

Research on the African American Student Achievement Gap

There are myriad of factors that contribute to the achievement gap between African American students and white students. Research has highlighted the following family, school, and structural factors as being salient to African American academic performance and suggests several interventions that may be effective at narrowing or closing the gap.

Factors Contributing to the Black-White Achievement Gap

Family Factors

When research studies controlled for socioeconomic status (SES), education level, and occupation, the black-white achievement gap narrowed, but still existed (Jencks and Phillips 1998). However, a recent article by Orr (2003) revisited the debate by introducing the concept of wealth (e.g., assets minus debts) and measuring its impacts on African American student achievement. Orr concluded that “wealth has a positive effect on achievement, even after family’s SES is held constant. Wealth also explains a portion of black-white differences in achievement” (Orr 2003, p. 295).

Jencks and Phillips (1998) reported that genetics played minimal or no role in academic performance, since African American children adopted into white families achieved at comparable levels to white students. Researchers cautioned that intelligence quotient (IQ) tests do not measure innate intelligence, but developed intelligence, so we do not have any direct way to measure if there is any difference between black and white innate intelligence.

A study conducted by Cheng and Starks (2002) revealed that influence of significant others on students’ educational expectations was the least prevalent among African American fathers. (Cheng & Stark 2002) Grandparents were determined to play a greater role in affecting African American students’ expectations than their white counterparts. These data were somewhat limited by the fact that they were “perceived, rather than self-reported, measures” (Cheng & Stark, 2002, p. 311).

School Factors

Of the few experimental studies conducted on ability grouping or tracking practices among teachers, Ferguson (1998) concluded that ability was not based on race, but rather on ability and achievement. Ferguson reviewed a study by Haller (1983) in which teachers were instructed to group their students for the next year. At first glance, it looked like race was the determining factor between the two groups, since the lower ability group consisted primarily of African Americans and the higher ability group was predominantly white. After testing the students for their ability levels, it became apparent that the teachers had grouped their students fairly accurately. Ferguson recommended more studies be conducted in order to conclude whether or not tracking is beneficial or detrimental to African American students (Ferguson 1998).

Having teachers of the same race did not necessarily help African Americans’ achievement. In fact, only African American teachers of low socioeconomic status and white teachers of high SES were associated with marginally positive effects on African American student test scores and only in mathematics. Ferguson tentatively explained this peculiar finding by arguing that these two groups of teachers “might be the least threatened by black children of low socioeconomic status, and the most inclined to believe that such children can achieve at high levels.” (Ferguson 1998, p. 349)

Tyson (2002) found in her study of 56 middle class black students that negative attitudes toward school were more likely linked to low performance. These results challenged Ogbu’s 1986 study suggesting that black students were culturally opposed to achievement, because they were perceived as “acting white” by peers (Tyson 2002). Her study cannot be generalized since the sample size was too small. According to Jencks and

Phillips, fear of “acting white” did not explain why African Americans were scoring low, but may explain why they were not motivated to “catch up” (Jencks and Phillips, 1998, p. 34).

Structural Factors

The few studies that have been conducted on the effects of segregation indicate that desegregation has a positive impact on narrowing the black-white achievement gap without detrimental effect on white students (Jencks and Phillips 1998).

The issue of unequal levels of funding may also play a part in the black-white achievement gap, but the research has not been conclusive. “In 42 out of the 49 states studied, school districts with the greatest numbers of poor children have less money to spend per student than districts with the fewest poor children. ... Nationally, the gap between the quarter of districts with the highest and lowest minority enrollments is \$979. Thirty-one states have such gaps” (Haycock, Jerald, & Huang, 2001, p. 20).

Research-Based School- and District-based Interventions

Although there are multiple, interconnected factors contributing to the black-white achievement gap, several solutions have emerged as more or less successful in raising the level of African American achievement regionally and nationally.

Smaller Class Size

Jencks and Phillips reviewed “a substantial number of randomized experiments [which] suggest that smaller classes raise test scores” (Jencks and Phillips, 1998, p. 30). Among these was Krueger’s and Whitmore’s 1999 study of Tennessee’s STAR program. Krueger and Whitmore concluded that “the STAR experiment indicates that students who attend smaller classes in the early grades tend to have higher test scores while they are enrolled in those grades than their counterparts who attend larger classes. The improvement in relative ranking on standardized tests that students obtain from having attended a small class is reduced when they move into regular-size classes, but an edge still remains. Moreover, black students tend to advance further up the distribution of test scores from attending a small class than do white students, both while they are in a small class and afterwards” (Krueger and Whitmore, 1999, p. 39).

Cultural Differences

Boykin, Coleman, Lilja, and Tyler (2004) conducted a study to measure the effects of communal learning by recreating “simulated school conditions” and using matched comparison groups. They tested two sets of African American elementary school students in both mathematics and social studies after dividing them into communal and individual learning settings. They found that “high communal learning tends to facilitate identification, subtraction, and overall mathematics fraction performance among African American students in the third and fourth grades, but not in the fifth and sixth grades” (Boykin, Coleman, Lilja, & Tyler, 2004, p. 27). Their findings are not generalizable due to their small sample size, but the study provides a platform for further research into the role of culture in academic achievement.

Teacher Quality and Support

More African American students are taught by teachers with low competency test scores (Ferguson, 1998). As a way to correct this, Ferguson suggested that schools admit only those teachers who attained a certain benchmark on a test of competency as an effective way to close the black-white achievement gap. Haycock, Jerald, and Huang (2001) pointed out that “students in predominantly minority schools are also about twice as likely as students in other schools to be taught by inexperienced teachers. . . We take the kids that are most dependent upon teachers for academic learning and systematically assign them teachers with the weakest

academic base” (Haycock, Jerald, and Huang 2001, p. 16-17). The North Carolina Education Research Council reviewed a study on teacher quality conducted by William and his associates, which compared student achievement in the current year and to that of the previous year. They concluded that “the effects of even a single ineffective teacher are enduring enough to be measurable at least four years later. Good teachers in subsequent grades boost achievement, but not enough to compensate for the effects of an earlier ineffective teacher” (Thompson & O’Quinn 2001).

Charles and O’Quinn also found that providing one-on-one tutoring (ideally by certified teachers) gave students the necessary support to help them “catch up” and learn the necessary study skills required to learn on their own (Charles & O’Quinn 2001). The research also revealed that pushing African American students to take higher level courses, such as Advanced Placement or college preparation courses, raised their test scores and did not result in higher dropout rates. Thompson and O’Quinn (2001) reviewed research and concluded that “the gains from taking a more demanding mathematics curriculum are even greater for African American and Latino students than for white students.” (Thompson & O’Quinn 2001, p. 8)

Preschool

Several studies showed that preschool attendance helped narrow the black-white achievement gap. While some researchers found that this effect was not be long-lasting others concluded that the research was not conclusive with regard to long-term effects. (Ferguson 1998). “All of the studies [reviewed by Ferguson], including the Perry Preschool experiment ... show declines in IQ relative to control or comparison groups by the third grade. Only one, the Philadelphia Project, reports statistically significant differences as late as fifth grade” (Ferguson 1998, p. 320). This waning effect represented in the research has been attributed to the comparatively poorer schools that black students attended after preschool.

Desegregation

Desegregation helped African American students and did not change white students’ performance. Resegregation, which has become an increasing pattern across the country, was most detrimental to middle class black students. In some instances, white students also benefitted from desegregated schools (Thompson & O’Quinn 2001).

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