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ACT and College Success

Question: What is the relationship between ACT scores and success in college?

Summary of Findings

For decades, admissions policies in colleges and universities across the country have required applicants to submit scores from a college entrance exam, most typically the ACT (American College Testing) or SAT (Scholastic Aptitude Test). This requirement suggests that high school students' performance on these exams can help predict their academic success as college students. In fact, research conducted over the past four decades on the efficacy of the ACT assessment as a predictor of college success generally supports this belief; there is a strong positive relationship between performance on the ACT and college GPA (Noble, 1991; Noble, Davenport, Scheil, Pommerich, 1999; Noble & Sawyer, 2002; Paszczyk, 1994; Price & Kim, 1976; Stumpf & Stanley, 2002; Thornell & Jones, 1986).

Clearly, college admissions policies have been shaped by research-supported "prediction models," that is, combinations of data generated by students during high school with the greatest likelihood of predicting their success in college. "Success in college" is generally defined in these studies as first-year college GPA, though some studies have looked at college completion or GPA at college graduation (e.g., Paszczyk, 1994; Stumpf & Stanley, 2002).

As a predictor of college success, the most reliable prediction models consists of a combination of both high school GPA and ACT scores. In fact, combining high school GPA and ACT scores is a much stronger predictor of future success for students regardless of race or gender than using either of these scores alone as a predictor (Hoffman & Lowitski, 2005; Noble, 1991). Although the combination has been shown to be highly successful as a predictor of college success, researchers continue to explore the intricacies of this prediction model and its impact on various groups of high school students.

- In some studies, high school GPA has been shown to have a higher "predictability contribution" than ACT scores (Hoffman & Lowitski, 2005; Paszczyk, 1994, p. 6).
- In other studies, ACT composite scores have been shown to be a better predictor of college GPA at all levels than high school GPA (Noble & Sawyer, 2002; Paszczyk, 1994; Price & Kim, 1976) . This is especially true at the higher levels (3.25 and above) where a high school GPA of 4.0 is not a strong predictor of a college GPA of 3.25 or above (Noble & Sawyer, 2002).
- Composite ACT scores (combined with high school GPA) are a stronger predictor of college success than the ACT subtest scores (Thornell & Jones, 1986).
- The efficacy of combined high school GPA and ACT (and SAT) scores as a predictor of college success is much stronger for groups of students (e.g., all students within a particular grade point range) than for individual students. In other words, important individual differences such as perseverance and other non-cognitive qualities also play a role in a student's future college success (Noble et al., 1999; Stumpf & Stanley, 2002).

Although using ACT scores as component of college admissions seems well supported in the research, a final reminder may be in order for high school leaders. Although ACT scores can be highly successful in predicting future success in college, students' performance on the ACT is largely determined by the courses students take during high school (Paszczyk, 1994), and the high school they attended (Noble et al., 1999). The "quality of the education they receive" during high school, the rigor of their course work, and access, especially to rigorous math and science courses regardless of the grades they receive in those courses, largely determine their performance on the ACT—and their future success in college. "The responsibility for providing challenging, quality education falls to administrators, teachers, and counselors, as well as to the communities that support the school system" (Noble et al., 1999, pp. 29 – 30).

References and Online Resources

ACT: American College Testing. For information visit http://www.act.org/.

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