

# "The measure of intelligence is the ability to change"

Nagothu Vijaya Prasanthi

## 1 Introduction

Intelligence means intellect put to use. It is the use of intellectual abilities for handling a situation or accomplishing any task. In general intelligence is the ability to learn, deal with abstraction, make adjustments or to adapt to new situations, make appropriate responses to certain stimuli in a given situation.



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### Definition

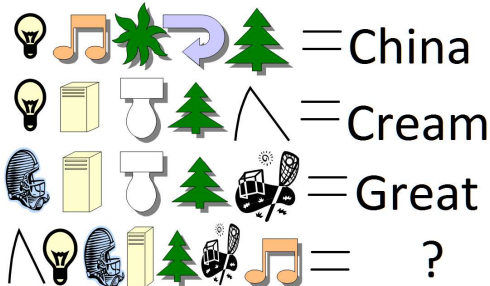
- ❖ It is an organization comprising the abilities of readiness, correctness and of understanding complicated and abstract things, exhibits necessary mental control and action in solving problems. S.P Chaube 1983
- ❖ Intelligence is a capacity of excellence individual in the various areas.
- ❖ According to the TERMAN “intelligence is the ability to things.”
- ❖ Intelligence is the ability to give responses that are true. Thorndike

### Types of intelligence

- ❖ Mechanical intelligence
- ❖ Social intelligence
- ❖ Abstract or intelligence

#### a. Mechanical intelligence

It is the skill to manipulate tools and gadgets and in managing the working of machines.



#### b. Social intelligence

It means understanding of people and the ability to act wisely in human relationships.

#### c. Abstract intelligence:

It is the ability handle words, numbers, formulate and scientific principle. A person with abstract intelligence is able to discover relations among symbols to solve problems.



## 2 Test of intelligence

French psychologist “Alferd Binet” the father of intelligence test construction movement.

1. Based on number of individuals to be tested.
  - a. Individual’s tests- one individual are tested at a time.
  - b. Group tests- group of individuals are tested at a time.
2. Based on the form of test:
  - a. Verbal tests: uses language or paper and pencil
  - b. Non- verbal tests: for example performance tests.

## 3 Types of intelligence:

- a) Individual intelligence test
- b) Group intelligence test

#### 1) Individual intelligence test:

This test can be administered to only one individual at a time. It can be verbal method, non verbal method and performance.

Types of individual intelligence test:

1. **Verbal method:** in this method language ability is essential. The individual can answer through to verbal way such as reasoning memory and numerical abilities. Verbal test cannot be administrated to dumb., young

<sup>1</sup> P. N. C. & K. R. College of nursing, Andhra Pradesh.

condition, or those who doesn't understand your language.

2. **Non verbal method:** it deals with diagram and picture. This test free from language barriers and do not require reading skill, non verbal test can administrate illiterate, literate foreign and natives.
3. **Performance test:** it is one of the non verbal test but is assessing the subject has to do something to rather than to some. Ex. solve out problem, assemble ex. A pattern of blocks, assemble animal picture.

**4 Group intelligence test:**

1. Verbal
2. Non verbal

If the type of tests is not applicable in group. For illiterate- group intelligence test is called Alpha Army test. For illiterate group intelligence test is called Beta Army test.

**Intelligence Tests based on scientists:**

1. Wechsler test:
  - a) Wechsler adult intelligence test
  - b) Wechsler intelligence test scale for children
2. The Stanford Binet intelligence scale
3. Ravens Progressive matrix
4. Vineland social maturity scale

**1. Wechsler test:**

This test described by American Psychologist Wechsler from this we can assist the individual intelligence scale for all age group. WAIS – used for people between ages of 16-75, WLSC used for children age group between 5-16 tears.

Test details: each test consist of verbal scale and performance scale verbal scale.

**Individual verbal tests:** usage of language and administered to an individual at a time. 30 items were prepared graded from different age levels on a scale the tasks to be performed by the test varies from simple manipulation.

The different types of scales used for adults and children differently. It is an individual test used as verbal scale and performance scale simultaneously.

Wechsler assist the intelligence through the intelligence through the verbal scale, involving used of word, concepts and numbers. It consists of six subsets.

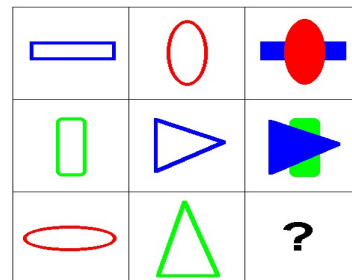
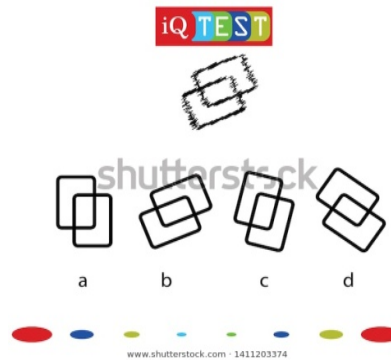
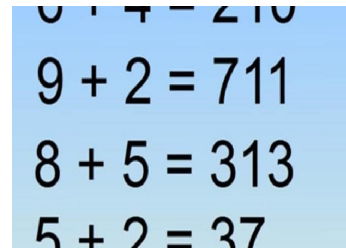
1. Test of general information
2. Test of general comprehension
3. Test of arithmetic reasoning
4. Test of digit span
5. Test of distinction between similarity
6. Test of vocabulary

**Information:** in this test ask general knowledge and assess the individual information status particular objects.

**Comprehension:** are deals with more abstract questions ex. Nature of necessity of laws.

**Arithmetic:** it is deals with problems solving method and measure by scoring ex. 986-8

**Digit stand:** the subject is required to repeat for backward series of numbers. Ex. 6,4,3,9 increasing member by backward or forward.



**Similarities:** the subject is asked to identify Paris similar

**Vocabulary:** the meaning of the words has to be given.

**Performance intelligence test:**

Performance intelligence test has 5 sub tests

1. Picture arrangement test
2. Picture completion test
3. Object assembly test
4. Block design test
5. Digit symbol test

$$IQ = \frac{MA \text{ (mental age)}}{CA \text{ (Chronological age)}} \times 100$$

**Picture arrangement:** the subject is given mixed up sets of pictures to that tell sensible strong.

**Picture completion:** the subject should find out the missing picture.

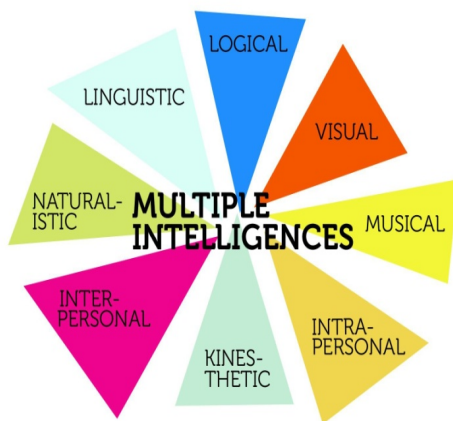
**Objective assembly:** in that are subject assemble the object to the complete one. Generally many small parts or blocks given to the individual they will arrange complete object.

**Block design:** block is a collared blocks to produced picture according to given pattern.

**Digit symbol:** it is a arithmetic procedure to find out the answer of digit value here provide correction in right side box.

### 5 Uses of intelligence test:

- a. Measuring general learning readiness
- b. To find out the differences of IQ among the children of same chronological age.
- c. To define more accurately the degree of intelligence quotient.
- d. To identify gifted children
- e. For educational and vocational guidance
- f. For study of mental growth
- g. For homogenous grouping



### 6 Advantages:

1. This test available in any language
2. It is an easy method of applying for all the age group.
3. It can administer in shorter from.
4. It is easy to identify prognosis of disease condition.
5. It is easy to identify prognosis of disease condition.
6. It is useful special abilities and disabilities.

### 7 Disadvantages of intelligence test:

- Limits children by putting them into stereotyped categories.
- Does not allow kids to be creative.

### 8 Conclusion

The WISC and stand ford – Z Binet are the most popular tests. They are regularly used by educational psychologists. Individual tests which can be administrated only by high trained persons

### References

- [1] Jacob Anthikad Psychology for nurses. 2nd edition.2001. Jaypee Publishers. Page number:68-70
- [2] S.K Mangal. General Psychology. 2004. Sterling Publishers. Page number:76-78
- [3] Charles E.Skinner Educational psychology. 4th edition. 2002. Prentice Hall India publishers. Page number: -280-282
- [4] SaiMadhu.K Textbook of Psychology & Sociology for nurses.1st edition.2002 Vijayam Publishers. Page number:60-62
- [5] Clifford T. Morgan Introduction to Psychology.2006.Tata McGraw Hill publishers. Page number:36
- [6] R. Sreevani Psychology for nurses.2nd edition.2007.Jaypee Publishers. Page number:92
- [7] Sudha.R Nursing Education Principles and Concepts.1st Edition.2013.Hariyana. Jaypee Publications.P.P.203-05.
- [8] Hasan Adeeb Jafri published in English, on may 18th 2018.
- [9] <https://www.slideshare.net/HasanAdeebJafri/types-of-aptitude-tests>
- [10] Manjula Naicker education and technology published on October 12th 2012.
- [11] <https://www.slideshare.net/manjunaicker/aptitude-test-9662708>