

# Achieved Eminence in Minority and Majority Cultures: Convergence Versus Divergence in the Assessments of 294 African Americans

Dean Keith Simonton  
University of California, Davis

Although psychologists have often used eminence measures as individual-difference variables, no researcher has investigated the differential eminence of individuals belonging to disadvantaged minority groups. Here a sample of 294 illustrious African Americans is scrutinized from the standpoint of the majority (White) culture and the minority (Black) subculture. Exploratory and confirmatory factor analyses of 7 Black and 10 White eminence measures indicate that (a) these measures can be explained by two latent variables but that (b) the two dimensions correlate very highly. Multiple regression analyses then showed that the Black and White composite assessments, although concurring on the impact of most predictor variables (e.g., gender, famous firsts, and Spingarn Award), could nonetheless disagree on the consequences of achievements in certain domains (e.g., athletes, blues and jazz musicians, and civil rights activists). The results have implications for the development of causal models that explain individual differences in achievement within minority- and majority-culture populations.

Francis Galton was among the most influential innovators in the history of psychology. Besides introducing such important substantive questions such as the nature–nurture issue, Galton devised many methodological techniques that still have a crucial place in contemporary research, such as questionnaires, twin studies, and correlational analysis (Galton, 1874, 1883). Many of his innovations were specifically devoted to the scientific investigation of individual differences. This emphasis is quite apparent in his classic book *Hereditary Genius* (Galton, 1869). Among the many original ideas introduced in this book, such as the family pedigree method, we find the first use of eminence (“reputation”) as a gauge of underlying individual differences (in “natural ability” or “genius”). Since Galton’s pioneer effort, many other psychologists have used biographical dictionaries, encyclopedias, chronologies, histories, and other reference works to obtain historiometric assessments of individual differences in eminence. For example, Lewis Terman, who was a great admirer of Galton (Terman, 1917), made use of these eminence criteria in his five-volume *Genetic Studies of Genius*. In the second volume, written by Catharine Cox (1926), the estimated intelligence scores of 301 famous personalities were correlated with the eminence scores compiled earlier by James McKeen Cattell (1903), another advocate of this technique (see also Simonton, 1976a; Walberg, Rasher, & Parkerson, 1980). Historiometric measures were likewise used in the last volume, written by Terman and Oden (1959), to document the adulthood achievements of over a thousand intellectually gifted children. Eminence assessments have been particularly useful in the psy-

chological study of two critical individual-difference variables, namely, leadership (e.g., Simonton, 1983, 1984b) and creativity (e.g., Simonton, 1997c; Zusne, 1976). Even when eminence is not serving as a variable of direct interest, it is often used as an explicit or implicit sampling criterion in psychobiographical, comparative, historiometric, and psychometric studies of famous personalities (see, e.g., Elms, 1994; Gardner, 1993; Mackavey, Malley, & Stewart, 1991; Martindale, 1990; Sulloway, 1996).

In addition, some investigations have more specifically focused on establishing the reliability and validity of diverse eminence indicators. Besides showing that alternative operational definitions of eminence show highly respectable internal consistencies, unidimensionality, and temporal stability (Farnsworth, 1969; Over, 1982; Rosengren, 1985; Simonton, 1976a, 1991c), investigators have shown that eminence indicators correlate with various alternative measures of attainment. Specifically, eminence measures are strongly associated with objective indicators, such as creative productivity and citation rates (Dennis, 1954; Simonton, 1977, 1991a, 1991b, 1992b), as well as with subjective indicators, such as assessed importance or impact (Ludwig, 1995; Simonton, 1987, 1991c). Research has even demonstrated that differential eminence cuts across national boundaries and ideological differences (Farnsworth, 1969; Simonton, 1987, 1991c, 1996a). In short, indicators of cross-sectional variation in eminence seem to feature some highly desirable psychometric qualities (see also Simonton, 1990).

On the other hand, a critical gap exists in this extensive literature. So far no one has scientifically determined whether eminence measures display some systematic biases with respect to women, minorities, and other “underrepresented groups.” To be sure, many have observed that lists of the eminent personalities often seem to have a conspicuous surplus of “dead white males.” This discrepancy is perhaps most obvious in the case of women, given that we would have a clear expectation of a 50% representation in the absence of any countervailing factors

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Correspondence concerning this article should be addressed to Dean Keith Simonton, Department of Psychology, University of California, Davis, California 95616-8686. Electronic mail may be sent to dksimonton@ucdavis.edu.

(Simonton, 1992a). Yet eminent women seldom make up more than a small percentage of any samples of famous personalities, and in some cases their gender is missing altogether (see, e.g., Cox, 1926; Farnsworth, 1969; Raskin, 1936; cf. Simonton, 1996b). Admittedly, in some exceptional instances members of particular social groups may enjoy higher than expected odds of attaining distinction, the most obvious example being the prominent place of Jews in modern European culture (Arieti, 1976). Nonetheless, these contrary instances are relatively rare, suggesting that the mainstream historical records may betray a prejudice against certain individuals on the basis of gender and ethnicity. It should be noted that this question of possible bias has theoretical as well as methodological implications. Galton (1869), for example, drew inferences about the inferiority of women and non-European ethnic and racial groups on the basis of their poor representation in his lists of eminent creators, leaders, and athletes.

In the current investigation, I concentrate on a specific minority group, namely, African Americans who attained distinction in the history of the United States. This group seems to provide an ideal place to investigate whether eminence measures exhibit ethnic bias. To begin with, like Native Americans, Blacks have been associated with the nation's history since colonial times. Yet unlike Native Americans, African Americans have always constituted an outgroup located securely within the European-oriented majority. This inclusive position occurred despite the scattered existence of autonomous Black communities, and notwithstanding the efforts of some Black nationalists to found a separate political identity in the New World. At the same time, Blacks were subjected to an exceptional degree of oppression, first in the guise of slavery and later, after emancipation, in the form of the most extreme denial of basic civil rights. Moreover, at the beginning this oppression was as much cultural as it was political and economic. As a result, the bulk of the African heritage of Blacks—their language, religion, and other cultural characteristics—had been almost entirely stripped away. In this circumstance, African Americans stand in contrast to Mexican Americans who were more able to preserve much of their cultural legacy after the conquest of Mexican territories by the United States. The main consequence of these distinctive conditions was that Blacks almost always have had to attain recognition within the confines of the institutions and traditions of the majority White culture.

Given this specific ethnic group as the basis for the study, the analyses are designed to address two separate issues. The first question concerns the magnitude of the relationship between the eminence of African Americans within their minority culture and the eminence of the same individuals within the majority culture. To answer this issue, I will define two sets of multiple indicators, one using reference works produced by Black scholarship, the other using those taken from comparable reference works generated by predominantly White American scholarship. These two sets of measures will be generated under equivalent operational definitions, namely space measures (as in J. M. Cattell, 1903; Cox, 1926; Farnsworth, 1969; Walberg et al., 1980). In particular, all measures will entail straightforward counts of the number of pages on which each person is mentioned, as indicated by the reference work's index. The adoption of identi-

cal definitions should maximize the comparability of the two sets of measurements.

The second question operates under the assumption that eminence within the minority culture will not be exactly equivalent to eminence within the majority culture. Given the existence of cross-cultural discrepancies, the predictors of eminence by the first criterion may differ in a substantial way from the predictors of eminence by the second criterion. In other words, Black assessments of Black attainment may have a somewhat different underlying foundation than White assessments of the same luminaries. This alternative basis would presumably reflect the distinct values and interests of the subculture in comparison to the majority culture. To the extent that this holds, global eminence assessments are less meaningful, for they will be contingent on the cultural perspective. In the extreme case, generic measurements become useless because evaluations will be entirely subject to cultural relativism. This outcome would seriously challenge the assumption so often made that variation in eminence across persons reflects some corresponding individual differences in objective achievement (Simonton, 1991c, 1997c). Instead, such variation would constitute a mere repercussion of the degree to which the work or activities of a prominent individual is deemed compatible with the prevailing cultural perspective of those making the judgments.

In this study, I wish to focus on six variables that might have the highest probability of distinguishing Black and White assessments:

1. *Achievement domain.* One of the most obvious ways that cultures may betray contrary interests and values concerns their preferred fields of endeavor (see, e.g., Simonton, 1988, 1997b). For example, some cultures place great stress on spiritual values, others on material values, and this contrast would then determine the evaluations they assign to religious leaders relative to entrepreneurs (McClelland, 1961; Sorokin, 1947/1969). Hence, some of the discrepancies between White and Black judgments of Blacks can arise from this very source. Such contrasts are especially likely to the extent that remnants of continental African culture have survived in the Black American subculture (see Skinner, 1996).

2. *Gender.* If women have very different status in the majority and minority cultures, this differential standing could diminish the correspondence between the distinction attained from the perspective of each culture. It is conceivable, for instance, that centuries of living under bondage, segregation, and discrimination may have placed African American women in a different position in Black culture relative to White culture (see Low & Clift, 1984, pp. 882–886, for general discussion). This difference may then have consequences for the assessment of eminent Black women in the two cultural worlds.

3. *Birth year.* Many studies have discovered that eminence ratings may correlate with the cohort from which an individual comes. Sometimes the correlation is positive, indicating a bias in favor of more "modern" figures (e.g., Simonton, 1976b, 1984a); other times the association is negative, revealing a "classicist bias" (e.g., Simonton, 1977, 1991b, 1992b); and yet other times no historical trend appears either way (e.g., Simonton, 1996b). It is plausible that the relationship between birth year and an African American's eminence would not be identical in majority and minority cultures. For example, figures

that attained distinction in the early period of American history may receive differential credit among Blacks than among Whites.

4. *Living contemporary.* The comparative eminence of individuals probably does not stabilize until after their death, at which time their sum total of life accomplishments becomes fixed and the specific manner of death known (Simonton, 1994). It is not unlikely that the majority and minority cultures might differ in their willingness to recognize still-living celebrities. Part of this difference might even arise from a contrast in the speed with which an individual's achievements become disseminated in the two cultures. Often a Black contemporary will become well known among fellow Blacks before his or her accomplishments begin to make inroads on the White culture. Of course, this variable is not completely independent of birth year, given that all those born long ago will certainly be deceased. Nevertheless, it would be valuable to know whether a differential effect of being a living contemporary exists even after controlling for a famous African American's cohort.

5. *Famous firsts.* When individuals belong to an oppressed or disadvantaged group, they will encounter constant reminders of their low status, reminders that cannot help but undermine their self-esteem. Aggravating this situation all the more is the fact that the majority culture will often promulgate an ideology of racial or ethnic superiority that places the minority members in a permanent position of inherent inferiority. Therefore, accomplishments that can challenge such doctrines and boost the group self-image may prove of immense importance to minority judgments of achievement. It is telling, for example, that many books have been published that produce extensive lists of accomplishments where an African American has been the very first to do something noteworthy (e.g., Garrett, 1972). Especially conspicuous are achievements in which Blacks first broke through a discriminatory barrier that hitherto prevented members of their race from participating fully in American society. Characteristic examples include Frederick Douglass, the first Black to serve as delegate to a national political convention; Booker T. Washington, the first to receive an honorary degree from Harvard University and to dine as a guest at the White House; William Grant Still, the first Black to conduct a major symphony orchestra and to have a large-scale work performed by a major American orchestra; Jackie Robinson, the first African American to play major-league baseball; and Sidney Poitier, the first Black to win an Academy Award as best actor.

6. *Within-group award.* The important role that eminent African Americans play in the reinforcement of "Black pride" has been formally acknowledged by the National Association for the Advancement of Colored People (NAACP). Annually since 1915, the NAACP has awarded the Spingarn Medal to someone who represents "the highest or noblest achievement by an American Negro" (quoted in Robinson, 1996, p. 2545). The original purpose of the award was to counter the negative image of Blacks that tended to dominate the mass media of the majority culture. Past recipients have included such notables as W. E. B. Du Bois, George Washington Carver, Marian Anderson, Richard Wright, Thurgood Marshall, Paul Robeson, Ralph Bunche, Martin Luther King, Jr., Duke Ellington, Leontyne Price, Sammy Davis, Jr., Hank Aaron, Alvin Ailey, Alex Haley, Rosa Parks, Bill Cosby, Jesse Jackson, and Colin Powell. The question that

concerns us here is whether Spingarn Medal winners are perceived as having comparable distinction in majority and minority cultures.

Needless to say, this short list does not by any means exhaust the number of factors that might differentiate Black and White evaluations of eminent African Americans. But they do offer a good place to begin. Furthermore, the first five discriminators have the advantage of being applicable to any cross-cultural comparison of differential eminence, whereas the last discriminator would be applicable to any minority subculture that has instituted a similar honor.

## Method

### Sample

There are 294 African Americans who were honored with biographical entries in all of the following three standard reference works: *The Encyclopedia of Black America* (Low & Clift, 1984), *The African-American Almanac* (Estell, 1994), and *The Encyclopedia of African-American Culture and History* (Salzman, Smith, & West, 1996). Because these three sources are spread over a dozen years of African American scholarship, and because the sources sometimes have somewhat different orientations and format, it can be safely assumed that these eminent Blacks have a secure place in African American history. However, that is not equivalent to saying that these individuals are assured a spot in the annals of American civilization as defined by the majority culture. In fact, as will be shown below, 49 of these persons received no mention whatsoever in a comparable set of general reference works. The methodological repercussion of this discrepancy is that most statistical analyses will be conducted on that subset of 245 Blacks who have identifiable reputations in both minority and majority cultures. This latter group shall be called the *truncated sample* to distinguish it from the *full sample* of 294. A complete list of all 294 is given in the Appendix, where those African Americans who were deleted from the truncated sample are tagged with asterisks.

### Eminence Measures

Two sets of reputational assessments were made, one using strictly minority-culture sources, the other using majority-culture sources. For convenience, these two sets will often be referred to as "Black" and "White," respectively. To ensure that the two sets of measures were truly comparable, the types of sources were the same, namely, encyclopedias, biographical dictionaries, chronologies, and pictorial histories (cf. Simonton, 1991c). In addition, for both sets of indicators the measurements were based on the number of pages allotted to an individual in a particular work, as determined by consulting each reference's index. Restriction to a single operational definition helps minimize the introduction of method factors that can otherwise complicate eminence evaluations (for examples, see Simonton, 1991c). Finally, all sources used to create the main eminence measures were published between 1991 and 1996, inclusively, thereby avoiding the confounding influence of epoch-centric biases and temporary fashions. Hence all measures gauge which African Americans were most worth mention according to Black and White scholars writing in the early 1990s.

*Minority-culture assessments.* Seven page-count measures were defined using the following sources: (a) *The African-American Almanac* (Estell, 1994); (b) *The Encyclopedia of African-American Culture and History* (Salzman et al., 1996); (c) *The Chronology of African-American History* (Hornsby, 1991); (d) *The Timelines of African-American History: 500 Years of Black Achievement* (Cowen & Maguire, 1994); (e) *The African Americans: Voices of Triumph* (Gates, 1994); (f) *The African Americans: A Portrait* (Long, 1993); and (g) *A Pictorial His-*

tory of African Americans (Hughes, Meltzer, Lincoln, & Spencer, 1995). The correlations among these measures across all 294 cases correlate between .22 and .80 ( $p < .001$ ), and thus they clearly all measure the same underlying construct. As a consequence, a global eminence measure was also constructed by summing the seven separate measures into a single indicator. The internal-consistency reliability (or coefficient  $\alpha$ ) for this composite eminence measure is .80, a highly respectable figure (cf. Simonton, 1984a, 1984b, 1991a). Hence, a strong consensus exists among African American scholars regarding the differential acclaim of the 294 individuals. Interestingly, the figure who comes out most consistently on top according to all seven measures is Martin Luther King, Jr.

To validate these measures further, two comparisons were made with alternative eminence assessments. First, eminence in the 1990s was compared with space measures derived from four works published in the 1980s (Berry & Blassingame, 1982; Franklin & Moss, 1988; Low & Clift, 1984; Quarles, 1987). The correlations ranged between .40 and .85 (all  $p$ s  $< .001$ ). Thus, the eminence of these Blacks exhibits some transhistorical stability. Second, the page-count indicators were correlated with alternative operational definitions of eminence using other minority-culture sources also published in the 1990s. The correlations ranged between .25 and .48 ( $p < .001$ ) with a ranking of 100 eminent African Americans (Salley, 1994, ranks inverted,  $N = 82$ ) and between .41 and .65 ( $p < .001$ ) with the number of lines an individual was granted in a biographical dictionary of eminent black Americans (S. Smith, 1994). These correlations are all statistically and substantively significant, despite the radically different operational definitions. What makes these reliability checks even more impressive is that they concern a highly select group of individuals, which necessarily truncates the variance and thus attenuates the correlations and reliability coefficients (Simonton, 1976a). The consensus would no doubt be even more pronounced had the study examined a less elite sample of eminent African Americans.

**Majority-culture assessments.** The original plan was to use precisely the same number of sources for these indicators as were used to define the preceding eminence measures. It became quickly evident that the probability of an eminent African American appearing in a majority-culture reference was often very small, and some, as noted earlier, were not mentioned at all in any comparable source. To avoid floor effects and to minimize the resulting skewness of the score distributions, 10 sources had to be used to define the space measures: (a) *The Encyclopaedia Britannica* (1996); (b) *The Encyclopedia Americana: International Edition* (1992); (c) *Academic American Encyclopedia* (1992); (d) *Collier's Encyclopedia* (1992); (e) *The Encyclopedia of American Facts and Dates* (Carruth, 1993); (f) *The Timetables of American History* (Urdang, 1996); (g) *The Encyclopedia of American History* (Morris & Morris, 1996); (h) *The Reader's Companion to American History* (Foner & Garraty, 1991); (i) *The Cambridge Dictionary of American Biography* (Bowman, 1995); and (j) *The USA: A Chronicle in Pictures* (Wenborn, 1991). The correlations among these measures range between .27 and .79 (all  $p$ s  $< .001$ ), so again these all may apparently gauge the same factor. These 10 measures were then summed to produce a global eminence indicator that had an internal-consistency reliability of .92. Although this figure is noticeably bigger than that observed for the Black global measure, a good part of this difference can be ascribed to the contrast in the number of component items. If there were 10 measures in the African American measure, the reliability would be estimated to be .85 (Nunnally, 1978, p. 223), and so this is not a substantial discrepancy. It is also crucial to recognize that the reliability of the White assessments are not dependent on the 49 individuals who received zero scores. The coefficient alpha for the subset of 245 is .91 (and the interitem correlations still range between .25 and .77, all  $p$ s  $< .001$ ). The parallel reliability for the Black composite index is again .80, or .85 if we correct for the difference in the number of items. In short, all reliability coefficients are very comparable, whether

or not we exclude the 45 who are totally neglected by the majority-culture sources.

Before continuing, I should discuss the assumption that the majority-culture assessments are relatively independent of the minority-culture assessments. On the one hand, it is apparent that the Black reference works represent almost exclusively the achievement of African American scholars. This is evident from the identity of those who served on the editorial boards or who authored the biographical entries. On the other hand, it is not so obvious that the White reference works would be equally independent from Black scholarship. After all, if an editor of a general encyclopedia or biographical dictionary wished to include an article on, say, Martin Luther King, Jr., he or she may be more likely to commission an African American than an Anglo American to write the piece. Unfortunately, the articles included in many majority-culture reference works are not always signed. For example, the *Encyclopaedia Britannica* recorded the author of its King entry, but did not do so for the entry on Frederick Douglass. Thus, it is seldom possible to determine the authorship for most of the published essays. However, it can be discerned from the editorial board membership lists that the White reference works may be predominantly if not exclusively staffed by majority-culture scholars. This preponderance is crucial because it is the board of editors that (a) decides which historic personalities are to be granted entries, (b) determines the amount of space that is to be allotted to each so chosen (often contractually specified by word counts), and (c) commissions the authors of articles on more general subjects (e.g., U.S. history and American literature) where there would exist considerable discretion about whether to cite the accomplishments of particular African Americans. All of these editorial decisions are critical in determining the representation of the minority culture in the majority-culture sources. Indeed, a huge portion of the variance in each of the 10 measures can be ascribed simply to whether or not a given African American luminary is mentioned even once in the majority-culture reference works. In the *Britannica*, for instance, fully 49% of the 294 do not even have their names listed in the index. This indicates not only that these individuals have no entries of their own, but in addition that these persons are not mentioned in other articles of this multivolume compendium of knowledge. And most of the remaining sources ignore even larger percentages of the sampled African Americans. The range across the 10 sources was 23% to 91%, with a median of 59% and a mean of 61%. Given these rates of exclusion, in combination with the minimal participation of Blacks in the editorial decisions, I think it reasonable to assume that the 10 measures primarily reflect the point of view of the majority culture.

### Eminence Predictors

The six potential factors that might distinguish between Black and White assessments were defined as follows (except when indicated otherwise, descriptive statistics are for the truncated sample):

1. To avoid imposing the framework of the majority culture when classifying the *achievement domain* of members of the minority culture, the 294 were initially assigned to one of 19 fields according to where their biographical entries were placed in *The African-American Almanac* (Estell, 1994). These sometimes necessarily inclusive categories are as follows (with  $n$ s for full/truncated samples): (a) figures of the past (largely abolitionists,  $n = 6/6$ ); (b) civil rights activists ( $n = 13/12$ ); (c) Black nationalists ( $n = 8/8$ ); (d) organization leaders ( $n = 15/14$ ); (e) lawyers (i.e., attorneys, judges, and legal scholars,  $n = 7/5$ ); (f) government officials (both elected and appointed,  $n = 27/23$ ); (g) entrepreneurs ( $n = 3/2$ ); (h) educators (including administrators and scholars,  $n = 11/8$ ); (i) religious leaders ( $n = 11/6$ ); (j) creative writers (namely, novelists, poets, and playwrights,  $n = 28/24$ ); (k) mass-media figures (editors, journalists, and media executives,  $n = 8/6$ ); (l) performance artists (actors, comedians, and dancers,  $n = 31/$

28), (m) classical musicians (composers, conductors, instrumentalists, and singers,  $n = 22/13$ ); (n) blues and jazz musicians (bandleaders, composers, instrumentalists, and singers,  $n = 39/39$ ); (o) gospel and soul musicians ( $n = 8/8$ ); (p) artists (both fine and applied,  $n = 17/9$ ); (q) scientists (including engineers, mathematicians, and physicians,  $n = 17/13$ ); (r) athletes ( $n = 18/17$ ); and (s) military figures ( $n = 5/4$ ). (See Appendix for the specific assignments.) Zero-one dummy variables were generated for each of these to encode an individual's domain of achievement. However, to avoid categories with excessively smaller numbers of representatives, the entrepreneurs and military figures were combined into a single miscellaneous leaders group ( $n = 10/6$ ). Moreover, in the multiple regression analyses to be reported later, the dummy variable for the performance arts was always deleted, making that domain the comparison group for the mean contrasts (Darlington, 1990). Without this deletion, the entire set of dummy variables would be perfectly collinear. This particular domain was selected not only because it is among the largest, but also because the average eminence of performance arts falls at about the same level as the mean for all 294 celebrities.

2. *Gender* variable was coded by a straightforward zero-one dummy that equaled 1 if female and 0 if male. There were a total of 63 women in the full sample, and 46 in the truncated sample ( $M = 0.21$ ,  $SD = 0.41$ ).

3. *Birth year* begins with the year of birth. When there was considerable disagreement about the birth year, the date adopted was that given in Salzman et al. (1996). Fortunately, prior investigations have shown that even discrepancies far larger than those observed here have no substantive consequences whatsoever (Simonton, 1992b). In any case, the oldest member of the sample, Crispus Attucks, was born around 1723, the most recent, Stevie Wonder, in 1950 ( $M = 1896.77$ ,  $SD = 41.46$ ). To facilitate the interpretation of the statistics, this raw score was put in mean-deviation form and then divided by 10.

4. Whether or not a person counted as a *living contemporary* was registered by a zero-one dummy variable that equaled 1 if the individual's death date was not given in any of the reference sources, but equaled 0 if such a date was given. In effect, this means that the individual was alive in 1995. Of the 294, 102 were still living by this criterion; of the 245, a total of 82 remained alive ( $M = 0.34$ ,  $SD = 0.47$ ). The correlation between this variable and birth year is .54 ( $p < .001$ ), which is insufficiently high to introduce multicollinearity problems, especially given the sample size.

5. *Famous firsts* were gauged using two distinct sources, both published in the 1990s. The first listed eminent Blacks who are credited with at least one "first" (Potter, with Taylor, 1994). This source yielded a zero-one dummy variable ( $M = 0.53$ ,  $SD = 0.50$ ). The second source listed various famous firsts along with the person responsible for the achievement, without regard for how many times that individual was listed elsewhere (J. C. Smith, 1994). This produced a ratio variable that ranged from 0 to 5 ( $M = 0.94$ ,  $SD = 0.98$ ). These two alternative assessments correlated .43 ( $p < .001$ ). This is high enough to justify summing them together to produce a composite variable that should be more reliable than either one taken separately ( $M = 1.36$ ,  $SD = 1.27$ , range 1 to 6).

6. Robinson (1996, p. 2546) provides a list of all those who received the Spingarn Award between 1915 (Ernst Just) and 1994 (Oprah Winfrey). The 53 of the 294 who were on this list were assigned a value of 1 on this dummy variable, with those who were not then being given a score of 0. In the truncated sample, 47 received this honor ( $M = 0.19$ ,  $SD = 0.40$ ).

## Results

Before advancing to the two main questions, it is first advisable to determine whether the 49 African Americans ignored by the

White sources differ in any systematic way from the 245 who received attention in at least one of the 10 majority-culture eminence measures. A dummy variable was defined that equaled 1 if the person was included in the truncated sample, but 0 if excluded. This dummy variable was then regressed on the above predictors. Such a regression necessarily yields significance tests identical to those obtained by a discriminant analysis, as well as regression coefficients that are exactly proportional to the discriminant coefficients (Darlington, 1990). According to this analysis, women were less likely to be included in the more selective sample ( $b = -0.134$ ,  $\beta = -.15$ ,  $t = 2.58$ ,  $df = 271$ ,  $p < .05$ ), whereas those Blacks credited with firsts are more likely to be included ( $b = 0.077$ ,  $\beta = .26$ ,  $t = 4.11$ ,  $df = 271$ ,  $p < .001$ ). In addition, individuals who attained distinction in the following six areas were less likely to enter the truncated sample (all  $df$ s = 271): lawyers ( $b = -0.286$ ,  $\beta = -.12$ ,  $t = -1.99$ ,  $p < .05$ ), educators ( $b = -0.333$ ,  $\beta = -.17$ ,  $t = -2.74$ ,  $p < .01$ ), religious figures ( $b = -0.425$ ,  $\beta = -.22$ ,  $t = -3.45$ ,  $p < .01$ ), classical musicians ( $b = -0.329$ ,  $\beta = -.23$ ,  $t = -3.49$ ,  $p < .01$ ), artists ( $b = -0.389$ ,  $\beta = -.24$ ,  $t = -3.81$ ,  $p < .001$ ), and scientists ( $b = -0.270$ ,  $\beta = -.17$ ,  $t = -2.51$ ,  $p < .05$ ).

An alternative analysis would include the same predictors as in the preceding analysis, but add the Black composite eminence measure. After all, once adjustment is made for the differential distinction of the 294 African Americans, certain variables might become less relevant as predictors of inclusion in the select sample. However, the addition of this variable to the equation did not greatly alter the findings. The only substantive change was that the effect of being a lawyer was reduced to only marginal statistical significance ( $b = -0.278$ ,  $\beta = -.11$ ,  $t = -1.94$ ,  $p = .054$ ). The absence of any alteration may have partly arisen from the fact that Black eminence did not bear a strong relationship with selection for inclusion in the truncated sample ( $b = 0.042$ ,  $\beta = .11$ ,  $t = 1.57$ ,  $p = .117$ ). Even so, this weak association may be due to the fact that the eminence measure is highly skewed right, whereas the disparity between the 49 and the 245 runs in the opposite direction, so that most of the variance in eminence can contribute nothing to predictive power. If the logarithmically transformed Black eminence measure is substituted in the equation, the relationship is far stronger ( $b = 0.123$ ,  $\beta = .35$ ,  $t = 5.35$ ,  $p < .001$ ). Nevertheless, this modification still alters the results very little. Only lawyers ( $b = -0.201$ ,  $\beta = -.08$ ,  $t = -1.46$ ,  $p = .146$ ) and scientists ( $b = -0.161$ ,  $\beta = -.01$ ,  $t = -0.15$ ,  $p = .879$ ) are deleted as significant predictors, whereas the other predictors survive with minimal change.

Hence, no matter which analysis we used, the 45 deleted celebrities did not apparently represent a random selection from the initial sample.<sup>1</sup> However, as will be seen later, few of these

<sup>1</sup> One anonymous reviewer suggested that a logistic regression be executed in lieu of the discriminant analysis reported here. Although this technique makes different statistical assumptions than does discriminant analysis (Darlington, 1990), the results did not vary in any dramatic fashion. For example, in the equation that included the log-transformed measure of minority-culture eminence, gender, firsts, educators, religious leaders, and artists all again emerged as statistically significant predictors of inclusion in the truncated sample ( $p < .05$ ). Thus, only classical musicians were deleted from the list of predictors. Precisely the identical outcome occurred when a probit analysis was used instead.

variables differentiate how Blacks and Whites evaluate the eminence of notable African Americans.

### Factor Analyses

The first question is whether there is one eminence or two. Are the 7 minority-culture indicators assessing individuals on the same latent construct as the 10 majority-culture variables? One simple way to answer this question is to examine the association between the two composite measures. The outcome is a correlation of .77 ( $p < .001$ ), a highly impressive figure. Furthermore, if this coefficient is corrected for attenuation, the association would increase to .90. These results hold for the full sample, but the corresponding correlations for the truncated sample are .76 and .89, respectively ( $p < .001$ ). In fact, when the two sets of indicators are combined to form a single 17-item composite, the resulting internal-internal consistency reliabilities are .87 for the full sample and .86 for the truncated sample. These figures are high enough to suggest that all 17 measures, Black and White, are assessing the same individual-difference factor. However, this conclusion is somewhat misleading because a multi-item measure can feature a high coefficient alpha even when two or more correlated factors underlie the scores (Cortina, 1993). Hence, the dimensionality of these indicators must be resolved using factor analysis, starting with single-factor models and then moving to two-factor models. In all of the following analyses, the truncated sample of 245 cases was used. Even so, the same conclusions appear if we include the 49 cases that received zero scores on all 10 majority-culture measures.

*Single-factor models.* If the 17 combined eminence measures are subjected to a principal-components analysis, only two components have eigenvalues that exceed unity (9.28 and 1.79), with the first component alone accounting for 54% of the total variance. Moreover, the factor loadings on the first component are uniformly high, with a low of .46 and a high of .88. These statistics compare quite favorably with other factor analyses of eminence measures, even when the assessments presumably arose from a single culture (see, e.g., Simonton, 1976b, 1977, 1984a, 1986). More importantly, the high and low loadings are fairly evenly distributed across the Black and White indicators, suggesting that the two sets of measures might be tapping a common latent variable. In further support of this conclusion, the remaining component does not provide any obvious differentiation of the majority- and minority-culture assessments. I should also point out that because the communalities of the 17 measures are so high, the results just reported are practically the same for a principal-axes analysis (viz., 52% of the total variance explained by the first factor, with loadings between .43 and .88).

Although the foregoing results hint at a high degree of overlap between the two sets of eminence scores, the findings do not prove unidimensionality. Such a proof requires the use of confirmatory factor analysis. The structural equation software EQS was used to attain this end (Bentler & Wu, 1995). The 17 variables were defined a priori as indicators of a single latent variable, and then the model was tested using maximum-likelihood estimation (using the robust statistics option). Although the single-factor model seemed to do a reasonably good job of describing the covariances, with standardized factor coefficients

ranging between .44 and .85, the goodness-of-fit statistics told a different story. The Bentler-Bonett normed fit index (NFI) was only .70, and the comparative fit index (CFI) .73, both implying that the model could be considerably improved (Bentler, 1993). Moreover, the chi-square test yielded 972.40, which, with  $df = 119$ , advises that the probability is less than .001 and that we can attribute the discrepancies to sampling error. It is evident that a single-factor solution is not very tenable, obliging the examination of two-factor models of the eminence assessments.

*Two-factor models.* The inquiry began with a straightforward exploratory factor analysis. This time the 17 indicators were subjected to a principal-axes analysis with iteration of the communality estimates, and then the first two extracted factors were rotated. Because it is already known that the two factors must be correlated, the Oblimin criterion was used, varying the gamma parameter until attaining what appeared to be the simplest factor structure. The solution for a gamma of 0.5 appears in Table 1.

There are two main observations to be gleaned from this table. First, the two rotated factors exhibit a very high correlation, namely, .75, which is about the same size as many of the higher factor loadings. Second, notwithstanding the highly oblique nature of this factor solution, it was not possible to separate the two sets of measures. Although Factor 1 seemed to represent a majority-culture dimension and Factor 2 a minority-culture dimension, the separate measures did not all load in the expected manner. One minority-culture assessment actually loaded more highly on the first factor, just as one majority-culture assessment loaded more highly on the second factor. Obviously there exist other sources of common variance besides the supposed contrasts between majority and minority cultures.

Another approach to this issue is again to use confirmatory factor analysis. This time two latent variables were defined, one for each of the two sets of measurements. Thus, the Black indicators were obliged to be a function of the same factor, and the White indicators were forced to be a function of a different factor. In other words, the loadings of the White assessments on the Black factor were constrained to zero, and the loadings of the Black assessments on the White factor were likewise constrained to zero. However, a correlation was permitted to exist between the two latent variables. The resulting model was again estimated using EQS with maximum likelihood under the robust statistics option (Bentler & Wu, 1995). The outcome is also shown in Table 1. It is apparent that the two factors are much more clearly defined, and that all measures have significant loadings on their corresponding factors. Even those measures in the exploratory analysis that loaded most highly on the wrong dimension still have respectable loadings on the anticipated dimensions in the confirmatory analysis. Thus, this second analysis suggests that the Black and White reputational assessments might be separated.

Nonetheless, a severe price was paid for this simpler factor structure. In the first place, the correlation between the two dimensions is .82, rather than the .75 found in the exploratory factor analysis. This factor intercorrelation exceeds many of the item-factor correlations by an ample margin. Moreover, the two-factor model as currently defined still does not accurately describe the covariances among the 17 indicators. In particular, the NFI, in

Table 1  
*Exploratory and Confirmatory Factor Analyses of Black and White Eminence Assessments*

Measure	Exploratory		Confirmatory	
	1	2	1	2
<i>African-American Almanac</i>	.69	.23	.87	.00
<i>Encyclopedia of African-American Culture &amp; History</i>	.93	.00	.90	.00
<i>Chronology of African-American History</i>	.29	.48	.74	.00
<i>Timelines of African-American History</i>	.57	.26	.80	.00
<i>African Americans: Voices of Triumph</i>	.61	-.13	.50	.00
<i>African Americans: A Portrait</i>	.63	-.05	.56	.00
<i>Pictorial History of African Americans</i>	.97	-.29	.70	.00
<i>Encyclopaedia Britannica</i>	-.03	.82	.00	.81
<i>Encyclopedia Americana</i>	.10	.80	.00	.88
<i>Academic American Encyclopedia</i>	.10	.75	.00	.84
<i>Collier's Encyclopedia</i>	.33	.60	.00	.61
<i>Encyclopedia of American Facts and Dates</i>	-.20	.78	.00	.60
<i>Timetables of American History</i>	-.33	.99	.00	.69
<i>Encyclopedia of American History</i>	.08	.69	.00	.74
<i>Reader's Companion to American History</i>	.95	-.14	.00	.65
<i>Cambridge Dictionary of American Biography</i>	-.05	.79	.00	.74
<i>USA: A Chronicle in Pictures</i>	-.11	.86	.00	.78
Factor correlation	.75		.82	

*Note.* The exploratory analysis used principal axes with iteration of the communality estimates, followed by rotation of two factors via the Oblimin criterion ( $\gamma = 0.5$ ). The confirmatory analysis used maximum-likelihood estimation (under the robust statistics option).

comparison with the one-factor solution, only increased from .70 to .76, whereas the CFI increased only from .73 to .79. Furthermore, the chi-square test for the model fit now yielded 788.81, which, with  $df = 118$ , still indicates that the probability remains less than .001 and that the discrepancies can be ascribed to sampling error. After scrutinizing the residual covariance matrix, it immediately becomes clear what are the sources of imprecise fit. The largest residual covariances are those between Black and White assessments. For example, the biggest standardized residual (.32) is that between Salzman et al. (1996) and Bowman (1995), and the next five residuals in order of size all similarly connect a Black with a White assessment. What these results demonstrate is that there survive residual covariances between the two sets of measures that cannot be accommodated by the assumption of two separate factors, even when those factors are allowed to display a rather large correlation.

Of course, we can accommodate these cross-cultural affinities by adding correlations between the error terms for the separate indicators. Such amendments would invariably increase the magnitude of fit. For example, if a correlation is allowed between the error terms for the White and Black assessment with the largest standardized residual covariance, we obtain an NFI of .78, a CFI of .81, and a chi-square of 724.70,  $df = 117$ ,  $p < .001$ . The new correlation (i.e., standardized covariance) is equal to .58, but otherwise the results seen in Table 1 are largely unchanged, except that the correlation between the two factors increases to .86. These incremental improvements may be continued until the goodness of fit attains some predetermined level (e.g., a CFI of .90). Nevertheless, such changes would be tantamount to an admission that majority- and minority-culture assessments of eminence are sufficiently convergent that other sources of variance can seriously confound the separation of the two sets of assessments. Hence, I think the best conclusion

to draw is that Blacks and Whites tend to evaluate eminent Blacks in a slightly different fashion, but with sufficient overlap in the judgments to ensure that the two cultures seem to be converging on the same overall assessments.

### Regression Analyses

Although we have just concluded that majority and minority cultures appear to offer rather similar assessments of illustrious African Americans, that is not tantamount to the claim that the two evaluations are absolutely equivalent. In fact, there will always exist some discrepancies between the White and Black judgments. Not only can these discrepancies exceed a standard deviation or more, but in addition the contrasts can involve some of the major figures in African American history and culture. This divergent group includes such notables as Muhammed Ali, Louis Armstrong, Frederick Douglass, W. E. B. Du Bois, Scott Joplin, Nat Turner, Booker T. Washington, Richard Wright, and Coretta Scott King. Of course, it might be that these disagreements are just randomly distributed across the sampled celebrities and thus constitute pure error variance. Yet it could also be the case that these contrasts are the result of some consistent differences between majority- and minority-culture evaluations. This second possibility can be scrutinized from several distinct analytical perspectives.

*Parallel equations.* The most obvious procedure is to conduct two multiple regression analyses, where the Black and White composite measures are each regressed on the potential discriminating variables. To make the results more comparable between the two equations, however, it is first necessary to make the two dependent variables more similar.<sup>2</sup> This was accom-

<sup>2</sup> I considered the option of redefining the two composite variables in light of the factor analytic results. That is, it could be that the reliability

Table 2  
*Regression Analysis: Predictors of Eminence Assessments of 245 African Americans*

Predictor	Black			White		
	<i>b</i>	<i>SE<sub>b</sub></i>	$\beta$	<i>b</i>	<i>SE<sub>b</sub></i>	$\beta$
Figures of the past	0.931	0.426	.14*	1.684	0.411	.26***
Civil rights activists	1.171	0.293	.25***	0.571	0.283	.12*
Black nationalists	0.925	0.361	.17*	0.584	0.349	.10
Organization leaders	0.379	0.279	.09	0.133	0.269	.03
Lawyers	-0.188	0.416	-.03	-0.870	0.402	-.12*
Government officials	-0.174	0.247	-.05	-0.170	0.239	-.05
Educators	-0.442	0.349	-.08	-0.727	0.337	-.13
Religious leaders	-0.203	0.391	-.03	-0.523	0.378	-.08
Creative writers	0.444	0.235	.13	0.569	0.227	.17*
Mass-media figures	0.256	0.385	.04	-0.328	0.372	-.05
Classical musicians	-0.499	0.285	-.11	-0.235	0.276	-.05
Blues and jazz musicians	-0.369	0.215	-.14	0.808	0.208	.30***
Gospel and soul musicians	0.519	0.341	.09	0.596	0.329	.11
Artists	-0.000	0.326	-.00	-0.628	0.315	-.12*
Scientists	-0.590	0.309	-.13	-0.424	0.295	-.10
Athletes	-0.198	0.269	-.05	0.930	0.260	.24***
Miscellaneous leaders	-0.474	0.384	-.07	-0.853	0.371	-.13*
Gender	-0.051	0.148	-.02	-0.187	0.143	-.07
Birth year	0.002	0.002	.09	0.039	0.019	.17*
Living contemporary	-0.392	0.144	-.19**	-0.364	0.139	-.17*
Famous firsts	0.220	0.053	.28***	0.193	0.051	.25***
Spingarn Award	0.434	0.157	.17**	0.460	0.152	.18**

*Note.* The foregoing predictors account for 36% of the variance ( $R^2 = .36$ ) in the Black measures and 40% of the variance ( $R^2 = .40$ ) in the White measures. The intercept for both equations defines the predicted eminence of performance artists, the comparison group for both regression equations. This intercept is  $-0.282$  for the Black equation, and  $-0.422$  for the White equation.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

plished by (a) subjecting each to a logarithmic transformation to reduce the skew and (b) standardizing each to  $M = 1.00$  and  $SD = 1.00$ , using their respective means and standard deviations in the truncated sample. The resulting composite measures thus have identical means and variances (as well as displaying very similar skewness, namely, Black 0.32, White 0.25). Because the independent variables are identical in the two regression analyses, the resulting regression coefficients should be rather congruent in the two equations if the reputational scores have the same basis in the two cultural perspectives. Table 2 shows the results. From these we can draw the following inferences:

1. For the most part, the predictors are very similar for the Black and White measures. The regression coefficients usually have the same sign and almost as often have the same magnitude. This is especially the case for government officials, gospel/soul musicians, living contemporaries, claimants to famous firsts, and recipients of the Spingarn Award.

2. Even when there appears to be some contrast between an independent variable across the two equations, the difference

of the two measures would be improved if I deleted those individual eminence indicators that had the lowest factor loadings on the appropriate factor or the highest factor loadings on the inappropriate factor. Yet the deletion of these variables would have lowered the reliability of the resulting composites for both Black and White assessments. This seeming paradox simply reflects the fact that the Black and White dimensions are so highly correlated to begin with.

often falls well within the range of the interval estimates of the unstandardized regression coefficients. As a rough rule of thumb, the 95% confidence interval is given by  $b \pm 2 \times SE_b$ . Although these intervals are not strictly applicable to the situation here, where the sample and independent variables are identical, they remain of heuristic value. The intervals indicate whether rather different conclusions might be drawn had a study only been conducted with one or the other eminence measure. With that in mind, it is apparent that even in those instances in which a predictor is statistically significant in one equation but not in the other (such as happens for the creative writers, for example) the two interval estimates overlap. This overlap is far more important than the fact that one of the intervals happens to include zero, thus rendering the corresponding regression coefficient nonsignificant by the .05 criterion.

3. The foregoing two points notwithstanding, there are at least two places where the discrepancies are too large to be ignored: blues and jazz musicians and athletes. In both instances, the regression coefficients have negative signs for the Black assessments but positive signs for the White assessments. In these cases, too, the confidence intervals do not overlap. Hence, it appears in these two instances minority- and majority-culture judgments dramatically diverge. The high premium that Whites place on African American achievements in sports and in blues and jazz music is not shared by the Blacks who, if anything, place these figures below the norm.

*Difference scores.* Another approach to this issue is to cre-



ate a discrepancy score by subtracting the transformed Black eminence assessment from the transformed White eminence assessment. This difference can then be regressed on the same set of potential discriminators. The result is an equation that explains 51% ( $R^2 = .51$ ) of the variance in the contrast. Only six variables make statistically significant contributions to this predictive power: figures of the past ( $b = 0.753, \beta = .13, t = 2.30, p < .05$ ), civil rights activists ( $b = -0.600, \beta = -.15, t = -2.67, p < .01$ ), lawyers ( $b = -0.682, \beta = -.11, t = -2.13, p < .05$ ), blues or jazz musicians ( $b = 1.177, \beta = .49, t = 7.11, p < .001$ ), artists ( $b = -0.628, \beta = -.13, t = -2.50, p < .05$ ), and athletes ( $b = 1.128, \beta = .33, t = 5.45, p < .001$ ). For figures of the past, blues and jazz musicians, and athletes, the regression equation predicts positive differences, which indicates that such individuals are more highly valued by Whites than Blacks. In contrast, the equation predicts negative differences for civil rights activists, lawyers, and artists, which shows that accomplishments in these two areas are more highly appreciated by Blacks than by Whites. Some of these contrasts, moreover, were isolated in the preceding analyses as well.

*Incremental predictions.* An alternative line of attack is to use the Black eminence scores to predict the White eminence scores, and then add the remaining variables to determine whether these make a significant addition to the amount of variance explained. This hierarchical regression analysis yields results similar to the preceding, but with some prominent changes as well. Replicating the earlier results, figures of the past ( $b = 1.060, \beta = .16, t = 3.53, p < .001$ ), blues or jazz musicians ( $b = 1.055, \beta = .39, t = 7.00, p < .001$ ), and athletes ( $b = 1.062, \beta = .27, t = 5.66, p < .001$ ) are all more highly evaluated by the Whites than would be anticipated by the Black ratings, whereas the lawyers ( $b = -0.744, \beta = -.10, t = -2.56, p < .05$ ) and the artists are less highly valued ( $b = -0.628, \beta = -.12, t = -2.76, p < .01$ ). On the other hand, the civil rights activists did not add anything to the predictive power ( $b = -0.214, \beta = -.05, t = -1.01, p = .312$ ). More important, a new predictor was identified: The miscellaneous leaders (entrepreneurs and military figures) received lower White evaluations than could be anticipated using the Black evaluations ( $b = -0.535, \beta = -.08, t = -2.00, p < .05$ ).

A distinctive feature of the present approach, in contrast to analyzing difference scores, is that it supports explicit tests that can determine whether the relationship between the White assessments and the Black assessments varies as a function of the independent variables. For instance, it might be possible that the correlation between the two assessments is stronger for women than for men, or for civil rights activists than for lawyers. To test for such interaction effects, it is necessary to introduce 22 product terms, each consisting of the Black assessment multiplied by one of the potential discriminators (Darlington, 1990). Because the addition of so many variables could produce results that are speciously statistically significant, a "protected" test was used (Darlington, 1990). Before examining any individual interaction term, the change in the  $R^2$  was first tested for statistical significance. Because it was possible to reject the null hypothesis that the regression coefficients for all 22 interaction terms equal zero in the population,  $F = 1.61, df = 22, 199, p < .05$ , it is justified to examine the significance tests for the individual interaction terms. Yet only one was significant,

namely that involving the Black nationalists ( $b = 1.250, \beta = .25, t = 2.40, p < .05$ ). In other words, the relationship between Black and White assessments is stronger for these historical figures than for the remainder of the groups. Even so, it must be considered a most striking finding that the association between Black and White judgments does not vary according to any of the remaining 21 predictor variables.

*Equality tests.* The last method takes advantage of an important feature of structural equation modeling: the ability to test for the equality of structural parameters (Bentler, 1993). Rather than estimate two separate multiple regression equations, as was done in Table 2, the two equations can be estimated simultaneously. The sole requirement is the addition of a parameter that accounts for any residual correlation between the two eminence measures. In other words, the model would take the form  $y_j = a_j + \sum b_{jk}x_k + e_j$ , where  $y_j$  is the eminence measure ( $j = 1$ , if Black, and  $j = 2$ , if White),  $x_k$  represents the  $k$ th predictor variables ( $k = 1, 2, 3, \dots$ ),  $b_{jk}$  is the unstandardized regression coefficient,  $a_j$  the intercept for each equation, and  $e_j$  is the error of prediction, which implies a parameter for the covariance between  $e_1$  and  $e_2$ . Here all continuous variables are in mean-deviation form, and the summation takes place across variables (rather than across cases, which is presumed in the definition of the parameters). When estimating this model, the constraint can be imposed that  $b_{1k} = b_{2k}$  for all  $k$ . This equality constraint should hold whenever (a) the two dependent variables are measured on the same scale and with roughly comparable reliability, (b) the independent variables are the same in the two equations, and (c) the structural relationships between the dependent and independent variables are indeed identical across Black and White assessments. The first two conditions are given, leaving the third to be subjected to empirical scrutiny (for a detailed discussion and illustration of how to execute tests for multigroup invariance, see Byrne, 1994, pp. 160–175).

This analysis was conducted by using EQS, under maximum likelihood estimation (Bentler & Wu, 1995). To make the problem more manageable, the number of parameters had to be reduced from the approximately 300 that would have to be estimated if all 22 independent variables were examined simultaneously (given that all entries in the variance-covariance matrix for the exogenous variables must be considered structural parameters). To achieve this reduction, only those variables were included that had some reasonable chance of exhibiting differential associations with the Black and White assessments, namely those variables discovered in the preceding two analyses. After all of these predictors were placed in the structural model, the equality constraints were removed one by one, as indicated by inspection of the standardized residuals. Each time a constraint was relaxed, the change in the model fit was tested by looking at the incremental improvement in the chi-square (Loehlin, 1992).<sup>3</sup> The central results are shown in Table 3.

<sup>3</sup> The chi-square tests for each incremental removal of equality constraints are only approximate. The set of constraints examined was determined by the preceding regression analyses, and thus the tests are not completely independent. Nonetheless, these structural-equation analyses provide something not found in the previous analyses, namely, a direct test of the difference between two regression coefficients. These quantitative tests, however approximate, are superior to a mere qualitative comparison of the parameters across Black and White eminence measures.

Table 3  
*Structural Equations: Nonequivalent Predictors of Eminence Assessments  
of 245 African Americans*

Predictor	Black			White		
	<i>b</i>	<i>SE<sub>b</sub></i>	$\beta$	<i>b</i>	<i>SE<sub>b</sub></i>	$\beta$
Figures of the past	0.828	0.384	.13*	1.382	0.368	.22***
Civil rights activists	1.217	0.277	.26***	0.703	0.265	.15*
Lawyers	0.141	0.419	.02	-0.471	0.402	-.07
Blues and jazz musicians	-0.573	0.166	-.21***	0.695	0.159	.26***
Artists	0.002	0.316	.00	-0.596	0.304	-.11*
Athletes	-0.217	0.236	-.06	1.029	0.226	.26***

*Note.* The fit indices for the structural model are Bentler-Bonett normed fit index = .993 and comparative fit index = .995, with a chi-square of 2.29, which, with one degree of freedom, yields a  $p = .130$ . The effect of miscellaneous leaders was found to be equal across both Black and White eminence measures.

\*  $p < .05$ . \*\*\*  $p < .001$ .

To comprehend these findings we should first observe that these regression statistics cannot be directly compared with the statistics seen in Table 2. Besides the contrast in estimation algorithm (ordinary least squares vs. maximum likelihood), the model does not include all predictor variables, and hence the partial regression coefficients have been adjusted for different variables. Most crucial is the fact that the comparison group is no longer the performance artists, but rather all eminent African Americans who attained distinction in some domain other than those with dummy variables incorporated in the structural model. Finally, even if one or both regression coefficients for a given predictor may not be statistically significant, it remains true that the *difference* between the two coefficients for that predictor is statistically significant.

These precautions notwithstanding, the results closely replicate what had been discerned in previous analyses. As seen before, figures of the past are more eminent among the White than the Black assessments, but the reverse holds for the civil rights activists. Lawyers and artists receive lower than average ratings by both assessments, but the White judgments are even more negative. Athletes and blues or jazz musicians exhibit the same transposition seen earlier: positive White assessments but negative Black assessments. Miscellaneous leaders, in contrast, are excluded from Table 3 because it was not possible to reject the hypothesis that the regression coefficients were identical for Black and White eminence assessments (see Table 2).

### Discussion

Perhaps this study's most striking discovery is the strong agreement between majority- and minority-culture eminence assessments. Although it is technically possible to separate the White and Black measures into two dimensions, the resulting factors are very highly correlated. Furthermore, not all assessments load most highly on the expected dimension. A White measure can correlate most highly with the Black factor, and a Black measure can correlate most highly with the White factor. Presumably these instances of cultural crossover mean that other extraneous factors can override the supposed distinction between the two sets of measures. It is also important to recognize that the high correspondence between the Black and White emi-

nence scores holds across almost all domains of achievement as well as for gender, birth year, and all other variables defined for this inquiry. Hence, the consensus is not only conspicuous but also robust across a diversity of circumstances. In addition, it is significant that Black and White assessments even assign the same predictive value to the overwhelming majority of predictors. For example, the two cultures allot the same amount of credit to recipients of the Spingarn Medal and to those African Americans who gone down in history for achieving famous firsts. These findings would seem to endorse the conclusion that eminence assessments can constitute relatively "culture-free" measurements of individual differences. Just as earlier research established the cross-national consistency and transhistorical stability of eminence measures, so does the current study demonstrate that the consensus can transcend contrasts between majority and minority cultures within a given nation.

Still, this optimistic conclusion cannot stand without imposing two reservations, one more serious than the other. To begin with the least severe qualification, some of the 294 African Americans seemed to enjoy a higher status in Black culture than they could claim in White culture. After all, 49 of these individuals received no mention whatsoever in any of 10 separate majority-culture reference works, some of which were much more voluminous besides. Such an omission is surprising because these 49 were of sufficient importance to be granted biographical entries in three major black reference sources (Estell, 1994; Low & Clift, 1984; Salzman et al., 1996). Hence, distinction within the minority culture seems not to be sufficient to ensure distinction within the majority culture. The basis for exclusion was the domain of achievement; for some unknown reason the White sources were less disposed to honor African American educators, religious leaders, classical musicians, artists, and scientists. The upshot was the omission of such notables as Benjamin Mays, Howard Thurman, Martina Arroyo, Augusta Savage, and W. M. Cobb (see Appendix).

Even so, care should be taken not to make too much of these deletions. Some allowance must be made for the fact that the Black sources were more specialized than the White sources, and such specialization will necessarily entail greater inclusiveness. A similar filtering process occurs when disciplinary

sources are compared to general sources. For example, not every scientist with frequent entries in encyclopedias and biographical dictionaries of science will receive attention in general reference works that attempt to span all domains of achievement (Simonton, 1990, 1992b). However, those individuals who do not make the jump from disciplinary sources to the general reference works tend to be those who are the more obscure members of the disciplinary luminaries—the also-rans rather than the true stars. A parallel process operated here. In this case, the least eminent African Americans according to the (log-transformed) Black assessment tended to be those that found no place whatsoever in the White reference sources. Consequently, the differential status of these 49 African Americans does not seriously threaten the statement that there exists a truly cross-cultural consensus.

But another qualification is more urgent: The Black–White agreement was not so potent as to prevent contrasts in the two assessments for those 294 who were honored by both majority and minority cultures. Two discriminators, in particular, displayed the most conspicuous discrepancies between Blacks and Whites: athletes and blues or jazz musicians. Appearing less consistently were contrasts involving figures of the past, civil rights activists, lawyers, and artists. Hence, if eminence assessments are used to gauge individual differences in creativity, leadership, and talent, the resulting measurements cannot be considered to be entirely culture free. The most obvious methodological consequence of this finding is that investigators must always take care to control for ethnicity (e.g., by introducing appropriate dummy variables and interaction terms into regression equations). But from a substantive standpoint, we would also want to know what causes these cross-group discrepancies.

The most obvious explanation is that these contrasts reflect some cultural differences between the Black minority and the White majority regarding fundamental interests and values. For example, the ubiquitous majority-culture stereotypes notwithstanding, sports, jazz, and blues may simply not enjoy the same status in Black culture as these achievements claim in White culture. On the other hand, Blacks may place much higher value on the attainments of civil rights activists, especially insofar as such accomplishments often affect the quality of life of every Black living in the United States. In a less dramatic fashion, much African American art addresses themes that relate explicitly and graphically to Black life in the United States (e.g., Jacob Lawrence). These visual and emotional themes may be better appreciated by Blacks who have shared those experiences than by Whites who can only enter into the Black world through an ever-approximate act of an outsider's empathy.

The preceding account gains more plausibility after considering various methodological interpretations, each of which fails to accommodate some key facts. For example, the differences cannot be ascribed to the slightly higher reliability of the composite White measure in comparison to the composite Black measure. A lower reliability in the dependent variable will cause an attenuation of the observed associations, but cannot cause those associations to either increase in absolute value or change the direction of relationship. Nor does it seem likely that the findings can be attributed to the slightly different sources used. Although it was not possible to equate the Black and White sources exactly, the factor loadings in Table 1 show that different

types of sources do not necessarily line up in the same fashion in the factor space. Yet another possibility is that some of the differences are due to special intercultural contrast effects. For instance, Black scholars might devote less attention to athletes and blues or jazz musicians because they may believe that these individuals receive more than enough attention from White scholars. Reasonable though this account appears, it may not be able to account for all the observed differences, especially when the sign of relationship is the same and only the magnitude of relationship is different in the two assessments. In sum, the cross-cultural contrasts cannot be dismissed as methodological artifacts.

Clearly more research is required before we can explain these cross-cultural contrasts with complete confidence. Nonetheless, the existence of these differences should not be allowed to undermine the broad conclusion that an impressive consensus exists in the eminence assessments. Blacks and Whites view the accomplishments of eminent African Americans in much the same fashion, no matter what the target of the evaluation or the source of the judgment. This suggests that such measures are all gauging some stable individual differences in achievement, whether it adopts the form of creativity, leadership, or talent. The next step is then to determine whether the factors that have been shown to predict success among Whites are the same as those that contribute to attainments of Blacks. Is the underlying etiology of such distinction invariant across subcultures? Or do there exist some unique predictors that operate for one or the other U.S. subculture? Does membership in a disadvantaged minority group require the acquisition of some exceptional personal qualities in order to attain status as a universally acclaimed American?

The answers to these final questions are absolutely essential if the goal is to fathom the degree and type of bias that might divide majority and minority cultures. It should be apparent that the analyses presented in this article did not completely address all aspects of the problem raised at the outset. Although ample evidence has been given regarding the relative divergence and convergence of Black and White assessments of African Americans, this does not directly indicate whether Blacks might be seriously underrepresented in the annals of U.S. history. Of course, it is obvious that on a per capita basis African Americans do not appear in the historical records on a par with members of the White majority. But such a discrepancy may have at least two independent sources.

On the one hand, the sociocultural and economic forces to which Blacks found themselves subjected may have denied them the opportunities to engage in the behaviors necessary to be eligible for the attainment of national distinction. The potential talents of many would-be geniuses may have been nipped in the bud by the negative influences of majority-culture oppression and discrimination. Certainly this was the situation in the antebellum South where it was illegal to so much as teach a Black to read and write.

On the other hand, those African Americans who somehow managed to break through these diverse barriers, and to compile a respectable list of worthy accomplishments, may find themselves nonetheless overlooked by those scholars who compose the encyclopedias, chronologies, and biographical dictionaries. In this case, the talent or genius is realized, but unrecognized—

revealing a bias in the majority-culture's judgments. Some of those illustrious African Americans who did not make it into the majority-culture reference sources might fall into this second group.

Yet how can researchers discern the relative importance of these two processes? I believe the only scientific approach is to construct a comprehensive model of individual differences in achievement. This model must be applicable to the majority culture as well as to all major minority cultures. Such a model would incorporate the social factors that determine how much potential talent will become actual talent, yet it would also include the individual-difference variables that predict the differential success of those whose talent was indeed realized. For instance, in creative activities the primary predictor of acclaim is an individual's degree of productivity (Simonton, 1997a). This relationship should allow the identification of creators whose eminence does not match what would be predicted on the basis of creative output alone. If those with negative residuals (or errors of prediction) come disproportionately from members of minority cultures, then there would be a more objective basis for inferring a bias in the assignment of recognition by the majority culture.

Admittedly, the construction of the necessary models will not be easy, and for three main reasons. First, previous research indicates that individual differences in eminence are a function of numerous factors (e.g., Ludwig, 1995; Simonton, 1994, in press), with many variables operating via complex functions, such as multiplicative and nonlinear effects (e.g., Eysenck, 1995; Helmreich, Spence, Beane, Lucker, & Matthews, 1980). For example, contrary to Galton's (1869) assumption, the relationship between intelligence and eminence may be best described by threshold functions, triangular distributions, curvilinear relationships, and other complications (Simonton, 1985, 1994). Second, although there has not been a substantial amount of research regarding the determinants of eminence in underrepresented populations, the little that has been published hints that the causal process may exhibit a pattern of convergence and divergence (e.g., Fassinger & Richie, 1994; Sulloway, 1996; Tomlinson-Keasey & Little, 1990). For instance, some predictors, such as creative productivity, will operate in the same fashion across all demographic groups, whereas other predictors, such as birth order or childhood trauma, will have their influence interact with gender and ethnicity. Third, as this investigation has demonstrated, the differential distinction of members of minority groups may have causal antecedents that have no close counterparts in the majority culture. Those who belong to disadvantaged groups may receive extra kudos for helping to enhance the group's self-esteem. Additional acclaim may also come for those who have overcome some discriminatory barrier to achievement and thereby have expanded the opportunities for their fellow minority-group members.

Despite all of these complexities, the construction of such causal models is absolutely essential if we are ever to tease out the precise way that eminence reflects individual differences in creativity, leadership, or talent. Cross-sectional variation in social prominence probably has a strong basis in other individual-difference factors, but the details of this foundation must be unearthed in future research on attained success in minority populations.

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## Appendix

### Full and Truncated Samples

The following is a list of the 294 sampled African Americans. Asterisks indicate the 49 individuals who did not earn an entry in a single majority-culture source: (a) *figures of the past*—Crispus Attucks, Frederick Douglass, Dred Scott, Sojourner Truth, Harriet Tubman, Nat Turner; (b) *civil rights activists*—Ralph Abernathy, Daisy Bates,\* Stokely Carmichael, Angela Davis, W. E. B. Du Bois, Medgar Evers, Fannie Hamer, Jesse Jackson, Coretta Scott King, Martin Luther King Jr., Leon H. Sullivan, William Trotter, Booker T. Washington; (c) *black nationalists*—Alexander Crummell, Paul Cuffe, Martin R. Delany, James Forten Jr., Marcus Garvey, Malcolm X, Elijah Muhammad, Henry Turner; (d) *organization leaders*—H. Rap Brown, Marian Edelman, James Farmer, Prince Hall, Dorothy Height,\* Benjamin Hooks, Roy Innis, Vernon Jordan Jr., Floyd McKissick, Huey Newton, A. Philip Randolph, Bayard Rustin, Bobby Seale, Roy Wilkins, Whitney Young; (e) *lawyers*—Clifford Alexander Jr., Jane Bolin,\* William Hastie, Charles Houston, Damon Keith,\* Thurgood Marshall, Constance Motley; (f) *government officials*—Julian Bond, Tom Bradley, Edward Brooke, Blanche Bruce, Ralph Bunche, Yvonne Burke,\* Shirley Chisholm, William Clay,\* John Conyers Jr.,\* Ron Dellums, Oscar Depriest, Patricia Harris, Maynard Jackson Jr., Barbara Jordan, John Mercer Langston, John Robert Lewis,\* Eleanor Norton, Pinckney Pinchback, Adam Clayton Powell Jr., Joseph H. Rainey, Charles Rangel, Hiram Revels, Robert Smalls, Louis Stokes, Robert C. Weaver, Andrew Young Jr., Coleman Young; (g) *entrepreneurs*—Percy E. Sutton,\* Madame C. J. Walker, Maggie Lena Walker; (h) *educators*—Mary Bethune, Fanny Coppin, John Hope Franklin, Charles Spurgeon Johnson, Alain Locke, Benjamin Mays,\* Jesse Moorland,\* Frederic Patterson, Arthur A. Schomburg, Clifton Wharton Jr.,\* Carter G. Woodson; (i) *religious leaders*—Noble Drew Ali, Richard Allen, George Baker ("Father Divine"), James H. Cone, James A. Healy, Joseph Jackson,\* Isaac Lane,\* Daniel A. Payne,\* Adam Clayton Powell Sr., Joseph C. Price,\* Howard Thurman\*; (j) *creative writers*—Margaret Walker Alexander,\* Maya Angelou, James Baldwin, Imamu Baraka, Arna Bontemps, Gwendolyn Brooks, Claude Brown, Ed Bullins, Charles Chesnut, Alice Childress,\* Countée Cullen, Paul Lawrence Dunbar, Ralph Waldo Ellison, Nikki Giovanni, Alex Haley, Lorraine Hansberry, Robert E. Hayden, Chester Himes, Langston Hughes, Zora Hurston, Georgia Johnson,\* James W. Johnson, Nella Larsen,\* Claude McKay, Loftin Mitchell, Toni Morrison, Phyllis Wheatley, Richard Wright; (k) *mass-media figures*—Robert S. Abbott, Timothy Fortune, Earl G. Graves,\* John H. Johnson, Dudley Randall,\* Carl Rowan, John Russwurm, Ida Barnett Wells; (l) *performance artists*—Alvin Ailey, Ira F. Aldridge, Eddie "Rochester" Anderson,\* Pearl Bailey, Josephine Baker, Harry Belafonte, Godfrey Cambridge,\* Diahann Carroll, Bill Cosby, Sammy Davis Jr., Ossie Davis,

Ruby Dee, Katherine Dunham, Stepin Fetchit, Red Foxx, Charles Gilpin, Richard "De Lawd" Harrison,\* Lena Horne, Judith Jamison, James Earl Jones, Canada Lee, Oscar Micheaux, Florence Mills, Arthur Mitchell, Sidney Poitier, Richard Pryor, Bill "Bojangles" Robinson, Noble Sissle, Cicely Tyson, Ethel Waters, Bert Williams; (m) *classical musicians*—Marian Anderson, Martina Arroyo,\* Thomas "Blind Tom" Bethune,\* Harry Burleigh, Will Marion Cook, James Depriest, Dean Dixon, Mattiwilda Dobbs,\* Robert Todd Duncan,\* Hazel Harrison,\* Roland Hayes, Eva Jessye,\* John Rosamond Johnson, Scott Joplin, Ulysses Kay, Dorothy Maynor,\* Leontyne Price, Paul Robeson, Philippa Schuyler,\* William Grant Still, André Watts, Clarence White\*; (n) *blues and jazz musicians*—Lil Armstrong, Louis "Satchmo" Armstrong, William "Count" Basie, Sidney Bechet, Jimmy Blanton, Charlie "Buddy the King" Bolden, Ray Charles, Charlie Christian, Ornette Coleman, John "Trane" Coltrane, Roy "Little Jazz" Eldridge, Edward "Duke" Ellington, Ella Fitzgerald, "Dizzy" Gillespie, Lionel "Hamp" Hampton, W. C. Handy, Coleman "Bean" Hawkins, Fletcher Henderson, Earl "Fatha" Hines, Milton Hinton, Billie "Lady Day" Holiday, Jimmy Johnson, "J. J." Johnson, "B. B." King, Jimmie Lunceford, Charlie Mingus, Thelonius Monk, Ferdinand "Jelly Roll" Morton, Joseph "King" Oliver, Edward "Kid" Ory, Charlie "Bird" Parker, Gertrude "Ma" Rainey, Don Redman, Sonny Rollins, James Rushing, Bessie Smith, Thomas "Fats" Waller, Muddy Waters, Lester "Prez" Young; (o) *gospel and soul musicians*—James Brown, Nat "King" Cole, Antoine Domino, Aretha Franklin, Berry Gordy, Mahalia Jackson, Diana Ross, Stevie Wonder; (p) *artists*—Richmond Barthé, Romare Bearden, Elizabeth Catlett, Aaron Douglas,\* Robert S. Duncanson, Meta V. Fuller,\* Jacob Lawrence Jr., Edmonia Lewis, Gordon A. Parks, James A. Porter,\* Augusta Savage,\* Moneta J. Sleet,\* Henry O. Tanner, Laura W. Waring,\* Charles White,\* Paul R. Williams, Hale A. Woodruff\*; (q) *scientists*—Benjamin Banneker, James Beckwourth, George Washington Carver, W. Montague Cobb,\* Charles Richard Drew, Lloyd A. Hall,\* Matthew Henson, William Hinton,\* Percy L. Julian, Ernest E. Just, Lewis H. Latimer, Miles Lynk,\* Garrett Morgan, Norbert Rillieux, Lewis Temple, Daniel H. Williams, Granville Woods; (r) *athletes*—Hank Aaron, Muhammad Ali, Henry Armstrong, Arthur Ashe, Jim Brown, Roy Campanella, Wilt Chamberlain, Lee Elder,\* Althea Gibson, Jack Johnson, Joe Louis, Willie Mays, Jesse Owens, Leroy "Satchel" Paige, Jackie Robinson, Frank Robinson, "Sugar Ray" Robinson, Bill Russell; (s) *military figures*—William Carney,\* Benjamin Davis Sr., Benjamin Davis Jr., Henry Ossian Flipper, Daniel "Chappie" James Jr.

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