

INTELLIGENCE AND PERSONALITY

Intelligence

Among the millions of species that exist on the earth, the **human being** is said to be superior and exclusive (separate) because of its **reasoning** of distinguishing between **right** and **wrong**. The ability to **adapt** to the environment with and to **master situations**, understanding, ability to **command** and capacity to carry on **difficult tasks** by learning and putting the past experience to the most **beneficial** use. This quality, which we describe as **intelligence** is found in different degrees in different human beings.

Definitions:

Intelligence is the ability of an individual to make profitable use of **past experience** –
Thorndike

Intelligence is the ability demanded in the solution of problems, which require the comprehension, and the use of symbols – **Gurprett**

Intelligence is the ability of an individual to adjust himself to the conditions that arise in his environment – **Brown**

Intelligence is the ability to adopt oneself to judge well, understand well, reason (think) well and act well – **Binet**

Intelligence is the organization of abilities to learn a group of facts with alertness and accuracy to exercise mental control and display flexibility in seeking the solution of problem – **Skinner**

Concept of Intelligence Quotient (IQ)

In 1912, William Stern, a German psychologist, devised the concept of Intelligence Quotient (IQ). The IQ is the ratio between the individual's mental age and her/his chronological age. In order to avoid fractions, the ratio is multiplied by 100.

$$IQ = \frac{MA \times 100}{CA}$$

Mental Age (MA): It is a measure of a person's intellectual development relative to people of her/his age group. A mental age of 12 means that a student's performance on an intelligence test equals the average performance level of a group of 12 year olds.

Chronological Age (CA): It is the biological age or actual age in year from birth. A bright student's MA is more than her/his CA; for a dull student, MA is below the CA.

Three types of Intelligence:

According to **Thorndike** intelligence is of **three** types. An **ideal person** is one who has **all** these three types of intelligence

(1) Abstract intelligence or cognitive ability:

1. Abstract means which is not physically existing e.g. alphabets, numbers etc.
2. It is the ability to understand and deal with verbal and mathematical symbols
3. Of the three abilities **abstract intelligence** is one that receives greatest weight and almost pronounced as a correct test of intelligence
4. It is also the ability of manipulating ideas and relationships and more concerned with understanding abstract things
5. **Philosophers** and **Professional people** are high in abstract intelligence e.g. vocabulary, language, relational concepts etc.

(2) Concrete intelligence or mechanical intelligence or motor ability:

1. Concrete means which is physically existing e.g. implement, object etc
2. It is the ability to understand and deal with things or objects etc., and more concerned with the physical skills of individuals
3. **Industrial and building traders** are high in mechanical intelligence e.g. problem solving skill and manual skills

(3) Social intelligence or social ability:

1. It is the ability to understand and deal with persons
2. It is the ability to understand and apply psychological principles of human relationships
3. **Salesmen, politicians, leaders** possess this intelligence e.g. association with people and empathy (understanding people by taking their conditions mentally)

Factors affecting Intelligence:

G.Brown a psychologist pointed out that, there are numerous factors which directly or indirectly affect the intelligence or abilities of the individual and which make up the behaviour pattern of the individual.

Important factors that affect the Intelligence:

1. **Heredity and environment:** heredity provides the physical body to be developed with certain inherent capabilities while environment provides maturation and training of the organism. Newman concludes that the variations in I.Q. or intelligence were determined about 68 % by heredity and 32 % by environment. It means that 68 % of intelligence of the individual comes through heredity and 32 % by environment.

2. **Age:** The intelligence is maximum at 20 years and remains relatively stable if health and other factors do not interfere, until around 70 years when it rapidly decreases due to decline in physical efficiency.

3. **Health and physical development:** Health and physical development are directly related to mental activity. Physical and physiological defects result in sub-normal intelligence or less intelligence.

4. **Race:** As it is race has no influence over the intelligence but certain races which are socio-economically and culturally weak show marginal effect on intelligence.

5. **Sex:** Not much difference is noticed as per the sex of the individual. According to Crow and Crow males are slightly superior than females in questions that involve mathematical material and scientific concepts or in performance of certain scientific tasks (work related to science) and girls excel that deal more directly with the humanities (languages, literature, philosophy, fine arts, history etc.).

6. **Culture:** Culture also influences the intelligence of the individual to some extent. Sternberg's notion of contextual or practical intelligence implies that intelligence is a product of culture. In technologically advanced societies, persons are well-versed in skills of attention, observation, analysis, performance, speed, and achievement orientation due to the adoption of child rearing practices that foster these types of skills. Therefore, the test in this respect should be standardised from one culture to another culture.

7. **Social and Economic Conditions:** if these conditions are good then physical development and mental development will also be fairly good and intelligence will be better.

Personality

Definitions

Personality is that which makes one effective, or gives one influence over others. In the language of psychology it is one's social stimulus value. (May, M.A.)

A man's personality is the total picture of his organized behaviour, especially as it can be characterized basis fellow men in a consistent way. (Dashiell, J.F.)

Our personality is the result of what we start and what we have lived through. It is a 'reaction mass' as a whole.(Watson, J.B.)

Personality is the dynamic organization within the individual of those psychological systems that determine his unique adjustments to his environment. (Allport, G.W.)

Concept of Personality

Personality is the total quality of an individual. The word personality comes from the Latin word '*persona*' which means the mask worn by players in the theater. Personality consists of observable behaviour. It is defined as an individual, typical or consistent adjustment to his environment. The elements of personality are called the traits of personality; it is the traits that make one person different from another person in his behaviour. Shyness and sociability are different traits and characteristic of an individual. All characteristics which an individual possesses are his powers, needs, abilities, wants, habits, his goal and aspirations. His patterns of behaviour to objects and persons continue his personality. Since an individual is a bundle of characteristics as traits we can define personality as an integrated pattern of traits.

According to **Worth**, one's personality is made up of high physique, instincts, and intelligence.

1. Material self (his body, clothes, family property etc.)
2. Social self (his home, club, office, church etc.)
3. Spiritual self (his ability to argue and discriminate consciousness, moral sensitivities).

TYPES OF PERSONALITY

Jung classified individual into two psychological types – introvert, extrovert, and ambivert was added later on, as all individuals could not be fitted in only these two types.

Introvert An introvert limits his acquaintance to a few. This person is very conservative and suspicious of the motives of others. He is not social and prefers to remain in the background on certain occasions. He avoids embarrassment and public speaking. He is

very reserved, self-centred, introspective, absent minded, remains worried and is always day dreaming. He is generally slow and hesitant to take the initiative. Philosophers, poets, and scientists are generally introverts.

Extrovert An extrovert is socially adaptable and interested in people. He likes to make friends and very soon creates a circle of friends around him. He prefers working in company with other people, is talkative and fond of talking. He is self assertive and generally takes things lightly. He never feels embarrassed. He has a keen sense of observation and is attentive. Reformers and social workers are generally extroverts.

Ambivert Ambivert types are placed in between extrovert and introverts. Their behaviour is balanced. Their psychic energy is partially directed inwards and partly outwards. They are interested in their own thoughts and emotions and also in other persons and their action. Most of us belong to ambivert type.

Measurement of personality

The measurement of personality serves both the criterial and practical purposes. When an individual who has difficulties of personnel adjustment comes for help to a psychiatrist, it is valuable to assess his personality. To measure the personality we have to measure the trails of personality. It is possible to measure needs, attitudes, interests, values and other personality characteristics also. The following methods have been used for measuring personality characteristics.

1. The questionnaire method

This method involves the preparation of a list of questions or statements. Each one is concerned with some aspect of the feeling, attitude, habit or mode of behaviour related to the personality characteristic which is intended to be measured. The respondent is required to indicate his agreement or disagreement, acceptance or rejection, affirmation or denial of each statement. The questions are constructed in such a way that the affirmation of some and the denial of others express the presence of the trait that is measured. Each question is followed by 'Yes', 'No', 'Untrue', 'Doubtful' or other similar responses. Here the respondent under line a response that shows his character.

Example:

- i. In social gatherings, I like to be the centre of attention.
- ii. In a meeting, I prefer to occupy a back seat.
- iii. When you have to make an important decision, do you prefer someone else to decide for you?

Usually a personality test contains 30-50 items. This questionnaire method is also called objective test of personality. In this method the respondent should be truthful and very frank.

2. Projective Tests

Projective tests are so named because they induce the individual to project to put himself into the test situation or to identify with the person therein and by telling about them, to reveal his own motives, attitudes, apprehensions and aspirations. The use of projective test is based on the mechanism of projection. The projective test is a device for measuring the personality which the person tested does not recognize as such. He makes spontaneous responses in the test. The test presents a highly ambiguous situation which the tests is required to perceive and describe. The situation has no definite characteristics and on different persons perceives it in different ways. In perceiving the ambiguous situation, each person reflects his own needs, attitudes, habits, interests, and feelings and behaviour patterns. The projective method is called projective because in perceiving and describing the situation, a person brings out his personality characteristics. Two well known projective tests are (1) Rorschach Inkblot Test and (2) Thematic apperception Test.

a) Rorschach Inkblot Test

Rorschach test was introduced by Hermann Rorschach. So the test was called after his name. This is most widely used test. It was first described in 1921 by Hermann Rorschach, a Swiss psychiatrist. Rorschach test consists of 10 cards, each one having an inkblot on it. Some blots are coloured and some are in black and white. These cards are presented in regular serial order. The inkblot does not represent any subject. It is ambiguous or unstructured figure. The ambiguity of the blot results in the great variety of responses it produces. Such an inkblot is placed before the subject. He is asked to describe what he sees. He is also required to say in what portion he sees and what makes him see the object that he describes. His responses are noted and classified under different categories. These responses differ from person to person. Some respond to the whole figure, some to the parts of the figure. Some respond to form a shape, some to colour or the white space between the coloured or black patches. Some see moving and others stationary objectives. Some see human figures or parts of human body. Others see animals. Classification of the responses made to the 10 cards by a subject shows that certain types and categories are made consistently. These responses are interpreted as indicating the personality characteristics of the respondent.

b) Thematic Apperception Test (TAT)

This TAT is also widely used projective Test. This TAT was first given by Murray. This test consists of 20 pictures. Each picture contains one or more persons in very ambiguous situations. For example, in one picture a very old woman is standing behind a young woman looking very serious. The subject is asked to write a story on each picture. The story should have a theme. It should say what is happening, and what is going to be the outcome or result.

In writing a story, the subject is expected to identify himself unconsciously with a character in the story. The story thus express out his own needs and frustrations, feelings and attitudes, ideas of self and of others, real or imaginary and so on. One cannot get clue about the characteristics of the subject from a single story. When one finds the recurrence of the same or similar characters, expressing similar feelings and attitudes, entertaining similar hopes and fears etc., one may be led to think that the stories reveal the person's own characteristics.

3. Personality rating

In this method one person judges or rates the characteristic of another person. The person who judges is the rater and the person who is judged is the rate. The basis of the rating is the rater's general impression drawn from his observation of the behaviour of the rates in a variety of related situations. For example, a class teacher may be asked to judge such personality characteristics of his pupils as orderliness, punctuality, industriousness, cooperativeness etc. The teacher may be asked to express his rating on each trait by locating the position of each pupil on a so called rating scale.

Example of a rating scale

Punctuality				
5	4	3	2	1
Always in time	Generally punctual	Sometimes punctual	Generally unpunctual	Never in time

If the teacher feels that the student is highly punctual he would place him at the left end of the scale and give him the score of 5.

4. Situational test

In this situational test, a person is required to act in a situation which is specially arranged for the purpose of testing. The tester observes the behaviour of the testee while he is acting in the situation. Generally the testing is done in a group. For example, a

party of 10 students is taken out and camps at the foot of hill. The students are given some cash. They are asked to plan and arrange for preparing their lunch. In this they will discuss and plan to report lunch. The teacher who accompanies them observes the behaviour of each and come to the conclusion regarding their personality character.

5. Interview

Interview is one of the methods to assess personality. The interview is a face to face situation consisting of the interviewee makes free and frank responses. The interviewer should win the complete confidence of the interviewee. He should establish with the interviewee of a relation of cordiality, warmth and responsiveness. Such a relation has been called 'rapport' without a rapport no psychological interview can be success.

Factors Affecting Personality

An adult's personality is now generally considered to be made up of hereditary and environmental factors and moderated by situational conditions.

Heredity

It refers to those factors that were determined at conception. Physical stature, facial attractiveness, gender, temperament, muscle composition and reflexes, energy level, and biological rhythms are characteristics that are generally considered to be either completely or substantially influenced by who your parents were that is by their biological, physiological, and inherent psychological makeup. The hereditary approach argues that the ultimate explanation of an individual's personality is the molecular structure of the genes, located in the chromosomes. Evidence demonstrates that traits such as shyness, fear, and distress are most likely caused by inherited genetic characteristics. It suggests that some personality traits may be built into the same genetic code that affects factors such as height and hair colour. If personality characteristics were completely dictated by heredity, they would be fixed at birth and no amount of experience could alter them. For example, if you were relaxed and easy going child, it would be result of your genes, and it would not be possible for you to change those characteristics. But personality characteristics are not completely dictated by heredity.

Environment

Environment to which we are exposed plays a substantial role in shaping our personalities. For example, culture establishes the norms, attitudes, and values that are passed

along from one generation to next and create consistencies over time. The environmental factors that exert pressures on our personality formation are culture in which we raised, our early conditioning, the norms among our family, friends, social groups, social interaction, etc that we experience. Both heredity and environmental factors are important determinant of human personality. Heredity sets the parameters or outer limits, but, an individual's full potential will be determined by how well s/he adjusts to the demands and requirements of the environment.

Situation

It influences the effects of heredity and environment on personality. An individual's personality, although generally stable and consistent, does change in different situations. Situations seem to differ substantially in the constraints they impose on behaviour. Some situations (e.g., employment interview) constraints many behaviour; other situations (e.g., a picnic in a public park) constrain relatively few.