UNIT 10: UNDERSTANDING HUMAN BEHAVIOUR

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10.1 LEARNING OBJECTIVES

After going through this unit you will be able to:

- explain how psychologists analyze human behaviour.
- identify the factors affecting human behaviour.
- discuss the biological bases of behaviour.
- describe the process of information processing in brain.
- explain how learning takes place.
- describe how perception affects human behaviour.

10.2 INTRODUCTION

The previous unit focused on a fundamental cause of human behaviour i.e. motivation. The degree of variation in an individual's motivation level

can be explained through his or her personality. The concept of personality has already been discussed in the previous unit. In this unit the concept of human behaviour is described in detail along with the biological and social bases behind it. Human memory, a fundamental function of human brain, is also discussed in brief as part of biological base of human behaviour along with learning and perception as part of social bases of human behaviour. Thus this unit will help to understand the evolutionary nature of human behaviour, enumerate the role of genetic factors and culture in shaping human behaviour and thereafter relate the biological and socio-cultural factors in understanding human behaviour.

10.3 CONCEPT OF HUMAN BEHAVIOUR



Human behaviour refers to the full range of physical and emotional behaviours.

Human behaviour is complex and very hard to determine. An individual can behave differently on facing a same situation at different points of time or many individuals can react similarly on different things in different situations. Human Behaviour refers to the full range of physical and emotional behaviours that humans engage in; biologically, socially, intellectually, etc. and are influenced by culture, attitudes, emotions, values, ethics, authority etc.

Psychologists have tried to analyze human behaviour from different perspectives which are as follows.

Behavioural perspective : This approach tries to analyze any overt (observable) action performed by an individual as a result of some stimulus. For example, John ran towards the door as soon as the door bell rang.

Cognitive perspective : This approach deals with the thinking and feeling or the covert (hidden) part of an individual which may prompt the person to perform the overt behaviour. For example, what John would have thought or felt that he ran towards the door to open it? May be he does not want anyone to answer the door bell before him.

Biological perspective : It focuses on the biological processes and events that underlie behaviour. For example, John is lean and agile and that may prompt him to run towards the door so fast.

Evolutionary perspective : This relates behaviour to the effects of human evolution. There are some inherited tendencies or psychological mechanisms we got from our ancient ancestors (apes) that have evolved over time to manifest in the behaviour observed. For example, as John is male, he prefers running towards the door as male apes were hunters and usually indulges in chasing for hunting purpose.

Developmental perspective : This focuses on the changes in behaviour and cognitive processes over the human life span. For example, John probably ran towards the door as he is in his adolescence. If he were an adult, he would not have performed the act of running.

Psychodynamic perspective : Focuses on the role of hidden, often unconscious motives that drives a person to perform a certain act. For example, perhaps John would have wanted to portray to the other person present that his wounded legs were fine and there was nothing to worry.

Social or cultural factors : These factors can influence human behaviour to a large extent. For example, Indians touches feet of elders as a welcome gesture while in western world people generally shake their hands.

10.4 FACTORS AFFECTING HUMAN BEHAVIOUR

- Heredity: Biological factor like genetic similarity may determine human behaviour to a large extent. For example, some common behavioural traits can be observed in identical twins.
- Personality: The overall psychological as well as sociable characteristics of a person constitutes his or her personality. For example, Radha is an extrovert lady.
- Attitude: The tendency (due to specific evaluation) to behave in a certain way by a person towards a particular object, thing or someone else reflects the attitude of that person. For example, Meeta hates liars and perceive Rohan as a liar. She started avoiding Rohan.
- Social Norms: Societal rules and regulations bind an individual to perform certain acts or show desired behaviours while avoiding

other undesired acts or behaviours. For example, committing any public nuisance may land you in jail. This rule will instil fear and people will restrain from any misbehaviour in public.



CHECK YOUR PROGRESS

Q 1: What are the different perspectives or approaches to analyze human behaviour?

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Q 2: What are the main factors affecting human behaviour?

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10.5 BIOLOGICAL BASES OF HUMAN BEHAVIOUR

Most of the psychological processes have biological underpinnings i.e. they can be explained through biological processes or chemical activities happening inside our body. For example, researches have proved that people with high level of testosterone, a male sex hormone, are likely to engage in fighting than people with the low level of it.

Cells within our bodies that act as a basic building block for receiving, moving and processing information are known as neurons. These neurons communicate or passes signal with each other through synaptic vesicles. When there is a difference between electrical charges between two neurons, a signal is transmitted through them. Now this neuro transmission is achieved through neurotransmitters which are chemical substances responsible for making the potential difference.

Neuron is the basic unit of our nervous system. Neurons are specialized cells, which possess the unique property of converting various forms of stimuli into electrical impulses. Neurons and other cells in our body build the nervous system which regulates our bodily functions and allow us to react in various ways. The nervous system has 2 major portions:

a) Central Nervous System (CNS) b) Peripheral Nervous System (PNS). The central nervous system consists of brain and spinal cord. PNS connects the CNS with other vital organs of the body through nerves and neurones. Apart from nervous system, another system exists in our body known as Endocrine Systems which act as chemical regulators of our bodily processes. This system consists of glands known as endocrine glands which release chemicals called hormones into our blood stream. Pituitary gland is an endocrine gland also known as master gland and the chemical it releases mainly control other glands and play a part in sexual development and basic bodily functions relating to metabolism and excretion.

Human brain a very powerful and complex human organ and is divided into three major components-a) parts concerned with basic body functions, b) portion concerns with motivation and emotion c) portions deal with higher mental processes such as verbal ability, planning, problem solving and reasoning. In the following section, human brain's functionality as an information storage and retrieval device is explained.

10.6 MEMORY

Memory refers to the retaining and recalling of information over a period of time, depending on the nature of cognitive tasks one is required to perform. Sometimes we remember things happen to us long ago while we often forget or cannot recall events, person's name, phone numbers or other details which we encountered few days or may be few hours back. This is due to our brain's capability of storing specific things and its context and retrieving the same when recalled.

Like a computer's memory, human memory also performs 10 basic functions.

- **Encoding :** Process of converting information into a form that can be stored in the memory. It is the first stage where incoming information is received and some meaning is derived. It is then encoded in such a fashion that associative brain parts can further

process it.

- **Storing :** Process of retaining information over varying periods of time. It is the second stage of memory. Information which was encoded must also be stored so that it could be put to later use. It therefore refers to a process through which information is retained and held over a period of time.
- **Retrieval :** Process of locating and accessing specific information when needed. It is the third stage of memory. Information can be used only when one is able to recover it from his or her memory. It refers to the process of bringing the stored information to his/her awareness so that it could be used for performing various cognitive tasks like problem solving, decision making etc.

10.6.1 MEMORY SYSTEMS

According to the stage model, there are three memory systems: sensory memory, short term and long term memory.

Sensory memory: The incoming information first enters the sensory memory. It has a large capacity, but it is of a short duration. It registers information from each of the senses with reasonable accuracy.

Short Term Memory or Woking Memory: Place in the brain for temporary storage of information. Generally working memory stores the recent information we are processing.

Long Term Memory: Place in the brain where information stays for a longer period of time.

For example, researchers have found out that when people are asked to recall a long list of un-related words, they generally remember the words from the beginning of the list and end of the list. They fail to remember the words in the middle. It can be said that the words from the beginning(early read) may be stored in their long term memory while the words in the end (recent read) is stored in working memory or short term memory.

10.7 LEARNING

Learning may be defined as any relatively permanent change in behaviour or behavioural potential produced by experience or practice. The simplest kind of learning is called conditioning. Two types of conditioning have been identified by psychologists: classical conditioning and instrumental/operant conditioning. According to some social behaviourists like Ivan Pavlov and John B. Watson, learning results from the association between a stimuli and response (S-R connection). To demonstrate his Classical Conditioning Theory, Ivan Pavlov conducted his famous experiment popularly known as "Pavlov Experiment". He was primarily interested in the physiology of digestion.

In this experiment he gave a piece of meat to a dog and on seeing the meat (unconditioned stimulus) the dog starts salivating. Next, he rang a bell (neutral stimulus) and found out that the dog did not salivate. In the next few trials, he gave the meat piece and simultaneously rang the bell. After this process repeated several times, the dog learned to associate the meat and the sound of the bell. Pavlov found that the dog started salivating even when only the bell was rung and the meat was not given. This means that the ring of the bell (previously neutral) had become conditioned stimulus on association with meat (unconditioned stimulus). Salivating on mere hearing the bell had become conditioned response. Food is thus an Unconditioned Stimulus (US), and salivation which follows it, an Unconditioned Response (UR). After conditioning, salivation started to occur in the presence of the sound of the bell. Thus the bell becomes a Conditioned Stimulus (CS), and saliva secretion a Conditioned Response (CR). This kind of conditioning is called classical conditioning.

Another Theory propounded by B. F.Skinner is the **Operant Conditioning Theory of learning**.

Here the consequences of the response (good or bad) determine the behaviour that results in learning (R-S connection). To demonstrate this, Skinner performed an experiment where he placed a hungry rat inside a box, called the Skinner Box. The box had a lever which on pressing would

drop a bit of food. The rat once accidently pressed the lever and received the pellet of food. The rat soon learned to associate pressing of the lever with the reward of food and repeats the behaviour of pressing the lever to get the reward. Thus it is obvious that lever pressing is an operant response and getting food is its consequence. The response given by the rat was instrumental in getting the food and thus it is also called instrumental conditioning. Therefore Skinner concluded that human beings too repeat that behaviour which has a positive consequence and avoid that behaviour which draws negative consequence.



Observational or Social learning was also called Imitation.

Observational learning or Social learning is also a form of learning. Earlier this form of learning was called imitation. According to N.E Miller and J.C Dollard, learning could also occur through imitation of others. Through observation, a person constructs a mental picture of the act carried out by someone. The person also imagines the probable consequences. After this, the person enacts the image in his mind. If the actual consequence of that behaviour is positive, the behaviour is repeated otherwise it is discontinued.

10.8 PERCEPTION

A same event witnessed by many can be perceived differently by each of them. Therefore, perception can be defined as a process by which an individual selects, organizes and interprets stimuli into a meaningful picture of the environment where he lives. It is basically giving meaning to sensations. The motivation level, personality and the learning of the individual plays a major role in the interpretation of the stimuli.

Perception of an individual can be related to objects, things, places, people and environment. Here we will discuss a little about social perception which mainly deals with how an individual perceives other individual.

There are few factors which influence one's perception of others. The factors are as follows:

1) If an individual is well aware of his or her own personality, he or she can predict other's personality accurately and can modify their own behaviours to interact with that person.

2) Certain specific traits of an individual affect the person's perception of others. For example, if a person is manipulative, he tends to perceive others manipulative.

3) The status of the person in the society influences how he or she would be perceived by others.

10.8.1 ATTRIBUTION

The way in which people explain the cause for their own or others' behaviour is called attribution. Through this attribution process, people make sense of their own and others' behaviour and draw conclusions of the possible factors influencing that very behaviour.

There are mainly two types of attribution viz., dispositional and situational.

In dispositional attribution, a person's behaviour is attributed to his own personality or internal characteristics. In situational disposition, external factors are attributed or held responsible for his or her behaviour. The above two dispositions are explained in the following example.

An average intelligent student has secured high marks in the board exams. His parents perceive that his good performance in the board exams is due to the hard effort he invested in his studies. They attributed the boy's internal motivation as the factor responsible for the performance. They demonstrate dispositional attribution. On the other hand his relatives perceive that it is due to the easy question papers, the boy has managed to secure high marks. They attributed an external factor (i.e. easy questions) responsible for his good performance. It is due to the difference in the perceptions, parents and relatives may behave differently with the boy regarding his good results in the exam.



CHECK YOUR PROGRESS

Q 3: What are the different types of nervous systems in our body?

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Q 4: How information is processed in human brain? What are the different types of memory?

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Q 5: What are the different ways of learning?

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Q 6: What are the different types of attribution?

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ACTIVITY

1. Which perspective of analyzing human behaviour you find most relevant and important? List down the reasons.

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2. List down the specific behaviour(s) you have which you think are hereditary, personal or socially learned.

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3. If you find your best friend is lying to you regarding some matter or event, how do you attribute for his or her behaviour and why? Will you do the same for any other friend of yours?

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10.9 LET US SUM UP

- Behaviour is generally the overt or observable response of an individual due to some stimulus. Psychologists try to analyze human behaviour through 7 perspectives viz., behavioural, cognitive, biological, evolutionary, developmental, psychoanalytical and social.
- Heredity, personality, attitude, cultural and social norms are the factors which mainly influences human behaviour.
- The central nervous system consists of brain and spinal cord. PNS connects the CNS with other vital organs of the body through nerves and neurones. Endocrine Systems which act as chemical regulators of our bodily processes. This system consists of glands known as endocrine glands which release chemicals called hormones into our blood stream
- Human brain is divided into three major components-a) parts concerned with basic body functions, b) portion concerns with motivation and emotion c) portions deal with higher mental processes such as verbal ability, planning, problem solving and reasoning.
- Human memory also performs 10 basic functions- encoding, storage and retrieval. Short-Term memory acts as a temporary storage of information. Information stays for a longer period in Long-term memory.

- Classical Conditional Learning, Operant Conditional learning and Social learning are three major types or ways of learning.
- Perception can be defined as a process by which an individual selects, organizes and interprets stimuli into a meaningful picture of the environment where he lives.
- The way in which people explain the cause for their own or others' behaviour is called attribution. Dispositional and Situational attributions are the two main types of attribution.



10.10 FURTHER READING

1. Baron, R. A. (2001). Psychology. Allyn & Bacon.
2. Luthans, F. (2010). Organizational Behavior: An evidence-based approach. McGraw-Hill Irwin.
3. Robbins, S. P. (2003). Essentials of organizational behavior (7th Edition). Upper Saddle River: Prentice Hall.
4. Anderson, J. R. (1990). Cognitive psychology and its implications . WH Freeman/Times Books/Henry Holt & Co.



10.11 ANSWERS TO 'CHECK YOUR PROGRESS'

Ans to Q No. 1: Behavioural, cognitive, Biological, Evolutionary, Developmental, Psychoanalytic and Social.

Ans to Q No. 2: Heredity, personality, attitude, social and cultural norms.

Ans to Q No. 3: Central Nervous System, Peripheral Nervous System and Endocrine Systems.

Ans to Q No. 4: Through encoding, storing and retrieval process information in the brain is stored and retrieved.

Short-term and Long-term are the two major types of memory.

Ans to Q No. 5: Classical Conditional Learning, Operant learning and Observational or Social Learning.

Ans to Q No. 6: Dispositional and Situational attributions are the two main types of attribution.



10.12 MODEL QUESTIONS

Q 1: How human behaviour is analysed by psychologists?

Q 2: Describe the biological bases of human behaviour?

Q 3: How brain functions as a memory device?

Q 4: How learning and perception influences an individual's behaviour?