

1. Introduction

Psychology - scientific study of behavior and mental processes.

Science - is a body of systemwide knowledge gathered by observing and measuring events.

Social Science - is concerned with society and relationship among individual within a society.

Positive psychology is the branch of psychology that uses scientific understanding and effective intervention to aid in the achievement of a satisfactory life, rather than treating mental illness.

2. Method of Ψ

Research - is a systematic application of a family of method to provide trust worthy information about the problems.

Kerlinger has defined research as a systematic controlled and critical investigation of hypothetical preposition about presumed relations among natural phenomena.

Observation – careful, unbiased, systematic, examination of event or phenomena under investigation.

Research Design – is a plan structure and strategy of investigation conceived so as to obtain answer to research question.

Ex-post facto research - is a method of investigation in which investigator draws inference regarding the relationship between the variable on the basis of IV whose manifestation has already occurred. (Kerlinger)

Focus Group - *Merton* coined the term. *Kreuger* defined it as carefully planned discussion designed to obtain perception in defined area of interest in a permissive non threatening environment.

3. Research Method

Regression is a statistical measure that attempts to determine the strength of the relationship between one dependent variable (usually denoted by Y) and a series of other changing variables (known as independent variables).

Correlation is a statistical technique that is used to measure and describe the STRENGTH and DIRECTION of the relationship between two variables.

Co-efficient of Determination - is the ratio of explained variation to the total variation. The coefficient of determination is the primary way we can measure the extent or strength of association that exist between two variable.

Parametric statistical test is one that makes assumptions about the distribution of the population and associated parameters. In particular a Normal Distribution is frequently used assumption. **Non-parametric test** is one that makes no such assumptions.

A **standard error** is the standard deviation of the sampling distribution of a statistic. Standard error is a statistical term that measures the accuracy with which a sample represents a population. In statistics, a sample mean deviates from the actual mean of a population; this deviation is the standard error.

The **central limit theorem (CLT)** is a statistical theory that states that given a sufficiently large sample size from a population with a finite level of variance, the mean of all samples from the same population will be approximately equal to the mean of the population.

Growth - refers to actual biological or quantitative increase in size such as enlargement of bodies or its component part by an increase in number of cells.

Developmental Task - is a task which arises at or about certain period in the life of individual, successful achievement of which leads to happiness and to success with later task while failure leads to unhappiness and difficulties with later task. (*Havighurst*)

Socialization - is a lifelong process of shaping individual's social tendency so that he remains useful and productive member of his society.

5.Sensation, Attention & Perception

Perception - the process by which sensory cues and relevant past experiences are organised to give most structured and meaningful picture under possible circumstances.

Schema - mental representation of knowledge about the world.

Illusion - instances in which perception yields false interpretation of physical reality.

Constancies - the tendency of object to be perceived in the same way despite wide variation in the physical stimuli.

Perceptual Organisation - the process by which we structure the input from our sensory receptor.

Figure Ground Relationship - our tendency to divide the perceptual world into two distinct parts-discrete figures and the background against which it stands out.

Perceptual Defence - refer to the relative high threshold for the low value words. (*Postman, Bruner & McGinnies*)

It is the tendency of the subject to delay the perception of aversion stimulus as long as possible within the constraints of given situation.

Subliminal Perception - the registration of sensory input without conscious awareness.

Plasticity of Perception - refers to modifiability and mouldability of perception.

Attention - the process of focusing on perception so that it leads to greater awareness of a limited number of stimuli.

Attention - the process which compels the individual to select some particular stimulus, according to his interest and attitude, out of multiplicity of stimuli present in the environment. (*Sharma*)

Theories of Attention -

1) Filter/ Selection/ Bottleneck Theories

- i. *Early Selection (Broadbent)*
- ii. *Attenuation Theory (Treisman)*
- iii. *Late Selection/ Memory Selection Theory (Deutsch & Deutsch)*
- iv. *Multitude Theory (Ponser)*

2) **Capacity Theories** (Kanheman)

Vigilance - readiness to detect the signal and respond to specified environmental changes which occur at a randomly distributed intervals.

It is the ability of the observer to maintain focus of attention and remain alert to the stimuli over a prolonged period of time. (*Macworth*)

Theories of Vigilance -

1. Arousal Theory
2. Habitation Theory
3. Attention Theory
4. Expectation Theory

Pattern Recognition - process which operates between sensory registration of a stimulus and the identification of a stimulus as a whole meaningful object or event.

Theories of Pattern Recognition -

1. *Template Matching*
2. *Prototype Matching*
3. *Feature Analysis*
4. *Top Down & Bottom Up*

Sensation - the initial experience of a stimulus or an object registered by a particular sense organ.

Sensory Adaptation - refers to a reduction in sensitivity to a stimulus after constant exposure to it.

Psychophysics - is a discipline in which the relationship between the stimuli and the sensation they evoke are being studied.

Signal Detection Theory - is a mathematical model for understanding how sounds or any other stimuli are detected in the presence of background noise.

6. Learning

Learning - Relatively permanent change in behavior that occurs as a result of practice or experience.

Conditioning - condition in which associative learning takes place.

Classical Learning - a type of learning in which the stimulus acquire the capacity to elicit a response that was originally elicited by other stimulus.

Theoretical explanation of CC -

- *Stimulus Substitution Theory (Pavlov)*
- *Information Expectation Theory*

Operant/ Instrumental Conditioning - process through which organism learn to repeat behaviours that yield positive outcome or permit to avoid or escape from negative outcome.

Reinforcement - the application or removal of a stimulus to increase the strength of a specific behavior.

Positive Reinforcement - any desirable stimuli or event that follows the repose and increase the likelihood of response being repeated.

Negative Reinforcement - any aversive stimuli or event the termination or cessation of which is contingent on a response & increases the likelihood of response being repeated.

Punishment - any aversive stimulus that follow a response and decrease the likelihood of response being repeated.

Shaping - It is a process in which closer & closer approximation of desired behaviour is required for the delivery of reinforcement. The method used is differential reinforcement and successive approximation.

Chaining - it refers to linking together of sequence of behavior. The initial response in the chain provides the set of cues which become associated with and thus elicit the next succeeding response and so forth. And in this manner the whole sequence is chained off.

Discriminative Cue - Stimulus that signals availability of

reinforcement if a specific response is made.

Generalization - is the process of giving similar response to different or subtly different stimuli.

Theoretical explanation of Generalization -

- *Failure of Association Hypothesis*
- *Failure of Discrimination Hypothesis*

Theoretical explanation of Extinction -

- *Response Inhibition Theory (Hull)*
- *Competition Theory*
- *Competition Frustration Theory*

Insight Learning - learning which is said to involve perpetual reorganization; the solution comes suddenly after a period during which little progress is made.

Cognitive Learning - refers to change in way in which the information is processed as a result of the experiences the person has had or is having.

Observation learning - the acquisition of new forms of behavior, information, or concepts through exposure to others and the consequences they experience.

Discrimination Learning - is the process by which animals or people learn to respond differently to different stimuli.

Probability Learning - is said to occur if the probability with which the participant indicate that the cue will occur matches the probability with which it occurs.

Programmed Learning - it involves any machine or other device in the aid of learning. It has behavioristic underpinning with focus on task analysis and involves active participation of learner and is provided with immediate feedback.

Learned Helplessness - feelings of helplessness that develop after exposure to situations in which no effort succeeds in affecting outcomes.

Gamblers Fallacy - believing that odds for success are better after previous failures; the logic of probability says that if each event is independent, the odds are the same despite previous failure.

7. Memory

Memory - Memory is the process involved in receiving, storing, retaining, and later retrieving different kinds of information.

Forgetting - partial or complete loss of information already encoded and stored in LTM

Theories of Forgetting -

- 1) **Trace Dependent Theories**
 - a) *Perseveration Consolidation Theory*
 - b) *Decay or Disuse Theory*
- 2) **Cues Dependent Theories**
 - a) *Interference Theory*
 - b) *Encoding Specificity Theory (Endel Tulving)*
 - c) *Motivated Forgetting theory (Freud)*
 - d) *Context & State Dependent Learning*
- 3) **Gestalt Approach to Forgetting**
- 4) **Biochemical / Biological approach to Forgetting**

Encoding - the process of receiving the sensory input and transforming into code to facilitate its storage.

Storage - the process of putting encoded information into our memory.

Retrieval - the process of getting access to the encoded and stored information.

Schema - organised set of mental representation which incorporates all our knowledge of particular objects, events or concepts. (*Bartlett*)

Theories of semantic memory

- 1) **Feature Comparison Model**
- 2) **Network Model**
- 3) **Spreading of Activation of Node**

Skagg Robinson Hypothesis - As similarity between interpolation and original memorization is reduced from near identity, retention falls away to a minimum and then rises again, but with decreasing similarity it never reaches the level obtaining with maximum similarity.

Mnemonics - is a method of remembering information that is otherwise difficult to recall.

Learning Style - learner's characteristics & consistent style of processing information of what he sees and thinks about.

Metamemory - person's general knowledge or awareness about one's memory processes as well as how one accesses one's memory ability. (*Flavell*)

People's ability to know how likely they will be able to remember something or how effective some memory strategy may be. (*Nelson & Nauns*)

Amnesia - a pathological loss of ability to acquire or recall information.

Anterograde Amnesia - new events are not transferred in LTM & as a result patient doesn't remember any events that happens after the onset of Amnesia except for a brief duration.

Retrograde amnesia - is a loss of memory-access to events that occurred, or information that was learned, before an injury or the onset of a disease.

Reminiscence is the process involved in the recall of past experiences such as early memories and anniversary events and other aspects of autobiographical memory.

8. Thinking & Problem Solving

Creativity - ability to produce novel and productive ideas or solution to problems.

Thinking - mental manipulation of symbols obtained from LTM and information obtained from the environment.

Problem - a conflict or a difference between one situation and another that we wish to produce.

Problem Solving - it is a goal driven behavior. It is an active process where the person accesses the stored information and manipulates it in order to reach the solution.

Problem Space - problem solver's inner mental representation of problem.

Set - preparatory adjustment to perform the task.

Functional Fixedness - the tendency to think of using the objects only as they have used in the past.

Algorithm - rule that when followed correctly guarantee a correct solution.

Heuristics - strategy based on past experience with the problems that are likely to lead to a solution but do not guarantee success. They are mental shortcut and are cognitively less demanding and are frequently used to solve the problem.

Judgement - is a process by which we form opinions and reach conclusion and make critical evaluation of events and people on the basis of available information.

Decision Making - refers to the process of making choices between various alternative.

Framing Effect - drawing different conclusions from the same information, depending on how the information is presented.

Availability Heuristics - a cognitive rule of thumb in which importance or probability of various element is judge on the basis of how readily they come to mind.

Representativeness Heuristics -

Anchoring bias and Adjustment Heuristics - a cognitive rule of thumb for making decision in which existing information is accepted as a reference point and then adjusted in light of various factors.

Theories of concept formation

- Reasoning** - is defined as combining past experience to solve the problem which cannot be solved by mere reproduction of earlier solutions.

9. Motivation & Emotion

Emotion - can be defined as a subjective response often accompanied by a physiological change which is interpreted in a particular way by the individual & which often leads to behavioral change.

It can be defined as a valence state that involve a person's interpretation of an immediate situation & is often accompanied by learned and unlearned physical response.

Motivation - is the combination of forces which initiate, directs and sustain behaviour towards the goal.

Stress - is a particular relationship between person & environment that is appraised by the person as taxing of exceeding his resource for coping & endangering his well being. (*Folkman & Lazarus*)

Coping - is constantly changing cognitive & behavioral effort to manage specific external &/or internal demands that are appraised as taxing or exceeding the resource of person. (*Lazarus*)

10. Intelligence & Aptitude

Intelligence - global & aggregate capacity of an individual to think rationally, act purposefully, and deal effectively with his/her environment. (*Wechsler*)

The ability to adapt, to shape and select environment to accomplish one's goals and those of one's society and culture. (*Sternberg*)

Theories of Intelligence

- i. *Spearman's Two Factor Theory* (G & S Factor)
- ii. *Thurstone Weighted Group Factor Theory* (PVSM RNW)
- iii. *Cattell's Theory* (Fluid vs Crystallized)
- iv. *Guilford: Structure of Intelligence Model* (Content - BSSF; Operation - ME CCD; Product - CITRUS)
- v. *Hierarchical Model* - Vernon ; *CHC Model*; *Jensen*
- vi. *Triarchic Theory: Sternberg* (Componential, Experiential and Contextual Sub theory)
- vii. *Theory of Cognitive Development : Piaget* (*Sensorymotor, Pre occupational, Concrete Development, Formal Development*)
- viii. *PASS Model* - Das, Kirby, Naglieri
- ix. *Multiple Intelligence Model* - Gardner

Intelligence Quotient - IQ score reflects someone's level of performance on a standardized set of tasks. These tasks are designed to be indicative of general quality called intelligence.

Aptitude - an aptitude is a combination of characteristics indicative of an individual's capacity to acquire (with training) some specific knowledge skill, or a set of organized responses, such as the ability to speak a language, to become a musician, to do a mechanical work.

Emotional Intelligence - the ability to monitor one's own and other's feeling & emotion, to discriminate among them & to use this information to guide thought and action. (*Mayor & Salovey*)

Ability to process emotional knowledge particularly as it involves perception, assimilation, understanding and management of emotion. (*Mayor & Cobb*)

Intellectual Disability - significantly *sub-average* general intellectual functioning existing concurrently with the *deficits in adaptive behaviour* & manifested during *development period*. (*AAMD*)

11. Personality

Self - refers to the totality of an individual's conscious experiences, ideas, thoughts & feelings with regard to herself or himself.

Personality - dynamic organisation within the individual of those psychophysical system that determine his unique adjustment in his environment (his characteristic behavior and thought). (*Allport*)

Personality - relatively enduring pattern of interpersonal situation that characterizes individual life. (*Sullivan*)

Locus of Control - extent to which individual feels he has control over life outcomes. It is belief that whether the outcome of one's life is contingent on what one does (internal orientation) or events outside one's control (external orientation).

Unconditional Positive Regard - is the basic acceptance and support of a person regardless of what the person says or does.

Type approach to personality - attempts to comprehend human personality by examining broad pattern in the behavioral characteristic of individual.

Trait approach - focus on specific psychological attribute in which the individual differs in consistent and stable ways.

12. Attitude, Values & Interest

Attitude - learned enduring predisposition to respond consistently either in favourable or unfavourable manner towards objects, events or person & /or class of objects, events or person. (*Newcomb*)

Attitude - are enduring organisation of motivational, emotional, cognitive & perceptual processes organised with respect to some aspect of the individual's world. (*Krech & Crutchfield*)

Theoretical explanation of Attitude-Behavior Link:

1. *Theory of Reasoned Action*
2. *Theory of Planned Behavior*
3. *Attitude as Heuristics*

Theories of Attitude Change -

- 1) *Cognitive Dissonance Theory (Festinger)*
- 2) *Consistency Theories*
 - a) *Balance Theory (Heider)*
 - b) *Congruity Theory (Osgoods, Suci, Tannenbaum)*
- 3) *Perceptual Theories*
 - a) *Self-Perception Theory (Daryl Bem)*
 - b) *Social Judgement Theory (Sherif et. al)*
 - c) *Attribution Theories*
 - i) *Naïve Psychology (Heider)*
 - ii) *Correspondence Influence Theory (Jones & Davis)*
 - iii) *Covariation Principle (Kelley)*
- 4) *Reinforcement Theory*
 - a) *Operant Condition*
 - b) *Classical Conditioning*
 - c) *Observational Learning /Modelling*

Dissonance - is a negative drive state that occurs when individual holds two or more cognition that are psychologically inconsistent and have mutually incompatible behavioral implication.

Attribution - is the process by which we use information to make inferences about the causes of behavior. It is a process of assigning reasons to the behavior of the person.

Attributional Error - people make inaccurate error when they deviate from the rules that a "pure scientist" would apply as outlined in the correspondent inference & covariance models.

Fundamental Attribution Error/ Correspondence Bias - is the tendency to make internal attribution over external

attribution in explaining the behavior of others.

Self-Serving Biases - is the tendency for people to make internal attribution to positive events but external attribution to negative events.

Actor Observer Effect - the tendency to attribute our own behavior to external causes and that of others to internal cause.

False Consensus Bias - is the tendency to believe that everyone else share their own feelings and behavior.

Confirmation Bias - the tendency to search and interpret information that confirms one's preconceptions.

Value - is a standard of behavior of a person and it is a standard towards which an individual has strong positive attitude.

Value - is anything that yields satisfaction or provides a mean of satisfaction. A value is not just a preference but infact a preference will & is considered to be justified morally or through reasoning or by esthetic judgement usually by any two of above or by all three. (*Allport*)

Interest - is liking or disliking state of mind accompanying doing of an activity or a thought of performing the activity. (*Strong*)

Interest - is the motivating force that impels us to attend to a person, a thing, or an activity or it may be an affective experience stimulated by the activity itself. (*Crow & Crow*)

Interest - is a thing that concerns us or motivates and matter to us. (*Ross*)

Prejudice - is an attitude that supports, justifies and cause discrimination. (*Rose*)

Prejudice - is failure of rationality, a failure of human heartedness, a failure of judgement in an individual's attitude towards members of other ethnic group. (*Harding et. al.*)

Prejudice - is hostility and aggression towards an individual based on his membership in a particular group. (*Buss*)

Stereotypes - cognitive frameworks suggesting that all members of specific social groups share certain characteristics.

Stereotypes - are exaggerated belief about a group based on irrational attribution.

Manifestation of Prejudice- Allport

Antilocution - Avoidance - Discrimination - Physical Attack -
Extermination
Competition - Exploitation

Causes of Prejudice -

1) ***Societal Level Explanation***

- a) *Exploitation*
- b) *Realistic Group Conflict Theory (Sherif et. al.)*
- c) *Norm Violation Theory*

2) ***Individual Level Explanation (Symptom Theorist)***

- a) *Scapegoat Theories (Frustr. Aggres. Hypo - Dollard & Miller ; Hostility Displacement Hypo - Freud)*
- b) *Projection*
- c) *Authoritarian Personality (Adorno et. al.)*

3) ***Individual Level Explanation (Socio-Cultural app.)***

- a) *Belief Incongruence*
- b) *Socialization*
- c) *Theory of Relative Deprivation*
- d) *Social Identity Theory (Tajfel)*

13. Language & Communication

Language - is a system of sounds and symbols that when combined according to some rules create meaning that are intelligible for all speakers.

Properties of Language - Displacement, Duality of Patterning, Productivity, Prevarication, Reflectivness, Learnability

Structure of Language

1) Units of Language

- a) Phoneme*
- b) Syllable*
- c) Morpheme*
- d) Sentence*

2) Rules of Language

- a) Rules of Phonology*
- b) Rules of Morphology*
- c) Rules of Syntax*
- d) Rules of Pragmatics*

Communication - is a process by which the sender reaches the receiver with thoughts, feeling, ideas and facts.

Non-verbal communication - transfer of cultural significant information from source to receiver without the actual use of words.

Persuasive Communication - refers to deliberate attempt on the part of source to influence the thought and action of the receiver. It involves a systematic effort to bring about change in the attitudes & behaviour of target group.

14. Issue & Perspective in Modern Contemporary Psychology

Altered State of Consciousness - are mental state induced by psychological, pharmacological and physiological maneuver or agent, which is recognized by the individual himself or the objective observer of the individual, as representing sufficient deprivation in subjective experience or psychological function from a certain general norm for that individual during alert or waking consciousness. (*Ludwig*)

Hypnosis - is a sleep like altered state of consciousness which occurs through non physical influence of one individual over another and where there is increased responsiveness to suggestion and command and a failure to discriminate between subjective and objective reality.

Sleep - is an ASC that we all experience characterized by reclined posture, relaxation in muscle tension and changes in the patterning of the EEG and other indicators of physiological mechanism.

Dream - refers to altered state of consciousness in which imagination is confused with reality. It refers to the train of thought passing through our mind when are asleep.

Parapsychology - is a discipline that studies that phenomenon of psi, which happens to be outside the framework of psychology.

Psi - refers to process of information or energy exchange not explicable in terms of known science.

Extrasensory Perception - refers to response to external stimuli without any known sensory contact.

Telepathy - is the ability to communicate with other person without the use of physical sensation.

Clairvoyance - is the ability to see events far away from subject through his mind without any physical means.

Psychokinesis - it can be defined as mental influence over physical events without the intervention of any known physical force.

Intersensory Perception - is the transfer of information from one sensory source to an association area where it can be

integrated with information from another sensory source.

Sensory Deprivation - is a state of perceptual isolation in which person does not receive enough information from senses to maintain normal balance.

Artificial Intelligence - is an interdisciplinary branch of Science in which psychologist study the capacity of computers to demonstrate performance if produced by the human beings would be described as intelligence.

Von Restorff effect - also known as the "**isolation effect**", predicts that when multiple homogenous stimuli are presented, the stimulus that differs from the rest is more likely to be remembered.

Zeigarnik effect - states that people remember uncompleted or a interrupted tasks better than completed tasks.

Just World Hypothesis - people want and believe that the world is basically a fair place and people get what they deserve. This lead to people to delay their gratification and work for distant goals.

Social Cognition - refers to all those psychological processes that deal with the gathering and processing of information related to social context.

Schema - a mental structure that provides a framework, set of rules or guidelines for processing information about any object.