MP469: Industrial psychology and organizational behaviour

ASHNA JOSEPH
ASSISTANT PROFESSOR
DEPT. OF EEE
MACE

Syllabus

Course code	Course Name	L-T-P - Credits	Year of Introduction
MP469	Industrial Psychology and Organisational Behaviour	3-0-0-3	2016

Course Objectives

- To create a knowledge about human psychology
- To learn about theories of motivation and group behavior.
- To understand the socio-cultural aspects in organizations

Syllabus

Introduction- psychology as a science- study of behaviour- stimulus- response behaviour- heredity and environment- human mind- cognition- character- thinking- attention- memory- emotion- traits- attitude- personality. Organizational behaviour- definition –development- fundamental concept- organizational behaviour system- models - understanding a social-system - managing communication- Motivation- motivation driver - goal setting- expectancy model- comparison models- interpreting motivational models- leadership- path goal model. Special topics in industrial psychology- managing group in organization- group and inter group dynamics- managing change and organizational development- nature planned change- resistance characteristics

Expected outcome.

The students will be able to

i. know the importance of psychology
ii. have insight into individual and group behavior
iii. deal with people in better way
iv. motivate groups and build teams.

Detailed syllabus

Module	Contents	Hours	End Sem. Exam Marks
I	Introduction- psychology as a science- area of applications – study of individual- individual differences- study of behaviour- stimulus-response behaviour- heredity and environment- human mind- cognition- character- thinking- attention- memory- emotion- traits- attitude- personality	6	15%
II	Human mind- cognition- character- thinking- attention- memory- emotion- traits- attitude- personality	6	15%

III	Organizational behaviour- definition –development- fundamental concept- nature of people nature of organization – an organizational behaviour system- models- autocratic model- hybrid model-	6	15%
IV	Understanding a social-system social culture- managing communication- downward, upward and other forms of communication	6	15%
SECOND INTERNAL EXAMINATION			
V	Motivation- motivation driver- human needs- behaviour modification- goal setting- expectancy model- comparison models- interpreting motivational models- leadership- path goal model- style – contingency approach	9	20%
VI	Special topics in industrial psychology- managing group in organization- group and inter group dynamics- managing change and organizational development- nature planned change- resistance characteristic of OD-OD process	9	20%
END SEMESTER EXAM			

Qp pattern

Question Paper Pattern

Maximum marks: 100 Time: 3 hrs

The question paper should consist of three parts

Part A
There should be 2 questions each from module I and II
Each question carries 10 marks
Students will have to answer any three questions out of 4 (3X10 marks =30 marks)

Part B
There should be 2 questions each from module III and IV
Each question carries 10 marks
Students will have to answer any three questions out of 4 (3X10 marks =30 marks)

Part C
There should be 3 questions each from module V and VI
Each question carries 10 marks
Students will have to answer any four questions out of 6 (4X10 marks =40 marks)

Industrial psychology is the applied branch of psychology which studies the human behavior in the workplace.

Hugo Münsterberg was a German-American psychologist. He was one of the pioneers in applied psychology, extending his research and theories to industrial/organizational psy:

Who introduced this type of Psychology?

Walter Dill Scott

Intro to psychology

- Psychology is **the study of the mind and behavior**.
- Science of why human beings behave as they do.
- Science of the personality
- Study of the mental processes
- The scientific study of the human mind and its functions, especially those affecting behaviour in a given context
- In this field, a professional practitioner or researcher is called a psychologist and can be called as a social, behavioral, or cognitive scientist
- Psychological knowledge is often applied to the assessment and treatment of mental health problems
- It is also directed towards understanding and solving problems in several spheres of human activity

Psychology

- The word Psychology was used for the first time in 1950 by Rudolf Gockel, the German scholastic philosopher.
- Etymologically the term has its origin from two Greek words – Psyche (Soul) and Logos (science).
- Thus psychology means science of soul.

Psychology as a science

- Psychology is a science because it follows the empirical method. The scientific status of any endeavor is determined by its method of investigation, not what it studies, or when the research was done, and certainly not by who did the investigation. All sciences use the empirical method.
- Empirical methods include the processes of collecting and organizing data and drawing conclusions about those data. The empirical methods used by scientists have developed over many years and provide a basis for collecting, analyzing, and interpreting data within a common framework in which information can be shared.

Psychology as a science

- Emphasize the search for truth
- It is factual: studies facts of human behaviour- conclusions are verfiable.
- It is scientific because it's a systematized body of knowledge collected by systematic observation and experimentation.
- Got a theory base- supported by laws and principles


DIFFERENT FIELDS OF PSYCHOLOGY
Biological Psychology
Clinical Psychology
Cognitive Psychology
Developmental Psychology
Educational and School Psychology
Evolutionary Psychology
Industrial Psychology
Personality Psychology
Comparative Psychology
Social Psychology
Health Psychology
Forensic Psychology
Non-Pharmachology Interventions Psy
Professional Psychology
Positive Psychology

Schools of thought

- Biological psychology
  - Known as physiological psychology, or neuropsychology is the study of the biological substrates of behavior and mental processes
  - Work at the interface of mind and body
  - For example, animal models, typically rats are used to study the neural, genetic, and cellular mechanisms that underlie specific behaviors such as learning and memory and fear responses
  - Biological psychology has notable contributions like Alzheimer's disease (progressive cognitive deterioration and behavioural changes), Parkinson's disease (central nervous system disorder) and Huntington's disease (neurogenetic disorder)

Schools of thought (continued…)

- Behavioral psychology
  - Psychologists take human behavior as a main area of study
  - Much of the research in this area began with tests on mammals, based on the idea that humans exhibit similar fundamental tendencies
  - Stimulus–response pairings, known as classical conditioning (Behaviors could be linked through repeated association with stimuli eliciting pain or pleasure)
  - Ivan Pavlov, known best for inducing dogs to salivate in the presence of a stimulus previously linked with food

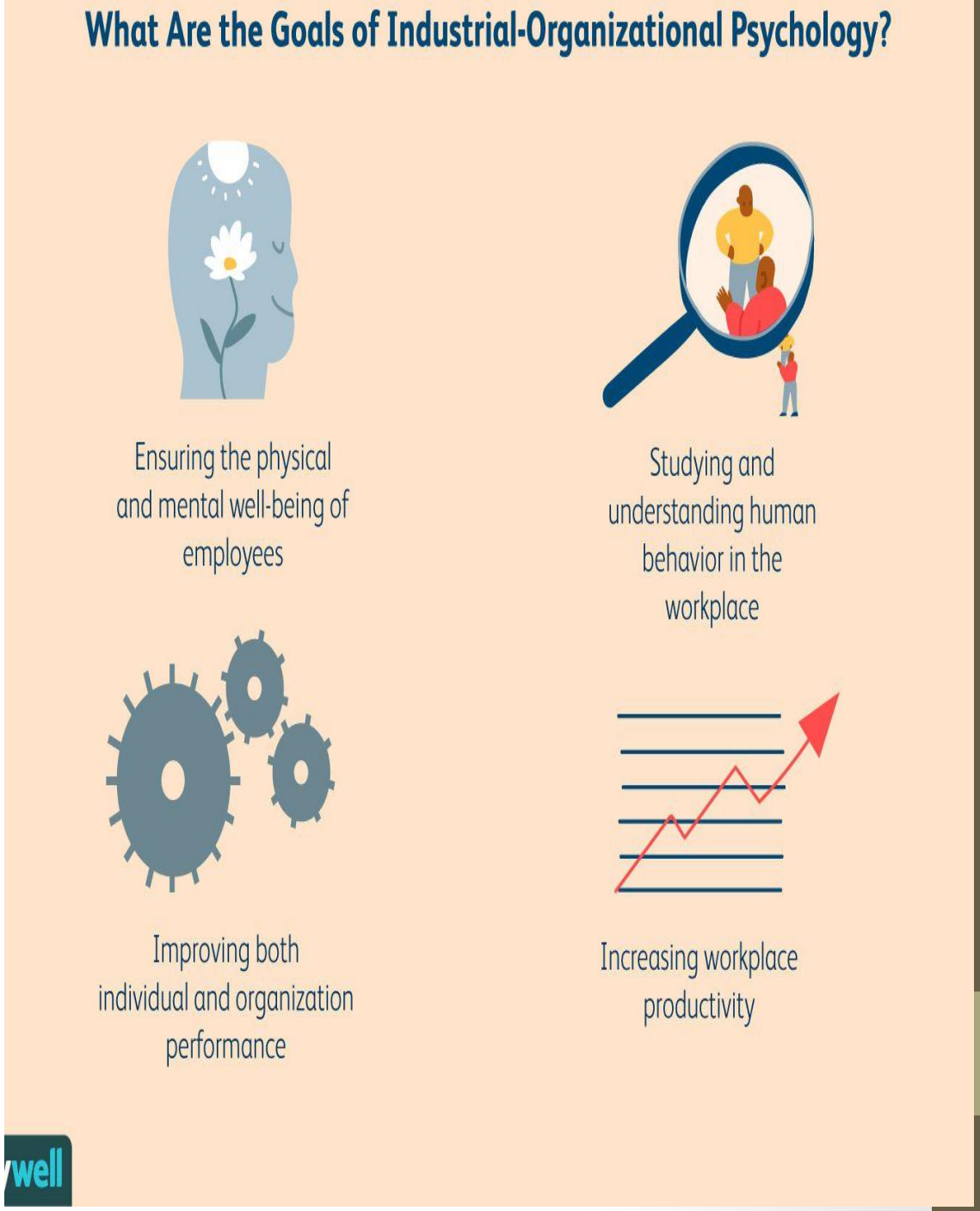
- Cognitive psychology
  - Studies cognition, the mental processes underlying mental activity
  - Perception, attention, reasoning, thinking, problem solving, memory, learning, language, and emotion are areas of research
  - Computer simulations are sometimes used to model phenomena of interest
- Social psychology
  - Study of how humans think about each other and how they relate to each other
  - Social psychologists study such topics as the influence of others on an individual's behavior (e.g. conformity, persuasion)
  - The formation of beliefs, attitudes, and stereotypes about other people
  - Studies the nature and causes of social behavior

Areas of application

- To understand human behaviour
- To identify factors that influence behaviour
- To find out individuals suitable for each job
- To increase productivity in workplace
- To understand social problems

Industrial Psychology

- The specialty of industrial-organizational psychology (also called I/O psychology) is characterized by the scientific study of human behavior in organizations and the work place. The specialty focuses on deriving principles of individual, group and organizational behavior and applying this knowledge to the solution of problems at work.



Individual

- An individual is that which exists as a distinct entity
- Individuality (or selfhood) is the state or quality of being an individual; particularly of being a person separate from other people and possessing their own needs or goals, rights, and responsibilities
- An individual is important in the fields of biology, law, and philosophy
- All human beings are born free and equal in dignity and rights, and should act towards one another in a spirit of brotherhood – International law
- In biology, the question of the individual is related to the definition of an organism
- Philosophy – “Blank slate” shaped from birth by experience and education and this ties into the idea of the liberty and rights of the individual (society as a social contract between rational individuals)

individual differences

- Drever James: Variations or deviations from the average of the group, with respect to the mental or physical characters, occurring in the individual member of the group are individual differences
- Good C.V.: The variation or deviations among individual is regard to a single characteristics or a number of characteristics, those differences which in their totality distinguish one individual from another
- Skinner C.E.: Any measurable aspect of the total personality
- Woodworth R.S. and Marquis D.G.: Individual differences are found in all psychological characteristics, physical and mental abilities, knowledge, habit, personality and character traits

individual differences (continued…)

- The psychology of individual differences is largely the study of group differences
- Classifies individuals by age, traits, sex, race, social class and so on, and observes the differences within and between those groups
- Physical, mental, social and cultural differences etc. are being studied, under individual differences
- Perhaps the first task of every teacher in a class should be to know and study individual differences among his pupils
- Individual differences in bodily appearance and physique, habits, skills, interests, temperaments, abilities and attainments have already been recognised

Ind. Diff. Dimensions

- Differences in physical traits
- Mental differences: IQ diff, way of thinking
- Difference in motor ability: speed of action, rate of muscular movement etc
- Difference in Aptitude
- Difference in attitude
- Emotional differences

- It can be concluded that **heredity and environment** are the determining factors that cause individual differences

Heredity & environment

- Both heredity and environment have their share in moulding personality of the individual
- The extent of their influence differ
- Heredity is responsible for all the inborn personality traits, emotions, I.Q., and physical traits
- Environment is responsible for the growth and development of the physical, mental and social traits
- The two forces heredity and environment are not opposed to each other but are complementary like seed and soil
- The heredity is the raw material out of which the object is to be manufactured and environment is the technique for the manufacture

Heredity & environment (continued…)

- Environment is nothing but a process under suitable conditions to change the shape of raw material just as potter does while making toys of mud
- Human behaviour is the product / interaction of heredity and environment
- Two individuals of the same heredity might differ (significantly) when put in dissimilar environments
- Also two individuals of differing heredity would probably differ (significantly) in spite of identical environments
- So we can predict that if there is change in either factor, the product is changed (significantly)

Behaviour

- The way in which one acts or conducts oneself, especially towards others
- The way in which an animal or person behaves in response to a particular situation or stimulus
- The way in which a machine or natural phenomenon works or functions
- Interacting with people is usually difficult and confusing because of different types of behaviours
- Types of behaviors: Passive, Aggressive, and Assertive

Behaviour (continued…)

- Deficit Behavior: Active studying, note taking, or passive responding in social circumstances
- Excess Behavior: Consuming alcohol until passed out, eats too much, or heavy Smoking
- Inappropriate Behavior: Exhibitionism, bed-wetting, consuming alcohol, or smoking
- Emotional Behavior: Test anxiety, shyness, or snake fear
- Appropriate Behavior: Good eating habits, acquires satisfaction for a work done or problems solved without depreciating others

Stimulus-response behaviour

- Any form of conditioning in which a specific stimulus comes to be paired with a particular response
- The most common applications of stimulus-response theory are in classical and operant conditioning
- The pioneers of stimulus-response theory are Ivan Pavlov, John B. Watson, and B.F. Skinner
- Ivan Pavlov (1849-1936) pioneered classical conditioning, the first form of stimulus-response theory
- Pavlov was a Soviet researcher studying the digestive process through prolonged experiments with dogs

Stimulus-response behaviour (continued…)

- In his most famous experiment, Pavlov rang a bell before giving his dogs food
- The dogs eventually salivated at the sound of the bell, regardless of whether or not Pavlov gave them food
- The dogs had been conditioned to pair the stimulus of the bell with the response of salivation
- In this particular experiment, the food was an unconditioned (untaught or natural) stimulus and Pavlov's dogs' salivation was an unconditioned response
- By pairing the unconditioned stimulus with a neutral stimulus (ringing the bell), the dogs came to associate the two
- Thus, the neutral stimulus became a conditioned (taught) stimulus, and the dogs' salivation in response to it became a conditioned response
- The conditioned response is usually the goal of this kind of experiment, which therapists often conduct with humans

Stimulus-response behaviour (continued…)

- Inspired by Pavlov's work, John B. Watson (1878-1958) was the first psychologist to intentionally apply classical conditioning to a person
- Watson used a young child, referred to in his published work as "Little Albert" to prove that humans could be conditioned in the same way as Pavlov's dogs
- Little Albert had no fear of small animals but cried whenever a steel bar was hit with a hammer, producing a loud noise
- Little Albert was then allowed to play with a lab rat, which he seemed to enjoy
- After some time, whenever Little Albert was presented with the lab rat, Watson hit a steel bar with a hammer
- Eventually, Little Albert cried whenever he saw the lab rat

Stimulus-response behaviour (continued…)

- Psychologist B.F. Skinner (1904-1990) first practiced operant conditioning and is best known for his creation of the "Skinner Box"
- He used the Skinner Box to teach lab rats various tasks
- He used the concepts of reinforcement (anything that encourages a desired behavior) and punishment (anything that discourages a desired behavior)
- He added the qualifiers "positive" and "negative" where positive indicates the addition of a stimulus and negative indicates the removal of one
- The desired behavior is to get the rat to pull the lever
- Giving the rat a food pellet when the lever is pulled is positive reinforcement
- Shock the rat whenever it did not pull the lever is negative reinforcement

Stimulus-response behaviour (continued…)

- This same process applies to punishment
- With punishment, a stimulus is added to discourage a behavior
- Suppose a parent spanks (Stimulus) a child for misbehaving, it is called positive punishment
- Taking away a child's toys because he or she misbehaved is negative punishment
- Operant conditioning is often used to treat people with addictions
- Psychologists use similar techniques to treat individuals with phobias (With Systematic Desensitization (SD), psychologists seek to help patients overcome their phobia by gradually exposing them to the object, a type of positive reinforcement)

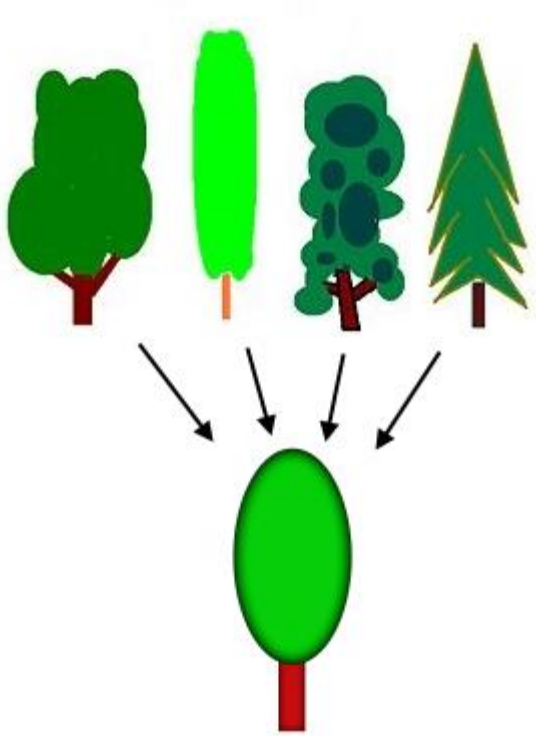
Human mind

- The mind (not to be confused with the brain) is a set of cognitive faculties including consciousness, imagination, perception, thinking, judgement, language and memory
- It is usually defined as the faculty of an entity's thoughts and consciousness
- It holds the power of imagination, recognition, and appreciation, and is responsible for processing feelings and emotions, resulting in attitudes and actions
- Mind is frequently synonymous with thought: the private conversation with ourselves that we carry on “inside our heads”
- It is a private sphere to which no one but the owner has access
- No one else can "know our mind"
- They can only interpret what we consciously or unconsciously communicate

cognition

- The mental action or process of acquiring knowledge and understanding through thought, experience, and the senses
- It encompasses many aspects of intellectual functions and processes such as attention, the formation of knowledge, memory and working memory, judgment and evaluation, reasoning, problem solving and decision making, comprehension and production of language
- Cognitive processes use existing knowledge and generate new knowledge
- Human cognition is conscious or unconscious, concrete or abstract
- When the mind makes a generalization such as the concept of a tree, it extracts similarities from numerous examples (abstract thinking)

Cognition (continued…)



character

- When wealth is lost, nothing is lost
- When health is lost, something is lost
- But when character is lost, everything is lost
- The mental and moral qualities distinctive to an individual
- The particular combination of qualities in a person that makes them different from others
- Strength of character: The quality of being determined and able to deal with difficult situations / crisis

thinking

- The process of considering or reasoning about something
- Encompasses an aim-oriented flow of ideas and associations that can lead to a reality-oriented conclusion
- Thinking allows humans to make sense of, interpret, represent or model the world they experience, and to make predictions about
- Helpful to an organism with needs and desires as it makes plans and attempts to accomplish those goals
- Psychology: An intellectual exertion aimed at finding an answer to a question or the solution of a practical problem
- Cognitive psychology is the branch of psychology that investigates internal mental processes such as problem solving, memory, and language
- The school of thought arising from this approach is known as cognitivism, which is interested in how people mentally represent information processing

attention

- An individual's awareness on a particular facet of their environment, or on the thoughts in their head
- The ability to pay attention to important things and to ignore the rest is a skill that can help children and adults alike succeed in school, at work, and in their relationships
- For most people, the ability to pay attention varies in different situations
- For instance, some are able to work only in distraction-free environment or with the aid of certain stimulants such as caffeine
- Humans can be distracted both by internal forces like wandering thoughts or external cues like the inviting ping of a text message
- Humans can feel almost impossible to force themselves to pay attention, particularly if the task they're trying to focus on is boring or difficult
- Some researchers who study attention view it as sort of “muscle” that can be strengthened with practice like Mindfulness, a state of active and open on the present

Memory

- Memory is the faculty of the brain by which information is stored and retrieved when needed
- Memory is vital for learning and experiences since the retention of knowledge and information is essential for future action
- Memory is understood as an informational processing system made up of a sensory processor, short-term (or working) memory, and long-term memory
- The sensory processor allows information from the outside world to be sensed in the form of chemical and physical stimuli
- The working memory retrieves information from previously stored material
- The function of long-term memory is to store data through various categorical models or systems

emotion

- A strong feeling deriving from one's circumstances, mood, or relationships with others
- Emotions are intense feelings that are directed at someone or something
- Basic emotions: anger, disgust, fear, happiness, sadness and surprise
- Additional emotions: desire, embarrassment, pain, relief, sympathy, boredom, confusion, interest, pride, relief, etc.

Traits and personality

Traits

- A distinguishing quality or characteristic belonging to a person
- A **trait** is something about you that makes you "you"
- In science, trait refers to a characteristic that is caused by genetics

Personality

- A characteristic way of thinking, feeling, and behaving
- Personality embraces moods, attitudes, and opinions and is most clearly expressed in interactions with other people
- It includes behavioral characteristics, both inherent and acquired, that distinguish one person from another

Personality traits

- **Big Five personality traits**
- **Five-factor model (FFM)**
  - Openness to experience
    - ✓ Openness reflects the degree of intellectual curiosity, creativity and a preference for novelty and variety a person has
    - ✓ The extent to which a person is imaginative or independent and depicts a personal preference for a variety of activities over a strict routine
  - Conscientiousness
    - ✓ Tendency to be organized, self-disciplined, act dutifully, aim for achievement, and prefer planned rather than spontaneous behavior
    - ✓ High conscientiousness is often perceived as being stubborn and focused

Personality traits

- Extraversion
  - Energetic, assertiveness, sociability and the tendency to seek stimulation in the company of others, and talkativeness
  - High extraversion is often perceived as attention-seeking behaviour
- Agreeableness
  - Tendency to be compassionate and cooperative towards others
  - A measure of one's trusting and helpful nature
- Neuroticism
  - Tendency to be prone to psychological stress
  - The tendency to experience unpleasant emotions easily, such as anger, anxiety, and depression
  - Neuroticism also refers to the degree of emotional stability

attitude

- A psychological construct, a mental and emotional entity that characterizes a person
- They are complex and an acquired state through experiences
- An individual's predisposed state of mind towards a person, place, thing, or event which in turn influences the individual's thought and action
- An attitude can be a positive or negative evaluation of people, objects, events, or activities
- The attitude of a person is determined by psychological factors (like values, beliefs, perception, etc.), family, society, working environment , or work as such