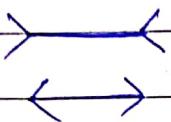


# Psychology

## → Lecture - 1

→ Mueller - Lair illusion.



→ Akin - Gauss illusion.

→ Shifford table.

→ Man - rat illusion.

→ Psychology: - the scientific study of 'mind', 'brain' & 'behaviour'.

→ Libao chaser experiment.

→ Asch experiment. — conformity.

## ⇒ Lecture - 2

→ Asch experiment — conformity.

→ Effect of conformity  on decision making / perception

→ Stereotyping — changes perception

→ Psychological analysis

Biological

Cognitive / Mental / Behaviour /  
Individual

Social level.

## Biological:

Focus: Genes, biochemistry, brain system, neurological and physiological.

## Study:

- How does social media impact brain development?
- Genetic influence on social behaviour.
- Neural responses to online peer influence and norm violation
- Are there differences in neurotransmitters when people engage in social ostracism.

- Social grouping on social media / network
- Grey matter, white matter both affected or transforms during social interactions online or offline
- Scale at which perception is affected on social media depends on the type of interaction, i.e., the number of people involved.
- Self esteem & perception changes according to our social network, with about 500 friends on Facebook as opposed to 5 friends in real life.
- Amygdala — responsible for elation
- Depressive people — low serotonin level

→ Mental / cognitive / Behaviour / Individual

Focus: Perception and Cognition, behaviour, individual differences.

Study:

...

:

:

- We are able to predict other person's behaviour
- We are able to read someone's emotions or behaviour to understand

→ Stereotyping: Automatically - than Controlled.

Study on white & Black men to be peaceful or threat.

→ Given a shooter game, shoot someone with gun? Such an experience has implied on the real world that tells us the unconscious stereotype among people.

Error rates in slides.

results skewed when white criminals are broadcast.

→ Our behaviour is very much shaped by our experiences, and depends on our individual differences.

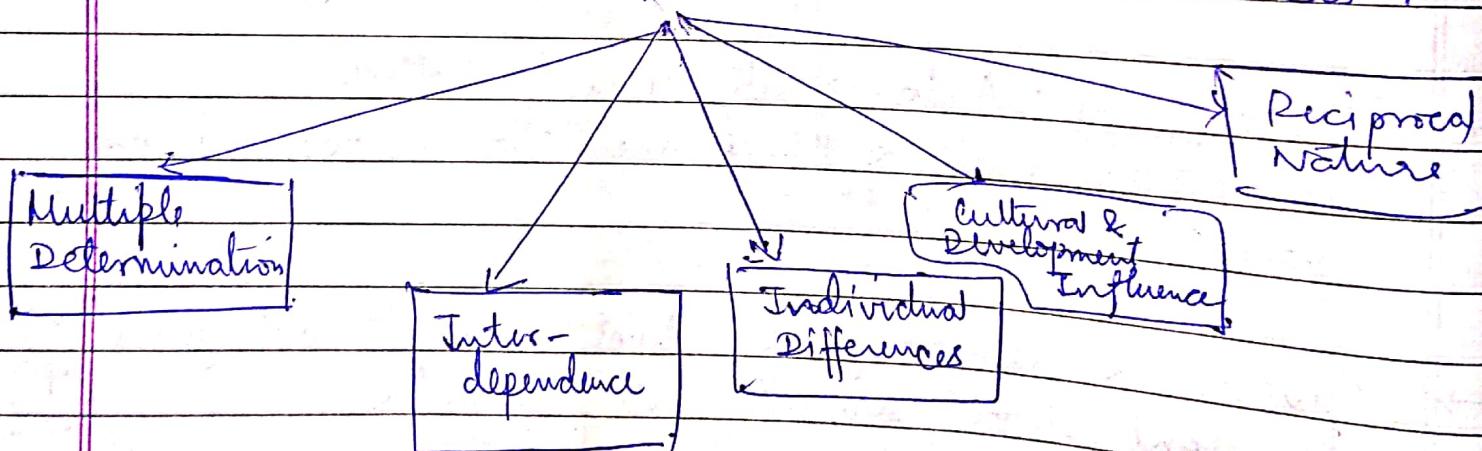
→ Social level

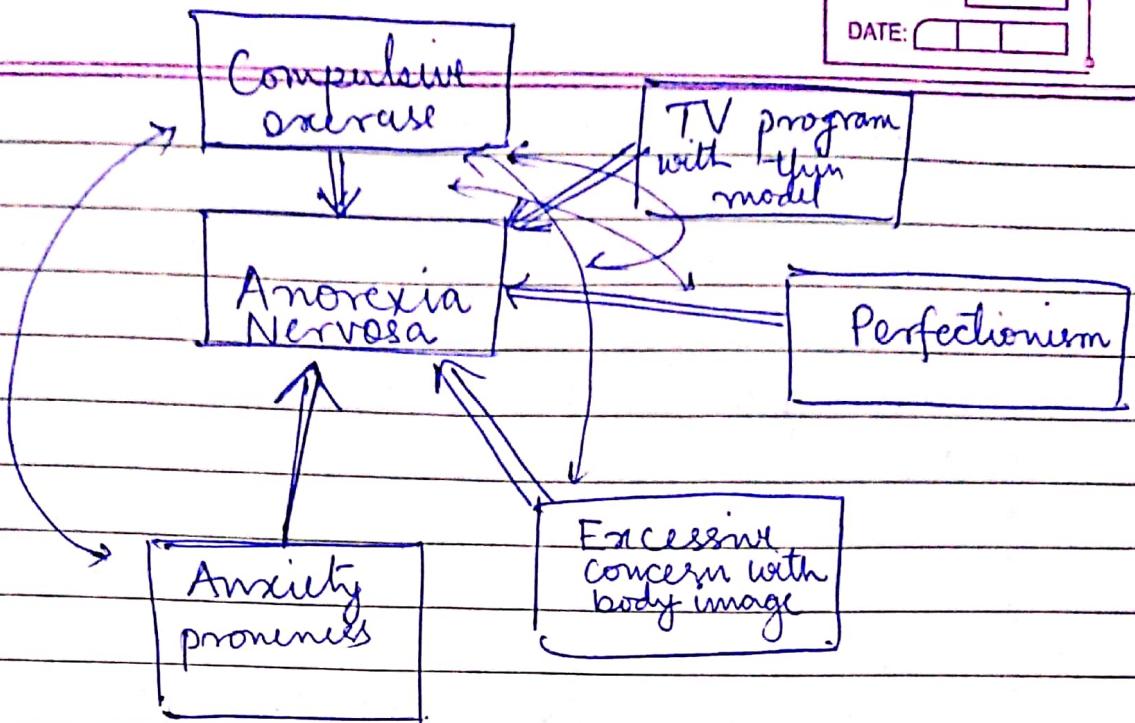
Focus: Society & Culture shape one's mind.

Study:

→ Looking at YouTube views, likes etc are factors that affect our behaviour to cause conformity, making people "correct" themselves

Why Psychology is different than other Sciences?





Attention and memory could affect functioning.

This often relates to damage to Parietal lobe, if right hemisphere is damaged, we will not be able to process info from our left. It could so much so affect our visual perception.

For example, so much so that, men may forget to shave one side, due to the damage to their Parietal lobe.

### Autism: Affects

- Sensory motor
  - Cognitive ability
  - Social interaction
- } impaired.

## Case Study : Facilitated Communication

- Extraordinary Claim : Is the evidence as strong as the claim
- Replicability
- Causality vs Correlation : Does "A" really cause "B"?

## Systematic & Controlled Approach

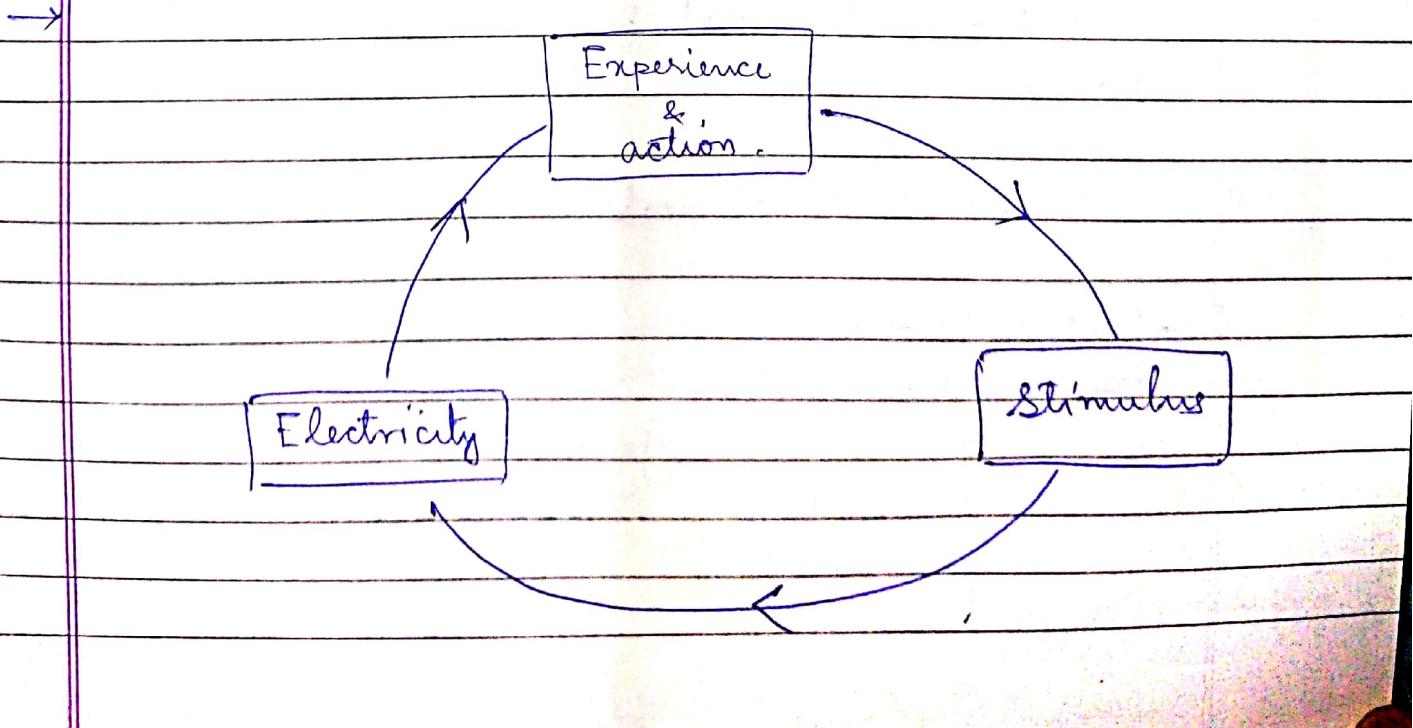
- Systematic & objective.
  - ↳ Hypothesis
- Single blind — when <sup>test</sup> subjects don't know purpose of the experiment
- Double blind — when observers don't know purpose of the experiment.

These two are methods to prevent skewed results.

## Perception

- Reality
- Virtual reality
- How do we negotiate between reality & virtual reality?
- Is ~~the~~ reality universal among all organisms?

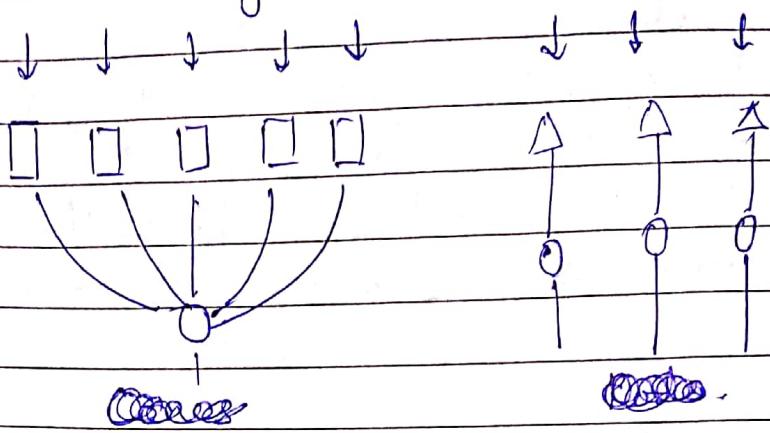
- One question is about our reaction if our body image is changed in that virtual reality.
- Experience through our sense. How this conscious experience is different.
- Things that we do not / can't sense are not real? Eg: visual impairment, Agnosia.
- Things that we do sense in absence of real stimulus is reality? like hallucination?
- UNWELT → The bubble of reality of the surrounding environment.
- Perception is organization, identification & interpretation of a sensation / raw stimulus in order to form a mental representations.
- Say we see a moth on a tree, the moth appears as an image, & tree ~~because~~ becomes background. However, if we look at the tree, the forest of whatever is behind it become background. A relative perception.



## → Transduction & Transmission

↳ Human eyes:

- Rods more evenly distributed than cones
- 



→ Epilateral — same side } of brain  
 Optalateral — opposite side }

- Input → visual signal goes to occipital lobe.
- Processing location, what (comprehension of its details)
- Next identify space, size, shape of the object.
- Input → Occipital lobe → Inferior temporal cortex.

→ V<sub>1</sub> — catalogue of sorts

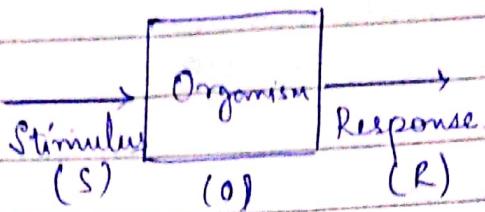
V<sub>2</sub> —

V<sub>3</sub> — perception

V<sub>3A</sub> — motion area.

V<sub>4V</sub> — Colour, shape, form.

- The Binding Problem
- Attention work as a GILVE.
- Illusory conjunction — result of no attention.
  - ↳ If not given enough time for attention to an object, we create something that is not real.
- Inattention Blindness — failure to perceive the objects that are not the focus of attention
- Change Blindness — failure to detect changes to the visual details of a scene.
- Subliminal Perception — thought or behaviour that is influenced by a stimuli that a person can't consciously report perceiving.
- Lilac Chaser Experiment (check slides)
- Multitasking — Attention & Perception — car following paradigm.
- Depending on what we are attending to, our perception changes. What we look at differ.
- Visual Agnosia:— loss of information or perception of certain factors.  
 Eg: If given an image & asked to replicate, people were able to replicate but not understand its meaning.



- Visual Agnosia, posting letter.
- Left brain lesion } — detail lost  
problem
- Right brain lesion } — holistic detail is lost  
problem
- Parietal lobe does the 3-D representation of the world they see.
- Visual neglect is when, although vision is normal, one side doesn't matter, i.e., the ~~true~~ memory of things of is affected and ~~the~~ one side's memory selection is lost.
- Mary's Room Problem
- Reality differs & ab
- Regaining sensory modality — Mike May Case
- Sensory Branding.
- Motion is a cue for perception.
- Most often perception & comprehension is guessing from preexisting knowledge.
- "Psychology from Inquiry to Understanding", Book for Perception.
- Individual to Group:
  - ↳ Group influence upon individual perception
  - ↳ Asch Experiment
  - ↳ Stanford Prison Experiment (looks at whether you're born evil or become evil. To check if culture & role you play influence your behaviour & perception).
  - ↳ Stanley Milgram's Experiment

## → Stanford Prison Experiment

- Examination of are you born evil, or become evil?
- Study if culture or roles played, affects behaviour or perception
- Planned for 2 weeks, but ended in 1 week due to <sup>brutality</sup>
- The demonstration of the role in that person's shoes, leading them to unconsciously changed in behaviour.

## → Stanley Milgram's Experiment

- One person asking the questions, other answering, shock (electrical) if wrong answer.
- Examine the behaviour of people under authority.
- Authority figure, a person in white coat did not need to coerce much to convince majority of people to raise the shock level.