

Is it possible to define
and measure
intelligence



**ASSIGN
BUSTER**

Is it possible to define and measure intelligence? Over the years there have been a lot of definitions for the word intelligence. Whether it is a fix concept like height or an innate general cognitive ability, intelligence can mean differently to everyone and consciously everyone has a definition for it. So does that mean there have a general understanding of the word?

No, an agreement on some level has been found but there are some aspects that have yet to a fixed definition in psychology. The possibility of defining intelligence has been controversial as researcher try to prove their definitions and develop a way to measure it over the years. This is when the famous “ IQ” (short for intelligence quotient) test was developed.

The question of intelligence being a single ability or multiple has taken a long and ongoing debate where researchers like Charlie Spearman, who helped develop factor analysis, believed that there was something called general intelligence ‘ g’ factor that underlines the fact that, even you are have special ability to stand out, generally people who score higher in one aspect usually score higher on other aspects too. Spearman also believed that this communality, the ‘ g’ factor, underlies all our intelligence behaviour since birth.

Other researchers disputed that was Howard Gardner. He believed that there was something called multiple intelligences. He disputed that brain damage may diminish one type of ability but not all. Gardner studied people with exceptional abilities, including those who excelled in only one. Some may say that is a biased verdict and that he didn’t have the communality that

Spearman had but Gardner observed that dissimilar abilities enable our ancestors to cope with diverse environmental challenges.

Gardner's multiple intelligences consisted of Linguistics, Logical-mathematical, Musical, Spatial, Bodily-kinesthetic, Intrapersonal (self), Intrapersonal (other people) and Naturalist. Each relatively independent of the others. An intelligence researcher Sandra Scarr (1989) responded "Wouldn't it be wonderful if the world were so just that being weak in an area would often be compensated by genius in other area. But alas the world is not just". That statement tends to lean toward the reality of the world and that as individuals we have capabilities that vary from person to person.

The modern intelligence testing idea came out in the twentieth century when France passed a law where all children were abided by law to go to school. The teachers were faced with the dilemma of teaching children with differences in the children's ability. The French government then asked psychologist Alfred Binet to help decide which students were mostly likely to experience difficulty in schools. Binet and his fellow colleague Theodore Simon began developing a number of questions that focused on things that had not been taught in school such as attention, memory and problem-solving skills.

With these questions, Binet found out which ones served as the best indicators of school achievement. He swiftly realized that some children were able to answer more advanced questions that older children were generally able to answer, while other children of the same age were only able to answer questions that younger children could typically answer. Based on this

observation, Binet suggested the concept of a mental age, or a measure of intelligence based on the average abilities of children of a certain age group.

This test is referred to as the first intelligence test and note that they made no assumption why the capabilities of these children varied. Binet never believed that this means of testing would be used at more broader and practical levels. Whereas Lewis Terman saw the Binet- Simon scale was no use in an American school so he adapted it to the different environment. The IQ test was developed from these tests, by finding out the person's mental age divided by chronological age and multiplied by a hundred, would give you a single figure which places you on a scale later called Wechsler intelligence score.

A standardized form of scores was developed to enable meaningful comparisons. These scores often form a roughly symmetrical, bell-shaped distribution clustered around the average which in this case is 100. Wechsler also developed two different tests specifically for use with children: the Wechsler Intelligence Scale for Children (WISC) and the Wechsler Preschool and Primary Scale of Intelligence (WPPSI). The adult version of the test is now known as the WAIS-III. The IQ test went on to become the most famous form of intelligence testing we know today.

Governments have used it in different aspects of society like immigration and recruiting. Many forms of intelligence tests are still being used in schools in today's world. Intelligence tests, such as the SAT, are still very popular and widely used among colleges for the purposes of student admissions. Some intelligence tests, even now, are still being administered to children in

the early grades. However, many people today convey caution in using IQ scores for purposes of ability tracking.

In particular, it has been observed that there are strong cultural biases built into the system of intelligence testing. If we go back to the essay question it refers to the possibility of defining measuring intelligence. Binet advised many people that the concept of measuring all intelligence at once cannot be done. On that statement I agree. Intelligence is too broad of a concept to be measured or defined. Different cultures and societies have different concept on what general knowledge mean.

Into that mix comes faith, religion and customs which other societies may not understand. What intelligence means solely lies on you? References 1. Summery Handout of Burt, C. (1931). " The Differentiation Of Intellectual Ability". The British Journal of Educational Psychology. 2. Suzuki, L. , ; Aronson, J. (2005). Cultural malleability of the racial/ethnic hierarchy of intelligence. Psychology, Public Policy, and Law. 3. Myers, D. G. (2009). Psychology, Ninth Edition. New York: Worth.