## **Intelligence**

#### introduction:

Intelligence is one of the most talked-about subjects in psychology, but no standard definition exists. Some researchers have suggested that intelligence is a single, general ability. Other theories of intelligence hold that intelligence encompasses a range of aptitudes, skills, and talents.

Intelligence, a central concept in psychology, is a multifaceted construct that extends beyond a single definition. It's typically characterized as the ability to learn, understand, and apply knowledge, as well as the capacity to solve problems and adapt to new situations.

Historically, intelligence has been quantified through the Intelligence Quotient (IQ) test, which primarily assesses logical-mathematical and linguistic abilities. However, this approach has been critiqued for its narrow perspective, as it may overlook other significant aspects of intelligence.

#### **1- Definition:**

In the APA Dictionary of Psychology the intelligence is define as: "the ability to derive information, learn from experience, adapt to the environment, understand, and correctly utilize thought and reason. See also IQ; measures of intelligence"

espite substantial interest in the subject, there still isn't a consensus among experts about the components of intelligence or whether accurate measurements of intelligence are even possible.

Although contemporary definitions of intelligence vary considerably, experts generally agree that intelligence involves mental abilities such as logic, reasoning, problem-solving, and planning. Specifically, current definitions tend to suggest that intelligence is the ability to:

- **Learn from experience**: The acquisition, retention, and use of knowledge is an important component of intelligence.
- **Recognize problems**: To use knowledge, people first must identify the problems it might address.
- **Solve problems:** People must then use what they have learned to come up with solutions to problems.

#### 2- Characteristics of Intelligence:

Intelligence grows during the first five years of the child's life rapidly, and then stops at the age of sixteen to eighteen to twenty.

Intelligence may stop at this age and remain constant, and may increase with the activity of the intellectual person, and may decrease with progress in time if a person stops learning, and does not practice intellectual activities.

Intelligence is influenced by genetic factors. When the parents are intelligent, the IQ of the child is increased. But this is also affected by the surrounding environment; the environment that encourages intelligence must be provided.

Intelligence is not one of the instinctive habits in man. Some believe that intelligence is learning and learning is instinctive, but the concept of intelligence is broad and learning is part of it.

Development and change is accepted in intelligence when appropriate activities are available.

The characteristics of intelligence may include:

- ☆ Intelligence is the capacity of a human being or the power of the human brain.
- ☆ Intelligence is a group of multiple forces in the overall form of truth.
- ☆ Intelligence is the power of good responses from the point of truth.

- ☆ Intelligence is the ability to adapt and adjust to a new situation.
- ☆ Intelligence is the ability of abstract thinking and problem-solving.
- ☆ Intelligence means all-round mental efficiency and includes all the qualities in the mental development of an individual.
- A Intelligence is the ability to learn from past experiences and use past experiences profitably.
- ☆ Intelligence is one of the factors contributing to an individual's achievement, adjustment, and character-building but it is not a guarantee against abnormal behavior, backwardness, and delinquency.
- ☆ Intelligence is not knowledge, despite the fact that the acquisition of knowledge depends to a large extent on intelligence.

# **3- types of intelligence:**

Howard Gardener, an American developmental psychologist, has described 9 types of intelligence:

- 1. Naturalist Intelligence.
- 2. Musical Intelligence.
- 3. Logical-Mathematical Intelligence.
- 4. Existential Intelligence.
- 5. Interpersonal Intelligence.
- 6. Bodily-kinesthetic Intelligence.
- 7. Linguistic Intelligence.
- 8. Intra-personal Intelligence.
- 9. Spatial Intelligence.

#### **4-Measuring Intelligence:**

The goal of most intelligence tests is to measure g, the general intelligence factor. Good intelligence tests are *reliable*, meaning that they are consistent over time, and also demonstrate *construct validity*, meaning that they actually measure intelligence rather than something else. Because intelligence is such an important individual difference dimension, psychologists have invested substantial effort in creating and improving measures of intelligence, and these tests are now the most accurate of all psychological tests. In fact, the ability to accurately assess intelligence is one of the most important contributions of psychology to everyday public life.

It is important that intelligence tests be standardized on a regular basis, because the overall level of intelligence in a population may change over time.

Once the standardization has been accomplished, we have a picture of the average abilities of people at different ages and can calculate a person's mental age, which is the age at which a person is performing intellectually. If we compare the mental age of a person to the person's chronological age, the result is **the intelligence quotient (IQ)**, a measure of intelligence that is adjusted for age. A simple way to calculate IQ is by using the following formula:

### IQ = mental age $\div$ chronological age $\times$ 100.

Thus, it was classified that the percentage must be according to the following categories:

- Genius: 140 and above.
- Very intelligent (120-140)
- Intelligent (110-120)
- Normal Medium (90-110)
- Borderline category (70-90)
- Mentally retarded age 70 or younger.