

A Study on Intelligence Quotient (IQ) of College Students

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Abstract

Intelligence involves the ability to think, solve problems, analyze situations, and understand social values, customs, and norms. Intelligence is a general mental capability that involves the ability to reason, plan, think abstractly, comprehend ideas and language, and learn. Intellectual ability involves comprehension; understanding, and learning from experience. The objective of the study is to find out the intelligence of Azad Mahavidyalaya, Ausa Students. Survey method was used for the study. 32 students were taken as sample using stratified random sampling technique. Raven's Standard Progressive matrices were used to measure the intelligence of college students. Mean, Standard deviation and t test were used to analyze the data. The results showed that there is significant difference in intelligence test scores of high school students in terms of area of study, gender, medium of instruction.

Key words: college students, Intelligence.

1. Introduction

An intelligence quotient (IQ) is a total score derived from a set of standardized tests or subtests designed to assess human intelligence. The abbreviation "IQ" was coined by the psychologist William Stern for the German term *Intelligenzquotient*, his term for a scoring method for intelligence tests at University of Breslau.

Historically, IQ was a score obtained by dividing a person's mental age score, obtained by administering an intelligence test, by the person's chronological age, both expressed in terms of years and months. The resulting fraction (quotient) was multiplied by 100 to obtain the IQ score. For modern IQ tests, the raw score is transformed to a normal distribution with mean 100 and standard deviation 15. This results in approximately two-thirds of the population scoring between IQ 85 and IQ 115 and about 2.5 percent each above 130 and below 70.

Scores from intelligence tests are estimates of intelligence. Unlike, for example, distance and mass, a concrete measure of intelligence cannot be achieved given the abstract nature of the concept of "intelligence". IQ scores have been shown to be associated with such factors as nutrition, parental socioeconomic status, morbidity and mortality, parental social status,[15] and perinatal environment.

While the heritability of IQ has been investigated for nearly a century, there is still debate about the significance of heritability estimates and the mechanisms of inheritance.

Accordingly, intelligence is best seen as a general ability that can influence performance on a wide range of cognitive tasks. IQ (the intelligence quotient) is the quantification of an individual's intelligence relative to peers of a similar age. IQ is one of the most heritable psychological traits, and an individual's score on a modern IQ test is a good predictor of many life outcomes, including educational and career success, health, longevity, and even happiness (Gottfredson 1998).

2. Material And Methods

Survey method was used for the study. In this study, stratified random sampling technique was used. Considering 32 samples from Azad college, Ausa

Tools Used

Raven's Standard Progressive Matrices

The Raven Standard Progressive Matrices (RPM) test was developed in U.K. and is one of the best known and most popular non-verbal group tests. The RPM can be administered to a group or individual and covers the age group eighteen years to elderly adults. Instructions are simple and, if necessary, the RPM can be administered by demonstration without the use of language. There are

60 matrices in the Raven's Standard Progressive Matrices which are graded in order of its difficulty. Each contains a logical pattern or design from six to eight alternate choices. The test may be used with or without any time limit, and research supports the RPM as a measure of general intelligence. This test has been designed to evaluate the subjects' ability to see the relationship between geometric figures or designs; and the ability to perceive the structure of a design in order to select the appropriate part for completion of each pattern. (Bhatia 1993)

In this study the validity was done, and in an employment setting, evidence of content validity was established by demonstrating that the jobs, for which the Raven's Standard Progressive Matrices (SPM) is used, require the problem-solving skills measured by the assessment. Criterion related validity was established reporting a positive relationship between scores on the Raven's Standard Progressive Matrices (SPM) and performance in decision making tasks. The SPM manual provides information indicating that the SPM validity predicts the ability of an individual to attain and retain jobs that require high levels of general mental ability.

Statistics: Used Percentage analysis, Mean, Standard deviation and t-test were employed (Anatasi,1982).

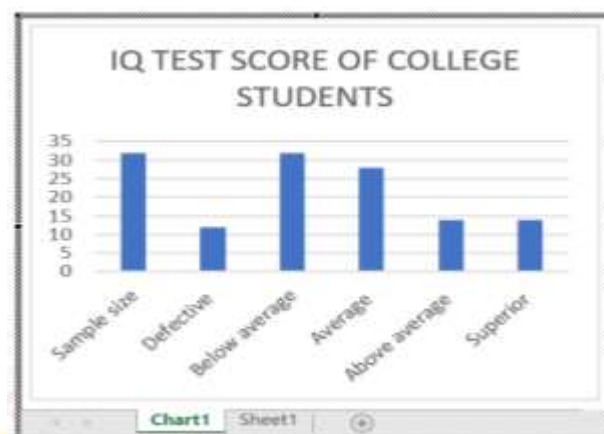
3. Results:

The major findings of the study are given below. It is found from the above study that the intelligence test score of college students is below average. This may be due to the fact that colleges concentrate more on the marks of the students and rote memory is encouraged without understanding the concepts.

From Table 1, it is found that 12. % are defective, 32% are below average, 28%are average, 14 % are above average and 14% are superior in the total sample based their intelligence test scores. From the table it is clear that the intelligence test scores of college students is below average and the hypothesis is accepted.

Table 1. IQ score of students of Azad Mahavidyalaya, Ausa

Sr . no .	Sampl e size	Defecti ve	Below avera ge	Avera ge	Above avera ge	Superi or
1.	32	12%	32%	28%	14%	14%



Graph 1. Graphical representation of IQ score of students of Azad Mahavidyalaya, Ausa

4. Conclusion and future scope

Humans have ability to “reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience” (Neisser *et al.* 1996). This complex of abilities is referred to as intelligence. In humans these tests give rise to an intelligence quotient (an “IQ score”) which quantifies an individual’s performance relative to those of a similar age. The intelligence in these animals varies among individuals and seems to be correlated with processes such as reasoning and working memory. Recent research in humans suggest that working memory training might make causal contributions to the improvement of IQ. Those findings have not only theoretical implications concerning the structure and neurobiological insantiation of intelligence, but it also opens up opportunities for future practical applications.

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