

## **Gifted Children**

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Children can be gifted in a variety of different areas, including musical talent, athleticism, and artistic ability among others. The focus of this entry will be solely on those children who are gifted in intellectual ability and academic achievement. Identification of intellectual giftedness usually requires an individually administered intelligence test, achieving a Full-Scale Intelligence Quotient (FSIQ) of 130 or higher, which is a threshold that dates back to Lewis Terman's research at Stanford in the early to mid 20<sup>th</sup> century. Although this seems like an arbitrary score, an IQ score of 130 and above is where an individual scores two standard deviations above the population average score, thus falling in the upper 2% of the population. This level of cognitive ability is correlated with many positive life outcomes such as increased level of education, higher income, and longer life expectancy, although results may vary widely across this high intelligence group.

Some other factors that are taken into account when deciding if a child is gifted include achievement in school, motivation, creativity, and attention span, which are usually judged and reported by a child's teacher. Even though many of these constructs—especially school achievement and attention span—can be reliably measured, almost no other psychological phenomenon in the field of psychometrics has the reliability or predictive validity that general intelligence (measured by intelligence tests) has, which is why IQ scores play such a large role in placing children into gifted programs. However, some schools may set a lower cutoff point to define gifted in minority and diverse ethnic children because of the concern that IQ tests may be biased against such children,

Piaget noted that high IQ individuals possess the cognitive ability to integrate and better understand their experiences (1952). This intellectual capacity, along with cognitive differences between gifted and non-gifted children, can be seen as early as age two. These capabilities include more words spoken and faster reaction times among gifted children when compared to their peers. Differences in self-control have been noted at ages four and five between gifted children and non-gifted children. The famous marshmallow test measured the ability of children to delay gratification by either accepting a marshmallow immediately or waiting 15 to 20 minutes to receive two marshmallows. The ability of a child to wait and accept two marshmallows rather than one now was correlated with higher SAT scores and cognitive functioning in adolescence. The differences between gifted children and their peers are not always favorable for the gifted as there is evidence of a higher prevalence of personality deficits such as perfectionism, intense sensitivity, alienation, and uneven development.

Not only are there educational and developmental differences between gifted and non-gifted children, but also significant differences in life outcomes. In a longitudinal study measuring long-term outcomes of exceptionally gifted children, it was found that exposing this group to a demanding level of education or accelerating them by two years was linked with high degrees of life satisfaction, research degrees at leading universities, professional careers, and fulfilling relationships. On the other hand, those with equal cognitive ability who were only exposed to education that was advanced by one year took lower level college courses, reported lower life satisfaction, and reported difficulties socializing.

These findings not only suggest differences in life outcomes between gifted and non-gifted children, but also that not challenging gifted children can hinder them in reaching their full potentials. As for specific differences between gifted and non-gifted individuals pertaining to

success in the workforce, the average annual income for those aged 32 in 1993 with an IQ between 90 and 110 was \$20,000, while individuals with an IQ above 125 was \$36,000 (Murray, 1998). Relating to health outcomes, IQ tests were given to children between ages seven and 11 and then the number of hospitalizations were measured in adulthood. Even though gifted children were not explicitly measured, those with higher scores had fewer hospitalizations than those with lower scores. All things being equal, gifted children are able to separate themselves at an early age and have the potential to truly flourish if given a demanding and accelerated education.

### **Further Reading**

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