Success and intelligence

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One of the most famous studies tracking the relationship between intelligence and success was conducted by Louis Terman. Terman’s Gifted Child Study began in the 1920s and followed nearly 1500 gifted children throughout their lives. To qualify, the children had to have an IQ of at least 140. The children were followed into adulthood to see how their intelligence was related to social and personal adjustment. Terman found that his sample showed not only positive academic outcomes, but also tended to be healthier, taller, and stronger than children with lower IQs. These positive effects persisted into adulthood. Two-thirds earned bachelor’s degrees as adults during the Great Depression. Compared to the white-collar average salary of $5,800 in 1954, the gifted children were boasting an annual salary of $10,556. In a review of Terman’s book about the gifted participants (now adults) Anastasi noted “In physical and mental health, as well as in emotional and social adjustment, the gifted group continued to be superior to the generality.”

Terman’s study was by no means perfect, of course. For example, due to the longitudinal nature of the study, gender norms may have influenced how women chose (or refrained from) a profession. Also, although Terman was convinced of the heritability of intellect, the children in his study came from relatively enriched environments – their families reported above average higher annual incomes, their parents completed twice as much schooling as the average adult,
and the children had six and a half hours each week of private lessons. It is possible that a randomly selected group of children with similarly privileged backgrounds would have fared just as well as Terman’s gifted children. Still, many of Terman’s findings have since been replicated and extended by other researchers. Modern psychological research has discovered relationships between intelligence and a wide range of variables that could be considered to reflect success. These variables can be organized roughly into two main categories: academic outcomes and career success.

One of the strongest correlates of intelligence scores is academic performance, whether measured by grades in school, performance on achievement tests, years of education, educational attainment, speed of attaining a degree, or productivity during school. It might be easy to dismiss these findings because these educational outcomes rely in part on test-taking, which may seem like a skill by itself, and hard to separate from skill in intelligence test-taking. On the other hand, attainment of educational credentials is often the entryway to advanced professional training and career opportunities, so it is clear that the relationship between intelligence and educational outcomes is consequential.

Success within careers is also strongly related to intelligence, which predicts not only occupational attainment, but also professional income, and success on the interviews that are the entry points to professional opportunities. Importantly, intelligence is strongly related to job performance across a surprisingly wide range of employment settings, and measured by both objective and subjective appraisals of performance. Consequently, even employers such as the National Football League routinely administer an intelligence test, along with physical
measurements, to prospective professional football players. Ree and Earles conclude that “if an employer were to use only intelligence tests and select the highest scoring applicant for each job, training results would be predicted well regardless of the job, and overall performance from the employees selected would be maximized.”

One might imagine that if intelligence predicts both academic and occupational outcomes well, and even variables such as health and social adjustment, it should also be strongly predictive of life satisfaction. Interestingly, the relationship between intelligence and subjective well-being is very small and may be mediated by factors such as daily living, income, health, and neurotic symptoms.

Further Reading:


