

## L- 9- Psychology – Consciousness

**Consciousness** : - is the individual's awareness of external and internal stimuli – that is , of events in the environment and of body sensations , memories , and thoughts.

The function of Consciousness are : -

1 – Monitoring ourselves and our environment so that percepts , memories , and thoughts are represented in awareness .

2 – Controlling ourselves and our environment so that we are able to initiate and terminate behavioral and cognitive activities .

Preconscious memories: - are memories that accessible to consciousness , so memories of personal events and accumulated knowledge which are accessible but not currently part of one's consciousness , events that affect behavior even though we are not aware of perceiving them, influence us subconsciously .

According to psychoanalytic theory , some emotionally painful memories and impulses are not available to consciousness because they have been repressed – that is diverted to unconscious , Unconscious thoughts and impulses influence our behavior even though they reach consciousness only in indirect ways – through dreams , irrational behavior and slips of tongue ( unintentional remarks that are assumed to reveal hidden impulses ) .

Automaticity refer to the habituation of responses that initially required conscious attention , such as driving car .

Sleep an altered state of consciousness , is of interest because of the rhythms evident in sleep schedules and in the depth of sleep . the rhythms are studied with the aid of EEG , patterns of brain waves show four stages ( depth ) of sleep called Non – rapid eye movements sleep ( NREMs) plus a fifth stage characterized by rapid eye movements ( REMs) , these stages alternate throughout the night , Dreams occur more often during REM sleep than during other four stages ( NREM sleep ) .

The opponent – process model of sleep proposes that two opposing processes – the homeostatic sleep drive and the clock – dependent alerting process – interact to determine our tendency to fall asleep or remain awake . Whether we are asleep or awake at any given time depends on the relative forces exerted by the two processes .

There are a variety of sleep disorders including sleep deprivation , insomnia , narcolepsy and apnea .

Dreaming is an altered state of consciousness in which picture stories are constructed based on memories and current concerns , or on fantasies and images .

Freud attributed psychological causes to dreams distinguished between their manifest and latent content and suggested that dreams are wishes in disguise . Other theories see dreaming as a reflection of information processing that the brain is doing while asleep .

Recently some theorists have concluded that dreaming is a cognitive process that reflects the individual's conceptions , concerns and emotional preoccupations .

## Intelligence :-

There are many different definitions of intelligence . Some theorists view it as what intelligence tests measure . Others view it as a set of general abilities , including the ability to learn from experience, think in abstract terms and deal effectively with one's environment .

A good test of intelligence must be reliable – it yields reproducible and consistent , alternate form reliability is shown when two forms of a test correlate highly with each other , A test has good internal consistency when various items on the test are correlated highly with each other , when more subjective assessments are used , judges rates the answers of respondents and the researcher hopes to see interjudge reliability or interrater reliability .

A test has good validity if it measures what it is intended to measure . criterion or empirical validity is shown when the test is highly correlated with another test of the same construct . construct validity is shown when the scores on the test predict the outcomes that the researcher's theory suggests it should predict . The first successful intelligence tests were developed by the French psychologist Alfred Binet , who proposed the concept of mental age . A bright child's mental age is above his or her chronological age , a low child's mental age is below his or her chronological age . The concept of the intelligence quotient ( IQ) the ratio of mental age to chronological age multiplied by 100 , was introduced when the Binet scales were revised to create the

Stanford - Binet . many intelligence test scores are still expressed as IQ scores , but they are no longer actually calculated according to this formula .

Both Binet and Wechsler , the developer of the Wechsler Adult Intelligence Scale ( WAIS) assumed that intelligence is a general capacity for reasoning . Similarly , Spearman proposed that a general factor ( g ) underlies performance on different kinds of test items . Factor analysis is a method for determining the kinds of abilities that underlie performance on intelligence tests .

Theories of intelligence : -

1- Gardner's theory of multiple intelligences suggests that there are seven distinct kinds of intelligence that are independent of one another each operating as a separate system or module in the brain according to its own rules These are 1 – linguistic , 2 – musical , 3 – logical – mathematical , 4 – spatial , 5 – bodily – kinesthetic , 6 – intrapersonal , 7 – interpersonal .

2 –Anderson's theory of intelligence suggests that differences in intelligence result from differences in the basic processing mechanism that implements thinking which in turn yields knowledge .

3 – Sternberge 's triarchic theory has three parts or subtheories ; the componential subtheory which deals with thought processes , the experiential subtheory which deals with the effects of experience on intelligence , the contextual subtheory which considers the effects of the individual's environment and culture , According to his componential subtheory , three components of thought are critical in intelligence , 1 – metacomponents or analytic abilities , 2 – performance components or creative abilities , 3 – knowledge-acquisition components or practical abilities .

4 – According to Ceci's bioecological theory of intelligence , everyday or real-world intellectual performance cannot be explained by IQ alone or by some biological notion of general intelligence , instead , it depends on the interaction between multiple cognitive potential with a rich , well – organized knowledge base .

Other cultures tend to emphasize social intelligence more than Europe and North America do in addition to the cognitive skills .

Trait's Heritability :- is the percentage of the variance in any trait that is accounted for by genetic difference among the individuals in a population . it is not a fixed attribute of a trait if something happens to change the variability

of a trait in a group will also change . Heritability indicates the variance within a group , not a source of differences between groups . Heritability does however , indicate how much possible environmental changes might change the mean level of a trait in a population .