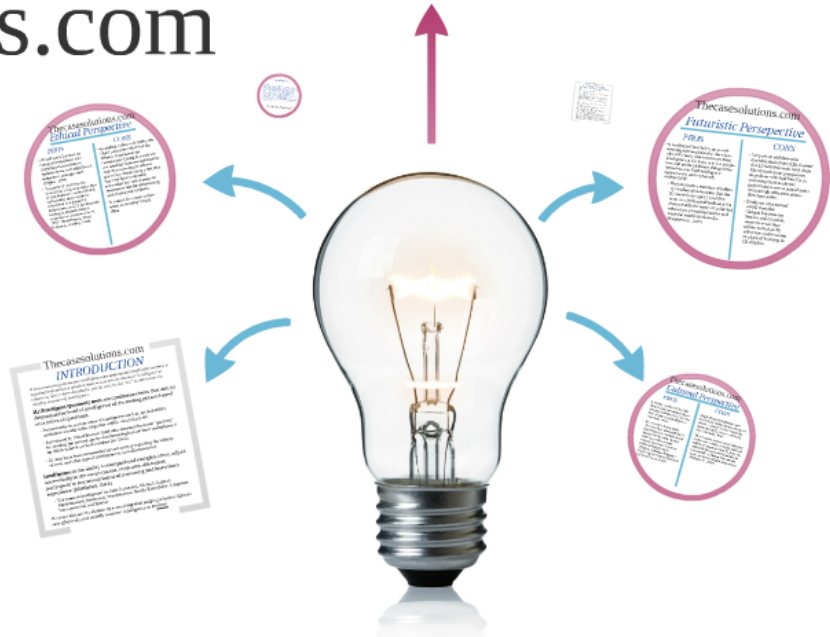




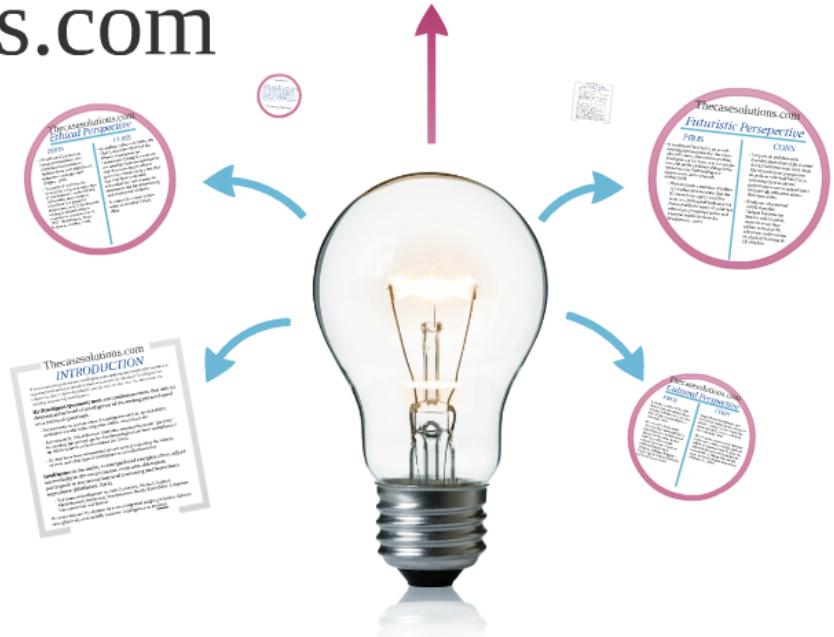
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# The IQ Experiment



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## *INTRODUCTION*

*When measuring someone's intelligence, an appropriate and valid method is required to determine whether that person can be deemed "intelligent" or otherwise. So we have decided to put IQ tests to the "test" to determine its validity measure of intelligence.*

**IQ (Intelligent Quotient) tests** are intelligence tests that aim to determine the level of intelligence of the testing person based on a series of questions.

- Focuses only on certain areas of intelligence such as: spatial ability, arithmetic (math) skills, linguistic ability, vocabulary, etc.
- Introduced by Alfred Binet in 1904 who assessed the name "quotient" by dividing the mental age by the chronological age then multiplying it by 100 to make it a whole number (Dr. Rich).
- IQ tests have been surrounded by controversy regarding the validity of tests and what type of intelligence is actually measured.

**Intelligence** is the ability to comprehend complex ideas, adjust successfully to the environment, overcome dilemmas, participate in numerous forms of reasoning and learn from experience (Matthews, 2014).

- The types of intelligence include: Naturalist, Musical, Logical-Mathematical, Existential, Interpersonal, Bodily Kinesthetic, Linguistic, Intra-personal and Spatial.

*We must discuss the debate by examining and judging whether IQ tests can effectively and validly measure intelligence as a whole.*





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## *Cultural Perspective*

### *PROS*

- A survey conducted in 1988 discovered a consensus from 661 psychologists that IQ tests indeed measure intelligence (Parshall, 1994).
- After conducting a study showing that Spaniards had a higher IQ than the Moroccan group, results indicate that one test could measure various functions based on cultural backgrounds (Fasfous, Hidalgo-Ruzzante, Vilar-López, Catena-Martínez & Pérez-García, 2013).

### *CONS*

- Since African Americans score lower than whites by an average of about 15 points, critics argue the measures of IQ tests as culturally bias (Parshall, 1994).
- Most social scientists conclude that race is not a valid scientific method and more precisely that IQ tests are culturally biased and therefore, do not provide evidence that certain races are far intelligent than others (Williams Jr., 2008).

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## *Ethical Perspective*

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### *PROS*

- We still use IQ scores to categorize students into inspiring classrooms or tedious ones, into significant schools or average ones (Begley, 1996).
- “A survey of 1,020 experts found that a majority agree that (1) intelligence can be defined; (2) heredity plays a role in individual and group IQ differences; and (3) intelligence testing in schools should continue at its present level. (KH)” (Snyderman, Mark; Rothman, Stanley, 1986).

### *CONS*

- According to Bruce Uditsky, the Chief Executive Officer of the Alberta Association for Community Living, IQ tests are not used for educational reasons and thus raise major ethical questions about using a test that has very little to do with education but rather pose an enormous risk for denouncing and classifying children.
- “IQ alone does not explain talent and ability” (Snell, 1996).

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## *Futuristic Persepective*

### *PROS*

- According to Dan Hurley, an award-winning science journalist, the whole idea of IQ tests, which measures fluid intelligence at the least, is to test people now and predict different things in the future because fluid intelligence appears early and is properly undisputable.
  - Reports from a number of follow-up studies demonstrate that the IQ score from age 13 could be seen as a fairly good indicator for future results in terms of achieved education, jobrelated status and material health (Firkowska-Mankiewicz, 2011).

### *CONS*

- A report on children with learning disabilities (LD) showed that LD children with fairly high IQs were no more prosperous than those who had low IQs in rocketing their academic performance over 2 school years of thorough educative efforts (Kershner, 1990).
- Kershner, who earned a PhD from the Ontario Institute for Studies in Education, went on to say that failure to find an IQ effect was not because of a lack of learning in LD children.

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## *Motivation on IQ scores?*

Angela Lee Duckworth, a psychologist at the University of Pennsylvania wanted to explore the effect of motivation on how well people perform on IQ tests.

Duckworth and her team administered two studies.

First, they performed a meta- analysis that joined 46 previous studies of the effects of incentives on IQ scores.

Financial rewards ranged from less than \$1 to \$10 or ore. The team measured a statistical paramter called Hedge's g to indicate the impact of incentives on IQ scores.

g values less than 0.2 were small, 0.5 are average and higher than 7.0 are large.

Duckworth's team found that the aveage was 0.64 (equaled to almost 10 points on the IQ scale of 100)

Rewards higher than \$10 produced g values of more than 1.6 whereas rewards fewer than \$1 were one-tenth as effective.

In the second study, Duckworth and her colleagues studied data from aprevious study of 500 boys who averaged about 12.5 years and took the IQ test without any incentives at all.

Researchers followed them later in life b the time they were adults and they agreed to be intervied. There were no differences in IQ or other major factors between boys who participated and those who didn't.

By building numerous computer models of the information, the team discovered that increased motivation accounted for extreme differences in IQ scores and also in how well IQ predicted later success in life.

# Conclusion

*In conclusion, as seen from the information provided , IQ tests and its valid measurement of intelligence have generated major debates. Based on all of this information, I believe that IQ tests are not a valid measurement of intelligence. A particular source that drives my conviction is the perspective of Bruce Uditsky who writes that IQ tests are not used for educational reasons and thus raise major ethical questions about using a test that has very little to do with education but rather pose an enormous risk for denouncing and classifying children. The fact that one single IQ test has the power to control the intelligence of a student is just not fair.*

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# *Solution*

*School districts should eliminate IQ in education tests as a way to classify children. They should instead, establish an assessment that touches all aspects of intelligence but to the point of what they have learned so far throughout their education. When the results return with strengths and weaknesses, we can apply students with the proper education that can strengthen their weaknesses and maintain their strengths. This test should be given to students throughout the school year to mark improvement and standards of children who want to achieve high education. Only then and only then, should childrens' intelligence be judged and measured.*

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