#### **INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**



#### Introduction

#### Introduction to Social Psychology

#### Ram Manohar Singh



#### **Course Evaluation**

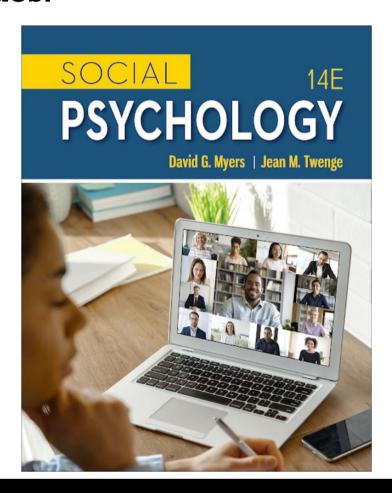


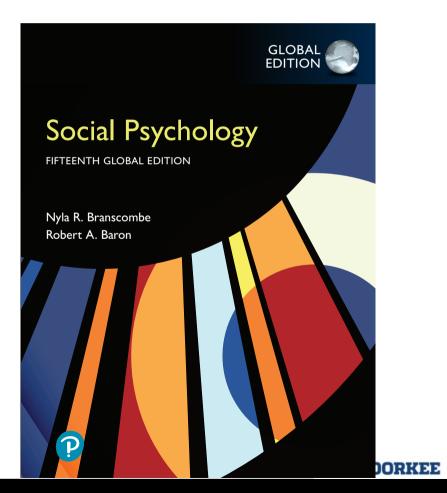
- ❖ MTE 25 Marks
- ❖ ETE 40 Marks
- ❖ CWS 35 Marks
  - ➤ Quiz 15 Marks

#### **Books**



These are basic textbooks. You do not have to read all the chapters. Refer to sections discussed in class and slides.





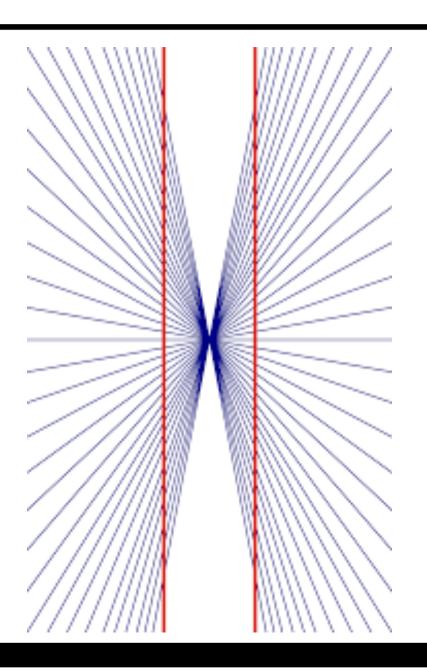
# Social Psychology



Why do people behave the way they do?

# **Perception**





**HERING ILLUSION** 

# **Perception**



- Motives, Emotions, and Perception
  - Cocktail party phenomenon
  - > Habituation
- \* The way in which we select, organize, and interpret sensory input to achieve a grasp of our surroundings.
- It is the active selection, organization, and interpretation of sensory input.

# **Perception**



#### **❖** Perceptual organization

- ➤ In order to make sense of sensations, people must *learn* to recognize objects, to read clocks, numbers, and letters, and to judge sizes and distances
- > Gestalt principles: Whole is more than sum sum of its parts

# Figure and Ground



- Our tendency to divide the perceptual world into two distinct parts: discrete figures and the background against which they stand out
- \* we selectively attend to certain aspects of our environment while relegating others to the background



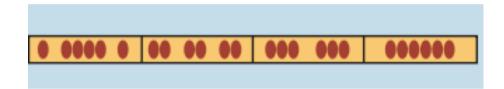


# Gestalt principles



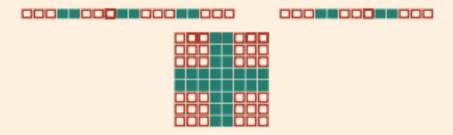
#### Nearness

> Stimuli that are near each other tend to be grouped together



#### **Similarity**

- > Birds of a feather flock together
- > Stimuli that are similar in size, shape, colour, or form tend to be grouped together

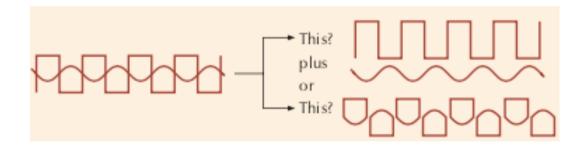


## Gestalt principles



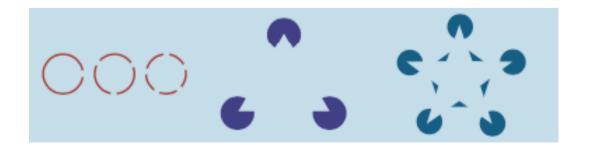
#### Continuation (continuity)

> Perceptions tend toward simplicity and continuity



#### Closure

> Tendency to *complete* a figure so that it has a consistent overall form



# Gestalt principles



#### **Contiguity**

> nearness in time and space.

#### Common region

> Stimuli that are found within a common area tend to be seen as a group



# Perceptual fallacies



- ❖ Illusion
- Delusions
- Hallucination

#### Illusion



Instances in which perception yields false interpretations of physical reality.



Müller-Lyer Illusion

- False interpretation due to cognitive processes.
- Illusions of size and illusions of shape or area
- Moon illusion
- Mirages, in which you perceive things that aren't really there
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#### **Delusions**



- ❖ Delusions are generally accepted to be beliefs which (a) are held with great conviction; (b) defy rational counter-argument; (c) and would be dismissed as false or bizarre by members of the same socio-cultural group.
  - **Erotomanic:** Someone with this type of delusional disorder believes that another person, often someone important or famous, is in love with him or her.
  - Frandiose: A person with this type of delusional disorder has an over-inflated sense of worth, power, knowledge, or identity. The person might believe he or she has a great talent or has made an important discovery.
  - > **Jealous:** A person with this type of delusional disorder believes that his or her spouse or sexual partner is unfaithful.
  - Persecutory: People with this type of delusional disorder believe that they (or someone close to them) are being mistreated, or that someone is spying on them or planning to harm them.
  - > Religious delusion: Belief that the affected person is a god or chosen to act as a god

#### Hallucination



- ❖ A hallucination is a perception in the absence of an external stimulus that has qualities of accurate perception.
- Hallucinations are sensations that appear to be real but are created within the mind
  - > Seeing things that are not there
  - > Hearing voices or other sounds
  - > Experiencing body sensations
    - Smelling odours that are not there.

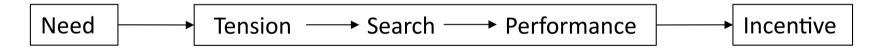


- Why are you in this class?
- Why do you dress well while going to party?
- ❖ Why does a terrorist blow his life?
- Why does some models eat (almost) nothing to maintain (so called!) perfect figure?
- Why does someone leave well paid salary to work for society?

# The motivation process







Goal directed behavior (motive / drive)

# **Types of Motives**



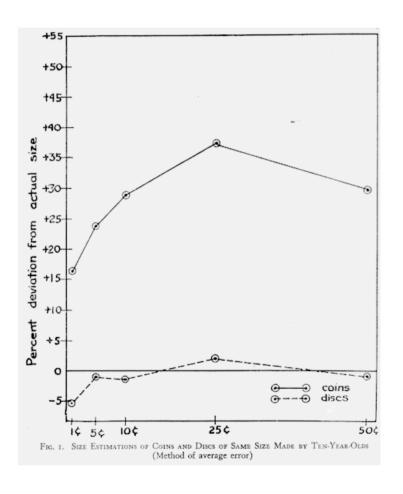
- Primary (Biological) motives
- Secondary (Learned) Motives
- Stimulus motives

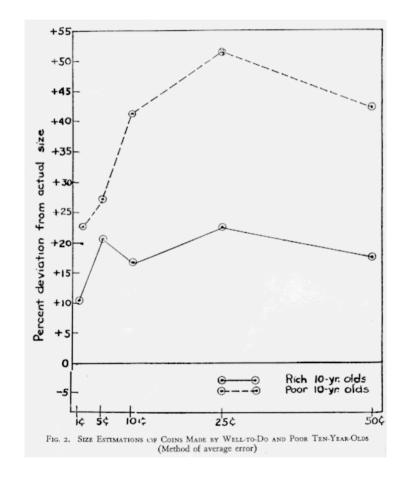
❖ Intrinsic and Extrinsic Motivation

#### Role of motivational factors



#### Bruner's Experiment





# Social Psychology



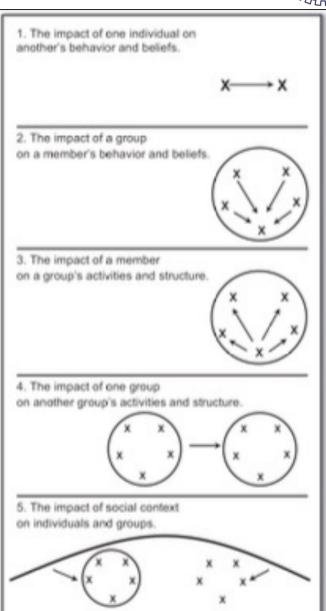
- Psychology is the scientific study of how people think, feel, and behave
- Social Psychology is a scientific field that studies the influence of social environment (Group / Culture) on individual thoughts, feeling, and behaviour
  - > The nature and causes of individual behavior
  - > Feelings, and thoughts in social situations
  - > Ways in which our thoughts, feelings, and actions are influenced by the
    - Social environments in which we live
    - By other people or our thoughts about them (e.g., we imagine how they would react to actions we might perform)

# Social Psychology



Social psychology is a science that studies the influences of our situations.

- Understanding People
  - > Hot motivational
  - Cold cognitive



#### What is science?



- Objective
- Generalizable
- \* Replicable
- Systematic
- Reliable
- Observable

- Verifiable
- ❖ Falsifiable

# **Theory**



- ❖ A theory is a set of coherent propositions that tries to explain a set of observations
  - > It has its assumptions
  - > A theory will imply a set of hypothesis

# Social Psychology is Scientific



- Science actually refers to
  - > A set of values and
  - > Methods that can be used to study a wide range of topics.
- Accuracy
- Replicability
- Objectivity
- Skepticism
- Open-mindedness

### Focuses on the Behaviour of Individuals



- Violence is an important phenomenon
  - > Social Psychology focuses on why individuals engage in aggressive behaviour
  - Behaviour is focus of analysis
  - > Milgram experiment

#### **Understand causes of Social Behavior**



- \* Actions and characteristics of people
  - Dispositional factors
  - Cognitive processes
  - Motivational processes
  - > Environmental factors
    - Physical environment
    - Social and psychological environment
  - Biological Factors

# Search for Basic Principles



- Social comparison
- Culture

# Social Psychology: An Overview



- ❖ Social Psychology Is Scientific in Nature
- Social Psychology Focuses on the Behavior of Individuals
- Social Psychology Seeks to Understand the Causes of Social Behavior and Thought
  - Dispositional factors
  - > Cognitive processes
  - > Motivational processes
  - > Environmental factors
    - Physical environment
    - Social and psychological environment
  - Biological Factors
- The Search for Basic Principles in a Changing Social World

# WHAT ARE SOCIAL PSYCHOLOGY'S BIG IDEAS?



- ❖ We Construct our Social Reality
- Our social intuitions are often powerful but sometimes perilous
- Social Influences Shape Our Behavior
- Personal Attitudes and Dispositions Also Shape Behavior
- Social Behavior Is Biologically Rooted
- Social Psychology's Principles Are Applicable in Everyday Life

# Social Psychology Is Scientific



- ❖ What is scientific?
- Social psychology relies on empirical research
- Social psychologists employ a methodology

# **Objectives of Research**



- 1. Describe reality in accurate and precise terms
- 2. Ascertain whether a relationship (correlation) exists between two or more behaviors or attributes.
- 3. Discover the causes of some behavior or event
  - Hypothesis
- 4. Test existing theories and develop new ones

## **Basic Concepts**



#### Variable

- Independent Variable
- Dependent Variable
- > Extraneous variable
- Population
- Sample
  - > Sampling
    - Random sample
    - Stratified sample
- \* Research Method
  - Qualitative Study
  - Quantitative Study

## **Basic Concepts**



- ❖ The hypothesis is a statement of the presumed relationship between two or more variables.
- Validity of Findings
  - > Internal validity
  - > External validity

# Survey method



- ❖ A survey is a procedure for collecting information by asking members of some population a set of questions and recording their responses.
  - Cross-sectional survey
  - Longitudinal survey
  - Panel Study
- Self-reports from individuals about their own attributes and opinion

#### Item

- > A question or statement on the subject of study with a prescribed response format
- > Type of items:
  - Likert scale
  - Semantic Differential Scale

# Survey method



- Questionnaire / Scale/inventory
  - > Set of items
- ❖ **Response rate** the percentage of people contacted who complete the survey.
- Strengths of the Survey method
- Weakness of the Survey method

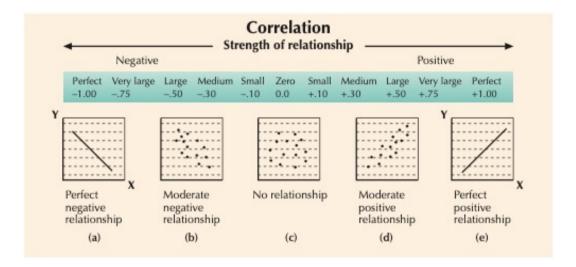
# Survey method



#### Analytic approaches

> Correlation

$$r_{xy} = \frac{\sum (x_i - \overline{x}) (y_i - \overline{y})}{\sqrt{\sum (x_i - \overline{x})^2 \sum (y_i - \overline{y})^2}}$$



> Regression

## **Experiment method**



#### Establish causal relations between variables

- Manipulate one or more of the independent variables
- > Assign the participants randomly to the various treatment groups

#### Random assignment

> Groups of participants that are equivalent in all respects except their exposure to different levels of the independent variables.

#### Types of Experiments

- > Laboratory experiments
  - Controlled environment
- > Field experiments
  - Natural Setting
  - Real-life Context

## **Experiment method**



#### Lab experiment

- > Bystander effect experiment
  - Dependent variables
    - Whether the participant would leave the room to offer help
    - · How quickly they would do so
  - Independent variable
    - The number of other persons who the participant believed were participating in the discussion

#### Validity

- > Internal validity
- > External validity

## **Experiment method**



- Field experiment
- Dutton and Aron's Bridge Experiment (1974)
  - > Independent variable
    - **High Arousal Condition:** A suspension bridge that was narrow, wobbly, and high above a river, inducing fear and physical arousal.
    - Low Arousal Condition: A solid, stable bridge close to the ground, inducing little to no physical arousal.
  - > Procedure:
    - An attractive female experimenter approached men individually on both bridges and asked them to fill out a survey.
    - After the survey, she gave her phone number to the men, ostensibly in case they had further questions about the study.
  - Dependent Variable
    - The number of men who later called the experimenter.

#### **Naturalistic observation**



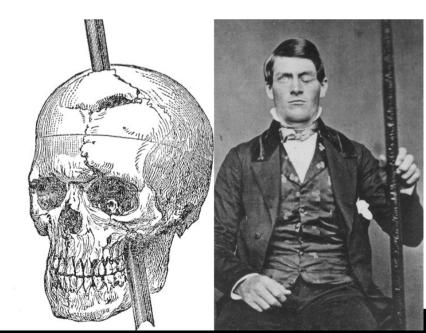
- Jane Goodall observed a chimpanzee
- Chimpanzees use a grass stem as a tool to remove termites from a termite mound



# **Case study Method**



- ❖ Dr. J. M. Harlow (1868)
  - > Phineas Gage foreman on a work crew
  - > Met with an accident while working
  - > Within 2 months Gage could walk, talk, and move normally
  - > Injury forever changed his personality
  - > Earlier he was honest and dependable worker
  - > Gage became foul-mouthed liar, emotionless





# Thank you