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A Comparison of the Relationship of Personality Traits to Academic Performance for  
African- American and Caucasian College Students

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### **ABSTRACT**

The topic of this literature review is research on differences between African-American and Caucasian students in the relationship between personality traits and collegiate academic performance as operationalized by cumulative grade-point-average (GPA). The first purpose of this review is to investigate which personality traits are predictive of GPA; the second purpose is to investigate racial differences in personality assessment. The literature used addresses a range of personality assessments including the MMPI-2, the Five Factor Model, expectancy beliefs, and a host of newer assessments. All of the literature is original with its own studies. From the review of literature, it is concluded that there are personality traits that can predict GPA. Racial differences were also found when looking at certain personality measures, but there is some inconsistency in the literature on that issue.

## A Comparison of the Relationship of Personality Traits to Academic Performance for African- American and Caucasian College Students

Personality is the basis for explaining human behavior. Career placement, job satisfaction, leadership styles, dating and marriage preferences, learning styles, and levels of achievement can all be explained in terms of personality. More often than not, inferences are drawn based on personality measures that have been created by different forms of assessment. Most forms of assessments strive to be sensitive to racial and ethnic differences so that their results are not biased.

This literature review investigated two issues regarding personality. The first issue of using personality traits to predict GPA and achievement was examined based on the available empirical literature. Personality traits have been found to relate to job and career success (Barrick & Mount, 1991) as well as academic performance (Lounsbury, et al, in press). Some researchers (Ones & Viswesveran, 1996; Hogan & Roberts, 1996) assert that broad personality traits can effectively predict complex criteria like job performance. It is assumed that certain personality traits are more useful than others when trying to attain high scholastic achievement. It is the purpose of this literature review to find which personality traits predicts GPA's of adolescents and college students.

The second issue under investigation is racial differences in personality assessment. This issue is of particular interest because most personality measures were developed primarily for use by Caucasians. As our society has become more diverse, the applicability of these measures should be questioned. It is logical to expect that people with different values, backgrounds, beliefs, and ethics would not respond in the same manner on a test. If that is so, then personality measures are not likely to be equally

accurate for different ethnic and racial groups. It is the purpose of this literature review to discover if personality assessments are applicable to minority groups, specifically African-Americans.

### *Research on Personality Traits*

The research surrounding the prediction of grades from individual differences is extensive, but the role of personality constructs is being examined instead of cognitive predictors. The Big Five constructs or Five Factor Model (FFM) suggests there are five basic dimensions of adult personality: neuroticism, extroversion, openness, agreeableness, and conscientiousness (Worrell & Cross, 2004). Empirical studies have verified the overall factor structure and individual integrity of the Big Five constructs in many different research settings and populations (Costa & McCrae, 1994; De Raad, 2000). Even with the use of different instruments, the FFM proves to be quite robust in different cultures and across different theoretical perspectives (Blaylock, 1999).

Many studies have found significant positive correlations between grades and cognitive ability, as well as between grades and certain personality traits. Paunonen and Nicol (2001) found Big Five traits among the significant predictors of GPA in a population of college students. Similarly, Lounsbury, Loveland, Sundstrom, Gibson, et al. (in press) and Lounsbury, Tatum, et al. (in press) found that Big Five traits significantly predicted cumulative GPA among adolescents in high school and middle school. Lounsbury et al. (2003) found that the Big Five constructs of Conscientiousness, Openness, and Agreeableness were positively related to course grades and grade point

average. Also, Dollinger and Orf (1991) found conscientiousness to be a successful predictor of students' grades and objective test performance.

These results can be interpreted to mean that students who are more open to new learning, discovery, and exploration; higher on self-control, more orderly, higher on achievement striving, and lower on anxiety, impulsivity, hostility, and vulnerability will have higher GPA's. Students who sit in the front of the class (conscientiousness), prepare their assignments (conscientiousness), follow the directions given (agreeableness), and ask questions (openness) are usually the better students. High levels of openness, conscientiousness, and agreeableness with low levels of neuroticism are an ideal combination. Those students labeled as Type A's (similar to the highly conscientious student) tend to achieve more than the Type B counterparts (Robbins, Spence, & Clark, 1991) and show better academic performance. Type A students tend to be more motivated, have higher drive, and are more aggressive, while Type B students are more laid-back and lazy, and may procrastinate more.

Even though the Big Five traits are significantly and positively correlated with course grades and GPA, there are more narrow traits that may be better predictors. Lounsbury et al (2003) found that aggression, optimism, tough-mindedness, and work drive can add significant, incremental validity to the Big Five personality traits. Aggression is a feeling of hostility that arouses thoughts of attack. Some (Edwards, 1977, Feshbach, 1984, Orpinas & Frankowski, 2001) found aggression to be negative correlated with academic grades, self-reported grades, and academic performance amongst secondary school-aged students.

Optimism is a tendency to maintain positive expectations about the future and anticipate the best outcomes. Optimists, in comparison to pessimists, are more persistent and more effective in their goal-directed behaviors (Robbins, Spence, & Clark, 1991), including academics, and are more confident in their performance ability. Prola and Stern (1984) found positive correlations between optimism and GPA in a study of high school students. Optimism may have beneficial effects on GPAs because optimism stimulates task-oriented behaviors (Robbins, Spence, & Clark, 1991).

Tough-mindedness is similar to the thinking-feeling dimension of the Myers-Briggs Type Indicator and refers to making sound judgments based on logic and fact. Even though a negative relationship was found between tough-mindedness and grades (Mandryk & Schuerger, 1974). A positive relationship between tough-mindedness and achievement scores in math and science in middle school students was found by Barton, Dielman, and Cattell (1972). It can be inferred that those students (typically males) categorized as “thinkers” are more apt to perform higher in math and science subjects. Finally, work drive refers to willingness to expend extra time and effort to meet achievement-related goals (Lounsbury & Gibson, 2002). In many studies, work drive was found to be a positive predictor of course grades for college students, and overall job satisfaction and performance.

The above findings seem to be fairly consistent. The Big Five traits, based on the FFM, all contribute to academic achievement as represented by GPA and course grades. The Big Five personality traits of conscientiousness, openness, extraversion, agreeableness, and neuroticism can predict academic performance for many education levels. Furthermore, narrow personality traits like, aggression, optimism, tough-

mindedness, and work drive can not only significantly correlate with GPA, but can also add incremental validity beyond that established by the Big Five personality traits.

### *Research on applicability of personality measures*

The discussion of racial issues has always been a difficult topic, and remains to be a controversial topic today. But, we need to discuss it so that we can move beyond a single perspective approach that is not beneficial to children of color or European American children. Many studies have found differences in the scores between African-American students and White students on some personality measures, as well as in the educational realm including standardized testing, academic tracking, gifted and remedial placement, and dropout rates (Boutte & McCoy, 1994). There are significant differences between racial groups' backgrounds, values, and ethics that they bring to their learning environment; but these differences should not imply an inferiority of one race to another. Treating all children equally and measuring them on the same level implies a disregard for cultural differences, resulting in overlooking cultural, racial, and other differences, which may affect children's learning styles, development, perspectives, and behaviors (Boutte & McCoy, 1994).

If there are differences in the personality trait scores of Black and White students, the applicability of these assessments to ethnic populations is in doubt. Some clinical psychologists questioned whether the MMPI would be appropriate for use with ethnic minorities that were likely to be different from the original normative sample (Timbrook & Graham, 1994) and they recommended modification to the MMPI to reduce the potential for bias against ethnic minorities. But it seems that quite a few studies have



found the opposite of the proposed hypothesis. Reviews performed by Pritchard and Rosenblatt (1980), and Greene (1987) concluded that the MMPI was equally valid for use with Blacks and Whites. Furthermore, Timbrook & Graham (1994) found the MMPI-2 differences between Blacks and Whites to be minimal when age, years of education, and total family income are taken into account. It may be the case that significant differences in income, level of education, and age may cause significant differences in the scores on personality measures, at least on the MMPI and MMPI-2.

Personality differences between Blacks and Whites have also been noted in several studies that have compared the personality structures of both groups. One such study (Cameron, 1971) compares Blacks and Whites on several scales: the Canter form of the Barron ego strength scale, the Eysenck personality inventory, the Cameron religious dimensions scale, the Sarason hostility scale, and the Berdie masculinity-femininity check-list. The results on these scales found Blacks to be less neurotic than Whites and Blacks were slightly more candid than Whites. No racial differences were found comparing extraversion, ego strength, or masculinity-femininity. Blacks were also found to be more religious than Whites and less hostile than Whites. The study further elucidated the parallel developmental and sex differences between the Black and White samples, suggesting that the social influences are similar for both groups, and these influences are handled the same by both races (Cameron, 1971). Thus, Blacks and Whites are more similar psychologically than different.

Another study by Worrell and Cross (2004) examined the reliability and validity of Big Five Inventory scores in a sample of African- American college students as performed on the Big Five Inventory. They found that reliable measures could be

created from the Adjective Q-sort (Aguilar et al., 1998) and there are no perceived predictive validity differences between White and Black students, using the NEO-FFI (Chan, 1997). Goldberg et al. (1998) reported average correlations between the Big Five and the demographic variables, indicating that the FFM does not seem to differ across demographic groups. From this study, it is concluded that the FFM as measured by the BFI can be applied without bias to African-American college students and African-Americans. This study adds to the growing belief that the FFM is applicable across groups and cultures.

Some of the newer personality assessments are based on less traditional models of personality theory, yet are still reliable and valid across cultures. The Assessment of Academic Self-Concept and Motivation (AASCM) Scale was developed according to motivational systems theory, unlike many others that are based on the FFM or Big Five constructs. This theory purposes that motivation is the patterning of goals, emotions, and personal agency beliefs (self-concept). The AASCM assesses four aspects of self-concept: ability, environmental responsiveness, control, and value or importance; it also assesses four dimensions of the high school environment: cognitive, social, extracurricular, and personal (Rouse & Cashin, 2000). Rouse & Cashin (2000) performed a reliability analyses on a sample of African Americans, European Americans, and Hispanic Americans who completed the AASCM scale survey. The results of these analyses from each ethnic group yielded equivalent support for the reliability and validity of the AASCM Scale score.

The AASCM Scale has several positive qualities that should encourage clinicians and psychologists to use it. It measures internal locus of control and control based on the

Living Systems Framework, motivation, and can be used for various ethnic groups (Rouse & Cashin, 2000). Since this scale focuses on motivation, it is useful for providing information about success in school, as well as the workplace. Different factors may motivate people to succeed in varying ways, but a positive self-concept is the same in all cultures. Just as an optimistic person is confident in their ability and thus performs better, a person's self-concept is increased if they are good at an important activity rather than an activity of little importance.

It is concluded that there may be racial differences in personality assessment, but these differences are minimal and insignificant. Racial differences are more prevalent in the educational setting with testing of intelligence and cognitive abilities. It may be the case that normal personality measures assessments are accurately assessing the Blacks and Whites, but these assessments cannot show how individuals learn. While many researchers have focused on the mean differences between Blacks and Whites in testing comparisons, new research should examine whether the correlations between personality and GPA are different for Blacks and Whites. Also, research should be guided toward measuring the academic success of students with similar personality types, but different racial backgrounds.

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