

Class : 12th

Subject : Psychology

Chapter : 1

Chapter Name : Variations in Psychological Attributes

Q1 How do psychologists characterise and define intelligence?

Answer. Intelligence is basically to know how one person is different from another person and how their behaviour changes to the environment. We also define intelligence as the ability of a person by checking or analysing their aptitude, reasoning, logical questions, etc.

But in psychology, it's quite a different notion. In Psychology, we perceive a person's intelligence on the basis of their mental alertness - how they learn something, their memory power - how they are just in a relationship, how they understand relationships - these all awesome examples of intelligence on which parameter we analyse.

There are different theories of intelligence and Alfred Binet was one of the four psychologists who worked on intelligence and defined

intelligence. Every psychologist characterized intelligence in their own way.

Like there is 'uni or one factor theory of intelligence' and the other is 'two factor theory' which was given by Charles Spearman in 1927. He talked about g factor and s factor, where g is general factor and s is specific factor.

Psychologist, Howard Gardner proposed the theory of multiple intelligence in which he described a type of intelligence that is linguistic, logical, mathematical, spatial (skills in forming visual images and patterns), musical, bodily kinesthetic, interpersonal, intrapersonal, naturalistic.

As well as Robert Sternberg in 1985 gave Triarchic theory of intelligence in which componential intelligence, experimental intelligence, contextual intelligence was there how psychologists define intelligence and characterize in different ways.

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Q2 To what extent is our intelligence the result of heredity (nature) and environment (nurture)? Discuss.

Answer. Intelligence is the result of heredity and environment both . As we see most of the things we have in our daily routine because of our genes. Heredity plays an important role in our intelligence because our sitting posture, walking style, and eating habits are similar to our parents. For example if you are eating in a good manner or something that is different from normal behaviour is somehow we have because our genes that are intelligent are the result of heredity (nature).

Environment gives a lot of information on knowledge that we had not known before. When we are surviving all living in an environment we come to know learn different things full stop for example child goes to playground he plays with children that time you only loans that game just because his friends told him how to play that practicing make him better in that game for sometimes their friends tell him how to play better that time environment plays role in his intelligence that how the child receive or memorize or understand that trick which was told him by his friends.

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Q3 Explain briefly the multiple intelligence identified by Gardner.

Answer. Howard Gardner proposed the theory of multiple intelligence. He defines intelligence that covers various areas. According to him, all these areas for different types of intelligence are independent of each other. It means, if one type of intelligence is high that doesn't mean it affects the other type of intelligence that makes them low or high.

He gave intelligence 8 types. These are:

1. Linguistic  
Skills involved in the production and use of language. It means having a person speak so uses language and his ability to express thinking and understand others.
2. Logical mathematical  
Skills in scientific thinking and problem solving. It means how a person is able to solve mathematical problems.
3. Spatial  
Skills informing visual images and patterns. It means how a person is able to form images in the mind after listening to a word for example pilots, sailors,etc.
4. Musical

Sensitivity to musical rhythms and patterns.

It means how a person is able to produce musical patterns.

5. Bodily-Kinaesthetic

Using whole or portions of the body flexibly and creatively. It means how a person is able to use their whole body like sports, gymnasium, etc.

6. Interpersonal

Sensitivity to subtle aspects of others Behaviour. It means the skill of understanding the feelings for the person so that will make their born into a comfortable relationship.

7. Intrapersonal

Awareness of one's own feelings, desires. It means how a person uses knowledge effectively that relates to others.

8. Naturalistic

Sensitivity to the features of the natural world. This involves the knowledge and awareness of the bond with the natural environment.

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Q4 How does the Triarchic theory help us to understand intelligence?

Answer. Robert Sternberg in 1985 proposed triarchic theory of intelligence. Sternberg's views on intelligence as "the ability to adapt to shape and select environment to accomplish one's goals and those one's society and culture".

Three basic types of intelligence; componential, experimental and contextual.

1. Componential intelligence : it is also called analytical intelligence. This type of intelligence checks the ability to solve problems.
2. Experimental intelligence: it is also called creative intelligence. This intelligence is using past experiences to solve problems.
3. Contextual intelligence: it is also called practical intelligence. It includes the capability to deal with environmental needs in daily routine. It may be called street smartness or business sense.

Sternberg's theory of intelligence represents the information process approach to understand intelligence.

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Q5 "Any intellectual activity involves the independent functioning of these neurological systems". Explain with reference to the PASS model.

Answer. This model has been developed by J.P. Das, Jack Naglieri, and Kirby(1994). PASS model includes :

Here, P refers to Planning ; It is one of the important features of intelligence. Information is given and processed, then planning is initiated. It relieves us to think of possible trials of action so that we can apply them to reach our goal and then analyse their result.

For example: When your family decides to visit for a trip. You start packing your bags before one day. That means, you start planning what type of clothes you want there , what eatables you want to have with you, what kind of footwear you want to carry with yourself .This is how we plan when we get the information of a trip.

A refers to attention. It helps to attend to a particular subject of stimuli. It includes when we give attention to a particular situation so that we are unable to process information.

For example: if mother told us to pack a bag for the trip immediately we start thinking about clothes, where is our bag which we want to carry , where were footwears kept.

S refers to Simultaneous and successive processing : when we collect the information inter knowledge system either simultaneously or successively. Information is collected in strike to that part which makes our mind that we are already known by it.

Example: If mother asks you to pack your bag but she explained to you that don't leave necessary things here. Then you start thinking one by one what you want there and what you have, i.e., processing items in your mind what you need.

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Q6 Are there cultural differences in the conceptualization of intelligence?

Answer. There are so many tests for intelligence to assess people's ability. There are so many cultures but intelligent tests work the same as one culture to another. Only the basic difference, what the result comes after applying for the test will be different because every culture has

different norms, different habits, different lifestyles, etc. which differences in the results. As we grew up in different cultures. Within different cultures from one another that will vary in the result of intelligence test.

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Q7 What is IQ? How do psychologists classify people on the basis of their IQ scores?

Answer. IQ means Intelligence Quotient. In 1905, Alfred Binet and Theodore Simon made the successful attempt to formally measure intelligence.

$$IQ = (MA \div CA) \times 100$$

IQ -intelligence quotient

MA- mental age

CA - chronological age

Normally, IQ is distributed in the population in a way that the scores of mostly people have fallen in the middle range. Only a few people do not come under a high or low range of IQ.

- Individual variety in their intellectual ability. If the calculation of IQ person scored 90-109 comes under average level.
- If a person scores less than 90 that will come under below average.
- If a person scores more than 90 that will come under above average.

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Q8 How can you differentiate between verbal and performance tests of intelligence?

Answer.

- Verbal test intelligence wants the subject to give verbal responses whether oral or written form.
- Non verbal tests that are also called performance tests do not want the subject to give verbal responses as it is based on performance.
- Verbal tests can be administered only on literate people.
- Nonverbal can be done by anyone.
- In verbal tests written languages are necessary for answering the test.

- Written language is not necessary in nonverbal tests.

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Q9 All persons do not have the same intellectual capacity. How do individuals vary in their intellectual ability ? Explain.

Answer. Individuals vary in their intellectual ability because they brought up in different environments. Environment in which they are living is also different . As well as in what type of culture they are also different. These are such factors which may lead to different intellectual ability of people.

Intelligent quotient is a test which helps in measuring people's intelligence. On the basis of scores of intelligent tests , individuals vary in their intellectual ability.

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Q10 Which of the two IQ and EQ, do you think would be more related to success in life and why?

Answer. There is a direct connection between our IQ and our ability to succeed in life. They both are directly proportional to each other.

As we see in our school we are ranked by our CGPA. Students are also given tests that rank them against other students. Nowadays, this has become the rule, in schools without their student's rank compared to others they don't give them ranks or positions. Here, IQ is on demand but there are studies that show IQ accounts for only a little percent of success.

But when we talked about EQ, it is the most important factor of success .

- Our emotional state helps us to survive in the environment .
- We can never go beyond without our emotions to stabilize ourselves.
- If we are not able to control our emotions then what kind of IQ will be helpful.
- To reduce stress and pressure, first we have to mark up to level our EQ , only after that our IQ will help us to achieve something we want.

Here, we conclude EQ is a more important factor in how creativity is related to intelligence and how creativity is related to how IQ is.

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Q11 How is 'aptitude' different from 'interest' and 'intelligence' ? How is aptitude measured?

Answer. Aptitude refers to special abilities in a particular field activity.

Interest is the feeling that forces us to do spontaneously that desired activity.

Intelligence stability of an individual is to think clearly and function effectively in the environment.

- Interest is when we make something first priority for particular activity but aptitude is the ability to do that activity.
- Intelligence is what we are able to do in the air of what we are capable of doing but aptitude is when a person is skilled in a particular type of area.

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Q12 How is creativity related to intelligence?

Answer. Creativity is what we do something different from others but better.

Example: There is a girl named Alice who works at home and she is also intelligent in the academic area also.

There is a girl named Rihanna who helps her mother at home . She is average in academics but she is a very good volleyball player and also participated in a very high level of competition.

That means, the prior one is intelligent, i.e., Alice.

But in the case of Rihanna she is doing well with her mother also in academics but her intelligence helps to make a creative as are she interested in volleyball . So this is how creativity relates to intelligence.

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