

Validity of the SAT®

In March 2005, the College Board introduced a revised SAT, with an additional writing section and minor changes in content to the verbal and mathematics sections. Colleges and universities across the United States provided first-year performance data for the fall 2006 entering cohort of first-year, first-time students to validate the use of the SAT in college admissions.

- The final sample included 151,316 students attending 110 colleges and universities across the U.S.
- On average, the sample for this study performed better on the SAT—around 60 points higher per section—and had a higher mean high school grade point average (HSGPA)—around 0.3 higher—than the 2006 college-bound seniors cohort, as expected, given that all of the students in the sample were enrolled in four-year colleges.

Validity of the SAT for Predicting First-Year College Grade Point Average

The main analytic method used for this study was the comparison of single and multiple correlations of predictors (SAT scores, HSGPA) with first-year college GPAs (FYGPAs). All correlations were corrected for range restriction. The results show that the changes made to the SAT did not substantially change how predictive the SAT is of first-year college performance. A summary of key findings is presented below:

- Among the three individual SAT sections, SAT writing has the highest correlation with FYGPA ($r = 0.51$). The correlation is 0.48 for SAT critical reading and 0.47 for SAT mathematics. In fact, SAT writing alone has the same correlation with FYGPA as does SAT critical reading and SAT mathematics taken together.
- As expected, the best combination of predictors of FYGPA is HSGPA and SAT scores ($r = 0.62$), reinforcing the recommendation that colleges use both measures for the best prediction of student success.
- The correlation of HSGPA and FYGPA is 0.54, which is only slightly higher than the multiple correlation of the SAT (critical reading, mathematics, and writing combined) with FYGPA ($r = 0.53$).
- The increment in predictive validity of the SAT over HSGPA is 0.08. Similarly, the increment in predictive validity of HSGPA over SAT scores is 0.09.
- The increment in validity of the writing section over the critical reading and mathematics sections is 0.02. When HSGPA is also considered, the incremental validity of the writing section is 0.01.
- The multiple correlation of the SAT with FYGPA is slightly higher in private institutions versus public institutions; it is higher in more selective institutions (less than 50% of applicants admitted) versus less selective institutions; and it is also higher in small institutions versus larger institutions.