadelphia project in which the entire school system has implemented "African American studies" for all students. As a district, they believe this will benefit all students by impacting both their identity development and their appreciation for the cultures of the world. This intervention must be explored and evaluated with respect to the impact on student cultural identities. The CCAM would be an ideal instrument for doing so. We would hope to see some academic improvements among African American students in this district because the results of the present study indicated that primary cultural identification enhances school success for students at the beginning and at the end of the year and track African American students' identity types. We could then gauge the effectiveness of teaching African American

studies to African American students by looking at how their identification might be impacted and how this affects their achievement. If their identification is indeed affected by teaching African American studies, then we might conclude that this is an effective intervention that should be scaled up.

The CCAM provides us with a tool for viewing the effectiveness of educational interventions directed at both students with an oppositional identity and those with a raceless identity. another avenue or strategy for academic success for African Americans. This strategy is taking on a primary cultural identity or, better yet, integrating it with a raceless or oppositional identity. This is an observable, quantifiable, alternative that some African American students take that overcomes this dichotomous problem of having to otherwise choose an oppositional identity that sacrifices academic success for cultural integrity or choose a raceless identity that sacrifices cultural integrity for academic success. The obvious implication of this discovery of an alternative to either an oppositional or raceless identity is that educators and instructional designers must create and implement educational materials and curricula that fosters the integration of a primary cultural identity among all African American students.

This theoretical perspective offers a possible means of increasing academic performance for those African Americans who are oppositional to school and learning, as well as reducing the alienation African American students experience when they choose a raceless strategy for school success. Primary Cultural identity has been positively related to academic achievement in this study and in previous research (e.g. Columbus, 2000a' Spencer et al. 2001; Taylor et al. 1994). African American success in schooling should not be contingent on adopting a raceless persona and being ostracized by their peers in the process. It should be contingent on them having a deeper primary cultural sense of self, where school becomes a group-valued goal and not just an individualist pursuit. African Americans who are oppositional to school might successfully cope with the burden of acting White by adopting a primary cultural identity and may thereby no longer feel that their identity is threatened by doing well in school. The students will be expected to do well in school because of group norms, and simply because it's their role in relationship to others in their "fictive kinship group." Fostering a primary cultural identity appears to be a promising goal and line of research for the future.

#### VIII. CONCLUSION

In summary, the research reported here has accomplished three important aims. First, I validated an instrument that will be useful in studying the characteristics of African American students with different cultural identities and the effectiveness of interventions designed to improve the academic orientation of oppositional students. Second, I also discovered two new cultural identities that refine our understanding of the complexity of such identities. Finally, I discovered important motivational characteristics for students with varied cultural identities. All of these outcomes will be valuable in the continued effort to understand and improve the academic motivation of African American students.

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