Relationships Among High School GPA, ACT® Composite Score, and First-Year College GPA for Students Who Take the ACT With Accommodations

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Our recent study *Predicting College Completion of Students Who Take the ACT® With Accommodations* (Moore & Schnieders, 2025) found that ACT Composite (ACTC) score tended to be a stronger predictor of college first-year grade point average (FYGPA) and degree completion than high school GPA (HSGPA) for students who took the ACT with accommodations. While the correlations among ACTC, HSGPA, and FYGPA tended to be lower for students who tested with accommodations than for students who tested without accommodations, the magnitudes of correlations between ACTC and FYGPA compared with correlations between HSGPA and FYGPA differed between these two groups of students. For students who tested with accommodations, regardless of the type of institution they attended, higher correlations were found between ACTC and FYGPA than between HSGPA and FYGPA, whereas for students who tested without accommodations, the reverse was true (see Table 1). The results for students who tested with accommodations are contrary to most of the literature comparing the predictive value of standardized test scores and HSGPA, which found that correlations between HSGPA and FYGPA tend to be somewhat higher than correlations between standardized test scores and FYGPA (Huh & Huang, 2016; Mattern et al., 2008; Sanchez, 2013; Sawyer, 2010; Zwick & Sklar, 2005).

Table 1. Correlations Among ACT Composite, HSGPA, and FYGPA (Overall, by Accommodation Status, and by Institution Type)

Group	Count	ACTC, HSGPA	ACTC, FYGPA	HSGPA, FYGPA
Total	143,768	0.54	0.43	0.48
No accommodations	141,109	0.55	0.43	0.48
Accommodations	2,659	0.32	0.32	0.25
2-year institutions (overall)	35,693	0.39	0.26	0.35
4-year institutions (overall)	108,075	0.54	0.47	0.50
2-year, no accommodations	34,805	0.40	0.26	0.35
2-year, accommodations	888	0.15	0.19	0.17
4-year, no accommodations	106,304	0.54	0.47	0.51
4-year, accommodations	1,771	0.33	0.37	0.27

Note. All correlations significant at $p < 0.0001$.

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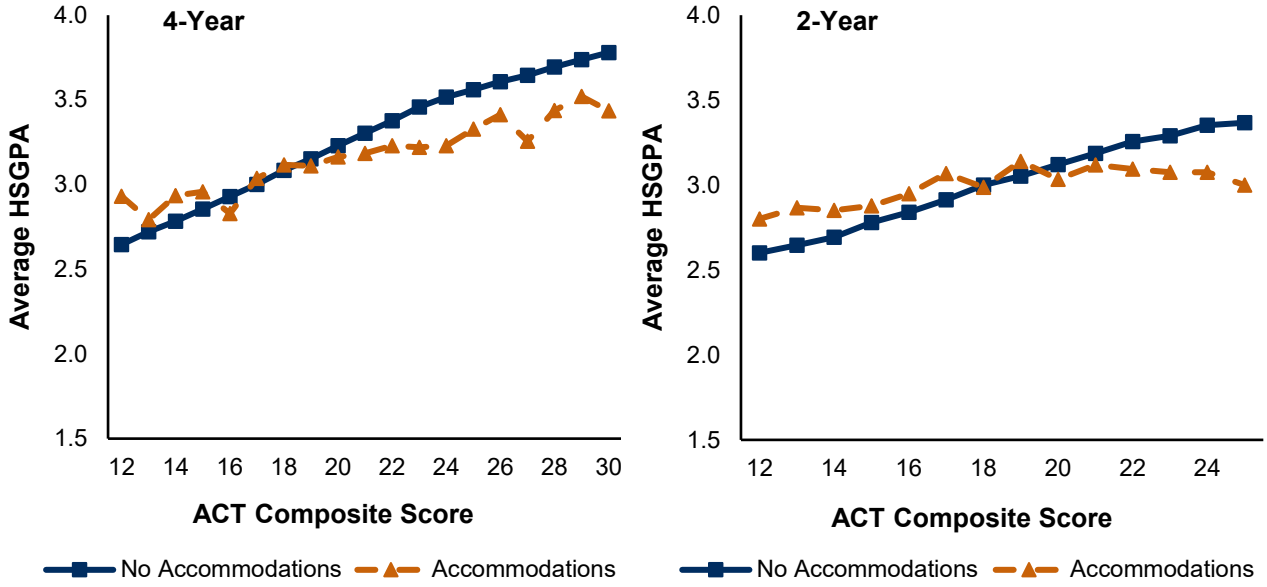
Why is this important? Both ACT score and HSGPA are measures of academic achievement that students, parents and guardians, educators, policymakers, and higher education officials use to determine whether high school students have been adequately prepared for their postsecondary plans, whether they are going to college, entering a workforce training program, or directly entering the workforce. Furthermore, the ACT is a standardized measure that goes through an equating process to ensure that scores retain the same meaning over time, whereas grading policies or standards may vary across schools or teachers (Woodruff & Ziomek, 2004), and HSGPA may also be susceptible to grade inflation (Sanchez & Moore, 2022; Sanchez, 2023). If HSGPA has the same meaning for students who took the ACT with accommodations (i.e., students with disabilities) and students who tested without accommodations, we would expect to see positive relationships among ACT scores, HSGPA, and FYGPA for both populations. Because we found differences in these relationships for students who tested with and without accommodations, it is important to understand the nature of the differences and their potential impact on predictive validity.

To better understand these findings, we calculated students' average HSGPA scores by their ACT Composite score. Figure 1 shows the results for students enrolled at 4- and 2-year institutions. The slopes of the lines were flatter for students who took the ACT with accommodations compared to those of students who took the ACT without accommodations, particularly for students enrolled at 2-year institutions. In other words, students who took the ACT with accommodations have a more constrained range of high school grades across the ACT Composite score scale, meaning that HSGPA provides less information about these students' achievement and does not distinguish well between students with higher and lower achievement levels. In contrast, for students who took the ACT without accommodations, as their ACT Composite scores increased, their HSGPA increased as well.

Figure 1. Average HSGPA by ACT Composite Score of Enrollees at 4- and 2-Year Institutions



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For example, of the students who enrolled at a 4-year institution and took the ACT without accommodations, a student with a Composite score of 16 had an average HSGPA of 2.93, and a student with a score of 24 had an average HSGPA of 3.52, a difference of 0.59 HSGPA points. In contrast, of the students who enrolled at a 4-year institution and took the ACT with accommodations, a student with a Composite score of 16 had an average HSGPA of 2.83, and a student with a score of 24 had an average HSGPA of 3.23, a difference of 0.40 HSGPA points—lower than the 0.59 difference found among students who tested without accommodations.

The difference is more pronounced for students enrolled at 2-year institutions. For example, of the students who enrolled at a 2-year institution and took the ACT without accommodations, a student with a Composite score of 16 had an average HSGPA of 2.84, and a student with a score of 24 had an average HSGPA of 3.35, a difference of 0.51 HSGPA points. In contrast, of the students who enrolled at a 2-year institution and took the ACT with accommodations, a student with a Composite score of 16 had an average HSGPA of 2.95, and a student with a score of 24 had an average HSGPA of 3.09, a difference of only 0.14 HSGPA points—much lower than the 0.51 difference found among the students who tested without accommodations.

Note that this analysis is not based on a random sample of students but instead consists of students who enrolled in college, thereby forming a self-selected sample of presumably higher-achieving students. Therefore, these results cannot be generalized to all students. However, this analysis does provide some insight into why ACT Composite scores may be a stronger predictor of performance in college (i.e., FYGPA and degree completion) than HSGPA for students who took the ACT with accommodations.

Future research should investigate the reasons for these differences in the relationships between HSGPA and performance on the ACT for students who take the ACT with accommodations. Are students who test with accommodations (i.e., students with disabilities) graded differently in school than students who test without accommodations? For example, do behavioral factors such as effort and teamwork play a different role in grades earned by students with disabilities compared to those earned by their peers? Are differences due to different high school course-taking patterns of students with disabilities? Some research suggests that students with disabilities are less likely to take more rigorous or advanced core high school courses, which could affect their HSGPA (Moore & Schnieders, 2022). Better understanding of the relationships among high school grades, standardized test scores, and postsecondary performance will help better serve this population of students.

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