EFFECTS OF HIGHER EDUCATION ON ACHIEVEMENT FOR BLACKS AND WHITES

Lee M. Wolfle

This study assesses the impact of college on knowledge of vocabulary and mathematics. Unlike many previous studies, this one is able to control for precollege abilities in these academic areas, which presumably tend to select people into or out of college. The results indicate that college attendance has a strong impact on improved performance on these tests, and that these effects are similar for whites and blacks.

Despite numerous studies of the effects of higher education, we still do not know a great deal about the impact of college on the intellectual skills of students. There is evidence that college students further develop intellectual skills during their college careers (e.g., Astin, 1977), but it is not clear whether these changes occur as a consequence of college attendance or as a consequence of simple maturation. There is also evidence that college students score higher on achievement tests than do others of their cohort who did not attend college (Feldman and Newcomb, 1969; Pace, 1979), but it is not clear whether these differences are a result of college attendance or an artifact of a priori differences in the kinds of people who do and do not attend college. It is also clear that adults who attended college know more than those who did not (Hyman, Wright, and Reed, 1975); what is not clear, however, is whether those who attended college were those with higher ability scores to begin with, or whether college attendance itself produced increments to knowledge. (For example, Wolfle (1980) has shown that previous studies may have seriously overestimated the enduring effects of education by failing to control for a priori measures of ability.)

Adequate research on the impact of college should therefore control for

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Lee M. Wolfle, Virginia Polytechnic Institute and State University.

the different characteristics of those people who do and do not attend college. In particular, the different levels of ability between the two groups needs to be controlled. In addition, tests of intellectual skills should be used that are not focused specifically on knowledge and skills taught in college; otherwise, comparisons of college with non-college attenders will almost assuredly lead to the tautological conclusion that college attenders know more about what is taught in college than do non-college attenders.

The fourth follow-up of the National Longitudinal Study of the High School Class of 1972 (Riccobono et al., 1981)—includes for the first time a readministration of academic tests that the subjects first took before they graduated from high school. These data uniquely permit the adequate measurement of the impact of postsecondary education. The present study examines the impact of postsecondary education on two academic tests of achievement, one in vocabulary and one in mathematics, administered seven years after high school graduation, while controlling for socioeconomic background and initial levels of ability as measured in high school.

The present study also includes analyses for both blacks and whites in order to determine the differential impact of college attendance upon the two groups. On the one hand, it may be that increments to measured ability are similar for blacks and whites, which one might expect if the pool of black college students was not unlike the pool of whites. On the other hand, for the same amount of postsecondary schooling it may be that blacks demonstrate larger increments to measures of ability than do whites. A plausible explanation for the latter may be that primary and secondary educational institutions do not tap the potential of blacks in the same way they do for whites. When blacks attend college, the experience may serve to remediate these past deficiencies. Consequently, blacks would initially exhibit lower mean ability scores but after some college show greater gains than whites.

DATA AND METHODS

Data for this study were drawn from the National Longitudinal Study (NLS) of the High School Class of 1972 (see Riccobono et al., 1981). The NLS was designed to provide data on a large cohort of high school seniors, and to follow these students as they made the move from high school into their early years of adulthood. The variables used in the present analysis include several socioeconomic background variables. Father’s and mother’s education were measured on a scale that ranged from 1 (less than high school) to 5 (masters or Ph.D.). Father’s occupational status was scaled with Duncan’s (1961) socioeconomic index. Increments in schooling beyond high school were measured on an ordinal scale on which values increased for both vocational and academic college attendance. Race was measured by a dummy