Identification of Gifted Youth


The Raven's Advanced Progressive Matrices (APM) has been recommended as a useful measure for identifying academic potential. Several empirically-derived versions of Set II were examined. Students (n=220) in grades 5-9 were asked to complete Set I and Set II of the APM. Short form scores were calculated based on the 12 items selected by Arthur and Day. Short forms 1 and 2 and the APM Set I were correlated with Set II. Both derived short forms more strongly correlated with Set II than was Set I. The psychometric properties of the short forms were cross-validated by administering tests to an independent sample of 247 academically talented students in grades 5-9 and showed comparable results. In addition, scores from short forms 1 and 2 were correlated with independent assessments of reasoning, demonstrating the same relationship as the full length APM Set II.


The Johns Hopkins University Center for Talented Youth (CTY) identifies students who reason well mathematically and/or verbally and offers summer and academic year programs of rigorous course work. Gender differences in test performance, even though not as large as previously reported, are noticeable, particularly among the highest test scores. The majority of students benefit from summer program participation, and have increased access to more advanced course work. No differences were found between 1982 and 1991 male and female populations in class ranking, liking of mathematics, or perceptions of support from the peers, family members, and teachers. However, the lack of support from the peer group underscores the academic isolation of this group of students.


This article discusses the impact of the talent search programs on higher education. It is suggested that the talent identification process provided by the talent searches, as well as the academic programs they offer, make students more aware of their abilities, leading many of them to apply to more selective colleges with demanding programs. These students typically enter college with more advanced academic preparation as well, and colleges are eager to attract these highly capable students. Higher education institutions have responded with numerous precollege offerings, and many have also enhanced their opportunities for college students to take advantage of accelerated learning opportunities.


This chapter summarizes the lessons learned from the over 25 years of research conducted by the Center for Talented Youth, as well as the prior 10 years of research conducted by Dr Julian Stanley and his graduate students. This summary also includes work done by several other talent searches (Duke, Northwestern and Rocky Mountain), although a complete description of their work can be found in the individual articles written by each. The findings from the hundreds of research studies conducted validate the talent search identification model and process, as well as the programs developed to meet the needs of identified students. In addition, the authors have condensed the findings from numerous research projects examining the cognitive, social, personality and academic development of the students CTY serves.


Almost without exception, experts in the field of education of the intellectually gifted agree that early identification of such talented students is important. There is a good deal of evidence to show that many gifted students who are not identified and whose needs are not met adequately at an early age become frustrated and disillusioned with school, falling into a pattern of low achievement and/or behavioral problems. At the very least, we know that if educational intervention does not take place at an early age, the child is missing out on valuable years of exciting learning. Interest in learning may diminish and important study skills may not develop because the child is never challenged to think and work hard. If left alone by the middle grades, the pattern of underachievement is a lifestyle that is almost impossible to change.


Inadequate standardization and norming have been cited as major limitations preventing widespread use of the Raven's Progressive Matrices (RPM). It appears to measure some type of reasoning ability, but the nature of that ability has not been clearly established. The test is also criticized for being costly, for providing little differentiated information about a student's range of abilities or the range of abilities worthy of identification, and for a lack of evidence concerning its usefulness as a way to identify gifted students with a learning disability. There is, however, some evidence to suggest that the inclusion of the RPM in an identification battery may broaden the range of abilities assessed. Important considerations are provided when using the advanced level of the RPM for identifying talented students.


Based on the results of 2 pilot testing projects, the SSAT appears to be an acceptable instrument for identifying academically talented students of elementary school age. An above-level form of the SSAT was administered to 2 samples totaling 305 5th- and 6th-graders. Mean scores for 8th- and 9th-grade normative samples are recommended as cutoffs for identifying highly able 5th- and 6th-grade students who could benefit from academically challenging programming.