Adjusted Differences in ACT Scores by Race/Ethnicity

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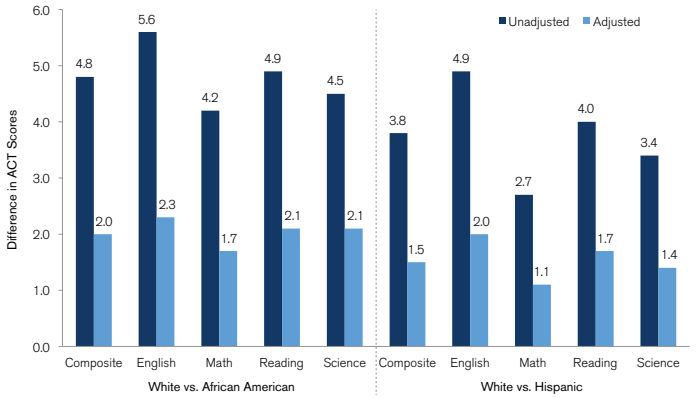
A recent study examined the contributions of students' demographic characteristics toward explaining performance on the ACT® test, over and above other cognitive, school-related, and noncognitive characteristics.[1]

Race/ethnicity and other demographic characteristics (including socioeconomic status, parental education level, and gender) accounted for a small percentage of the variance in ACT scores (4% or below), after high school coursework and grades, school characteristics, and other noncognitive student characteristics were taken into account. Additionally, differences in ACT scores by race/ethnicity were reduced after statistically controlling for these other student and school characteristics. That is, underserved minority students were more likely to have lower ACT scores than white students; however, they were also more likely to have lower high school GPAs and to take less rigorous coursework in high school.[2] Once other differences between the racial/ethnic subgroups were controlled for, performance on the ACT was somewhat more comparable.

Specifically, unadjusted mean differences in ACT scores between white and African American students ranged from 4.2 points (mathematics) to 5.6 points (English). Similarly, unadjusted mean differences between white and Hispanic students were rather large, ranging from 2.7 points (mathematics) to 4.9 points (English). However, after accounting for other student and school characteristics, mean differences were reduced by nearly 60% and ranged from 1.7 to 2.3 points for white and African American students and from 1.1 to 2.0 points for white and Hispanic students.

Study findings suggest that differential performance on the ACT by race/ethnicity is largely attributable to differential academic preparation. Students from all demographic groups benefit from taking rigorous courses in high school and earning good grades as these factors relate to an increased likelihood of earning higher ACT scores and being better academically prepared for college. Other research suggests that positive school climates featuring high-quality academic instruction and high levels of academic expectations, student engagement, and parental involvement can also contribute to improved student achievement and increased college aspirations and access.[3] ■

Unadjusted and Adjusted Mean Differences in ACT Scores by Race/Ethnicity



Note: Results are based on 6,440 high school seniors from 4,541 schools who took the ACT in the fall of 2012 and completed an online questionnaire. For a more detailed description of the study, see A Multidimensional Perspective of College Readiness.

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1 Daniel M. McNeish, Justine Radunzel, and Edgar Sanchez, *A Multidimensional Perspective of College Readiness: Relating Student and School Characteristics to Performance on the ACT*, ACT Research Report No. 2015-6 (Iowa City, IA: ACT, Inc., 2015).

2 Justine Radunzel, *Informing Educational Planning and Advising for Students from At-Risk Demographic Groups: Results from a Survey of High School Seniors Who Took the ACT*, (Iowa City, IA: ACT, Inc. 2015). Underserved minority students are also somewhat less likely than white students to indicate that their parents are involved in their post-high school plans and to participate early in college planning activities.

3 Alliance for Excellent Education, *Climate Change: Creating an Integrated Framework for Improving School Climate* (Washington, DC: Alliance for Excellent Education, 2013); Rafael Heller, Sarah Calderon, and Elliott Medrich, *Academic Achievement in the Middle Grades: What Does Research Tell Us? A Review of the Literature* (Atlanta, GA: Southern Regional Education Board, 2003); Leticia Oseguera, *Importance of High School Conditions for College Access*, Research Brief No. 7 (Los Angeles, CA: UC/ACCORD and PATHWAYS to Postsecondary Success, 2013).