Cognitive and Noncognitive Measures as Predictors of Student Success at an Independent School

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Abstract
Predicting academic success is an important aspect of education, but is of particular interest for educators and admissions officers at independent schools. This study, conducted using archival data at an independent school in the Philadelphia suburbs, used hierarchical regression analysis to determine whether cognitive measures could predict student GPA, whether measures of noncognitive traits (Grit, Conscientiousness, Openness, and Emotional Intelligence) could improve the prediction of GPA, and whether cognitive skills predict to any of the noncognitive traits. The most significant finding ($p < .01, \eta^2 = .52$) is that scores on the Wechsler scales combined with scores on noncognitive measures are good predictors of GPA. The noncognitive traits of Conscientiousness and Emotional Intelligence (as measured by the Understanding and Managing scales of the MSCEIT-YV) are the most predictive of GPA. Also of interest to those in independent schools will be that the number of years that students attend the school is a positive predictor of GPA, as well of Grit and Conscientiousness. Also of note is the negative relationship between Wechsler scores and Grit, and between Wechsler scores and Conscientiousness.

Recommended Citation

Transitioning from high school to college can be challenging and success in one level of education does not guarantee success in another. When it comes to predicting who among admitted students with similar grades will eventually 'thrive' and who will 'dive', we need to, therefore, look to other measures. Identify students who are at risk of underperforming in college and those who are likely to succeed. The search for non-academic predictors of a successful or failed transition to college is magnified by isolating outlier groups that, on their own, are of particular interest. Academic performance in high school as well as in college likely reflects both the cognitive and noncognitive abilities of students. The degree of activity of students and students in the process of mastering knowledge is an important factor for successful learning. From this point of view, it is important to pay attention to the use of active methods in the teaching of psychology. The method of training can be effective when it is built on methods and techniques that activate the activity of the trainee, first of all, the thinking. The more active...
the cognitive activity of the learner, the higher the effectiveness of learning. The usual form for the school is a detailed oral answer, when one student answers at the board, and the others listen. In this case, questions are raised that require a fairly large volume of educational material. Another type of interview is a front-line oral or written survey of a group of students. Consistently, general cognitive ability is probably the most researched trait in psychological research (Gottfredson, 2002). Thus, the main challenge faced by previous research was to improve the prediction of students’ academic success by identifying additional factors explaining incremental variance over general cognitive ability in order to get a more differentiated and improved prediction of AP. Richardson et al. An important non-cognitive predictor of AP is the construct of study skills; Credé and Kuncel (2008, p. 425) even stated that “overall, study habit and skill measures improve prediction of AP more than any other non-cognitive individual difference variable examined to date”. In contrast to highly structured school environments, studying at a college is less Multiple studies identifying the interdependence between cognitive and noncognitive skills indicate that we may fail to boost cognitive skills unless we pay closer attention to noncognitive skills. Noncognitive skills represent valuable assets with respect to both traditional school outcomes and the broader development of individuals. Indeed, various strands of scholarship come together to point to noncognitive skills’ centrality. (2012). This review assumes that academic performance, as measured by grades or test scores, reflects not only knowledge of academic contents but also other important student attributes or noncognitive factors, such as a “range of academic behaviors, attitudes, and strategies that are critical for success in school and in later life.”