## **PTS NOTES**

RECIPROCAL DETERMINISM = x has the power to determine y and y has power to determine x

Communication from Industrial Perspective = so that MNCs can flourish

Smart Phones = Pleasurable means (Instant Gratification)

Personality does not change rapidly

Technology has social impact on life of others, so it is no longer a neutral object. we can apply concepts of psychology on technology also. Technology has power to connect to others, so it is a social object.

Life editable in virtual world, not in real world.

Basic psychology does not change.

Reason for religious conflict ? – I am the best, not acknowledge the presence of others. Don't give space to other ideology.

Three basic needs of human:

- Need for affiliation
- Need for power
- Need for achievement

#### Attention is of two types:

- Sustained attention (selective attention )
- divided attention

What is psychology? – is the science that studies behavior and the physiological and mental processes that underlie it, and it is the profession that applies the accumulated knowledge of this science to practical problems.

What is science? – branch of knowledge or study dealing with a body of facts and truth systematically arranged.

Knowing oneself better = psychology

Scientific theory = a reasoned explanation tested by many observations and experiments.

#### Characteristics of Science:

- objectivity
- verifiability
- ethical neutrality cloning , obedience experiment
- systematic exploration
- reliability
- precise
- accuracy
- predictibility

permanent damage to self-esteem of the person = Stanford prison experiment

### Psychology is:

- uses scientific method
- is factual
- laws of psychology are universal
- laws of psychology are verifiable
- cause and effect relationship in human behaviour
- prediction of human behaviour
- ethical issues in psychological research

Conformity means = set pattern of behaviour of individuals.

#### Good science

- Science is a human endeavour
- Acceptance of scientific ideas is based on a process of publication and peer review
- Replication is also vital to good science
- Not involve many technical jargons

#### Fact vs. Opinion:

• Fact in a scientific context is a generally accepted reality. Hypothesis and theories are generally based on objective inferences, unlike opinions, which are generally based on subjective influences.

#### Bad science

- Unrealistic claims
- Small sample size
- Correlation and causation confusion
- Using too much scientific jargons words that are difficult to understand
- "Scientifically proven" or "Gauranteed results"
- No control group
- Non-replicable results

#### **Correlation and Causation:**

Correlation only talks about the relation between x and y, it does not talk about what is causing what. While in causation, we clearly know what is causing what.

Favour and familiarity goes hand in hand.

#### Social Science vs. False Science:

Psychology is a social science based on verifiable evidences and theories that are tested according to scientific method.

False Sciences, on the other hand do not rely on verifiable evidences and does not follow basic premises of scientific approach.

#### Example: Horoscope section of newspaper.

- Uncertain about of our future, our insecurities, seeing the prosperity of others, I feel I
  am unfortunate.
- Information about places where I cannot be should reach to me.

We should start restoring ourselves for objective and scientific approach to life.

Behaviour guided by mental and physiological processes.

<u>Example</u>: Lie detectors = eye ball movement, perspiration, heart rate, these are the things on which lie detector works. Two persons — lay and expert, an expert in deceiving the emotions. Lay person may be nervous, he can be proved guilty. Expert who is mastered in controlling physiological processes may come out clean chit.

### More about psychology:

- Scientific way of studying human behaviour
- Comprehensive discipline
- Uses Variety of methods to study a research question
- Pragmatic in approach: intuitive or naïve psychologist.

### Goals of psychology:

- Describe: it describes what happens in an objective manner empirical in approach (can be tested out), data driven, operational definition
- Explain = provides explanation of an event
- Predict, control and improve (enhancing quality of life).

# **COGNITION**

Cognition = knowing what I am doing

Basic difference between "person in coma" and "fully conscious" – both biologically alive, responsive, capable of receiving information from outside and responding to them

Why I am moody – is it social media, underevaluation etc. = we need to know our internal processes of mind.

Why I could not perform not well on a task – nervous, could not learn task better, underevaluation, not much effort.

Interaction is time bound between two people = first impression (behavioral unit)

Psychology do not follow stimulus and response model, we follow cognitive model.

Mediational process = we can find cost and profit of input

Quality of output depends on mediational process.

- Information from CEO to lower hierarchy = top-down
- National Educational Policy (Govt is floating) = top-down
- Recommendations to govt. = bottom-up
- Senses to mind = bottom-up
- Mind (processed, analysed, directing your behavior) = top-down

Cognition = top-down approach heavily realied on bottom-up

Person in coma = top-down is failed, bottom-up working perfectly.

When we perplexed, confused, indecisive = top-down not working perfectly. – judgement, underevaluation, social judgements

Extrovert – talkative, enjoys party, admirable by others

Cognition = includes past experience

IQ is fixed. = Genetic Contribution

Example: Mental retardation

Time management, good lifestyle and targeted practice, no procrastination = to improve cognition

Our effort = using IQ to improve our cognitive ability

<u>Example</u>: Hanuman cursed by saint, he will get back all his powers when reminded of his potentials.

Let our energy out in a constructive way.

Notion of cognition = universal

Empathy = perspective taking

In child, tongue and hand = working

Preoperational = egocentric ( world starts with him )= idea of others perspective not developed = not empathetic

Small child cannot handle abstract thinking

Scheme = A plan

Schema = Blueprint of the world that we carry in our world by interacting with environment (peer groups, school, teacher).

<u>Example</u>: day 1 not able to reach class, this experience comes with some effort since new environment was new.

<u>Assimilation = when we come across a situation same as previously we experienced, we use assimilation.</u>

Example = fitting things brought from grocery store into designated containers.

<u>Accomodation = new info that we come across</u>, we need to modify existing schema or create new schema.

Technocrat = science, maths and subjects from HSS.

Example: rigid person and person who is eager to learn

A rigid personality (fundamentalist approach) uses assimilation, looking for consistent pieces of info, ideologies that support their notion. They lack empathy as they cannot take into account feelings of others.

Fully-functionaling personality = we should question also our blueprint.

Don't fully rely on assimilation.

How to cope with disequilibrium = accommodation OR escaping (faulty strategy)

Technology follows assimilation process.

Root cause of prejudice, discrimination = assimilation since it does not allow us to see the full picture of world, cannot think contrary facts.

Reduce the anxiety, indecisiveness, confusion, conflict = psychological homeostatis (equilibrium) = uses of schema.

One of the processes in cognitive process not work = whole cognition circuit don't work.

Standard Context is being imposed = less variation in responses.

## **PERCEPTION**

Every perception starts from sensation (bottom-up approach).

How I am processing information derives our perception.

Listening = not automatic, if we focus on hearing , we get listening Hearing = automatic process

Childish = rely on making castles in air, not expected of mature person

Child-like = child is exploratory = expected of mature person

## Poll Questions:

- Psychology says most genius people are born in June , July and October = false
- Psychology is the science that studies only the behavior and not the physiological and mental processes = false
- In scientific approach, facts and truth systematically arranged = true
- Science studies correlation between variables and not causal relationship between variables = false
- Cognitive development takes place in 4 stages = true

## Role of context in perception

Mismatch between sensation and perception = optical illusion

Ambiguity = seeing one thing from different perspective

Perceptual constancy = certain things are constant, like door is door whether it is closed, open, partially open

Spotlight metaphor = only able to see things that are in spotlight on stage

Zoom lens metaphor = focus on things that we desired to capture.

Attention = zoom in perspective of the things that we like to do.

Selective attention = controlled processing (since we put our effort to focus)

Divided attention = automatic processing

Imagining = selective attention

Divided attention for complex tasks = we fail

Divided attention on things with some practice = will work

Selective attention, if we gain some expertise, use divided attention.

Multiswitching instead of multitasking = divided attention on complex processes

## **LOCALIZATION:**

Content vs. context:

Content = figure

Context = background

Syncing psychological attributes = to minimize conflicts, effective teamwork.

### Example:

Room allotted in hostel = along with my friends (law of similarity) and we need to be close to them (law of proximity).

<u>Discrimination</u> = law of similarity ( we discriminate on basis of colour, gender , caste ).

Law of closure = even though we are provided with insufficient information , we try to fill it from our side.

Example: Rumours are a case of "law of closure"

<u>Example</u>: example of perception is SOP and recommendation letters. SOP touch upon the various aspects of personality, other people make a perception about you.

Monocolour cues = important in "engineering drawing" subject, artists also use it.

# **LEARNING**

Learning can be when "there is error and trial". Past experiences not useful to decode the new situation. Learning is a behavioral phenomenon.

Physical and mental environment contributes to learning. Learning is a life phenomenon.

Why learning is relatively permanent? = good and bad, personality attributes come into picture, example of drug addicts and concept of rehabilitation centres. If it was a permanent change, there is no scope of improvement. It is also NOT a daily change. we remain the same person when we wake everybody. We can change learning if we are focused, goal oriented.

Can we change habit ? = not easy to change habit but IT CAN BE CHANGED.

Example: is it easy to approve sapling or tree = sapling is easy to be detached

<u>Doping</u> = accelerating performance temporarily in sports due to drugs.

Learning can be done by three types:

- Learning by association (Classical conditioning) = Advertisements use this (Glamarous girl in advertisement of car)
- Learning by consequences (Operant conditioning) = code of conduct and rewards in Job, Academic
- Learning by observation = Observing the consequences of others , there can be learning

<u>Serendipity</u> = results expected when "not expected"

Learning is the building block of personality.

Learning should be product of our experiences, if any change occurring due to other factor (drugs, unfair means) is not learning.

Biological maturation, we have no control over it. (so it cant be learning).

Classical conditioning = learning by association

Coca – cola = neutral stimuli

Neutral stimuli when paired with "natural stimuli" takes the power of natural stimuli. It acts as a parasite or zombie.

Illusional Correlation in case of "neutral stimuli".

If we can discriminate between neutral and natural stimuli, we can unlearn that phobia.

Fear is generated when we start associating two different things.

## **OPERANT CONDITIONING**

based on two principles = reinforcement and punishment

<u>reinforcement</u> = something that yield a pleasurable reward = example : coming first in class , birthdays

<u>punishment</u> = diminish "not socially accepted behavior".

<u>Reinforcement</u> = increase socially acceptable ( desirable ) behavior

<u>Punishment</u> = decrease undesirable behavior

Example:

Legal system = based on punishment

Q) reinforcement for undesirable behavior = antisocial behavior , Social unrest , converting people , terrorist.

BF Skinner = Operant conditioning concept developed

Why Every behavioral theory start with lower cognitive species? = easier than humans to study, they will react naturally, no "rights on lower species", highly unethical to perform experiment on humans.

<u>Example</u>: subject determines reinforcement or punishment = if we pass on easy test, not much rewarding but if fails = large punishment

#### Example:

Paying fine = negative punishment

Stopped by the cop = positive punishment

Looking at red light stopping the vehicle = negative reinforcement

Negative reinforcement = professor gives -10 marks if assignment not submitted on correct time.

Fastening the seatbelt = punishment

Classical conditioning = subconscious learning

Why reinforcement not always good?

Motivation = external and internal

External motivation = driven by rewards

Matchfixing = replaces passion with money = a good example of "bad effects of reinforcement".

Reinforcement validates the positive side of behavior.

Variable interval = incentives payment in company (they can vary).

Permanency in learning = interval