

CHAPTER - 3

THE BASES OF HUMAN BEHAVIOUR

Question 1. How does the evolutionary perspective explain the biological basis of behaviour?

Answer: Evolution refers to gradual and orderly biological changes that result in a species from their pre-existing forms in response to their changing adaptation demands of their

- environment.

Physiological and biological changes that take place as a result of evolutionary processes are so slow that they become visible after hundreds of generations.

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Three important features of modern human beings include:

- A trigger and developed brain with increased capacity for cognitive behaviours (like perception, memory, thinking, reasoning, etc).
- Ability to walk upright on two legs and
- Free hands with a workable opposing thumb.

The environmental demands had to biological and behavioral changes over a long period of time. In the human brain, the earliest to the most recent structures in the process of evolution are: Limbic system, brain stem and cerebellum are the oldest; and cerebral cortex is the latest developed.

Question 2. Describe how neurons transmit information.

Answer: Neuron is the basic unit of our nervous system. Neurons are specialized cells which convert various forms of stimuli into electrical impulses. They receive information from sense organs or from adjacent neurons, carry them to the central nervous system and bring motor

information from the central nervous system to motor organs. Neurons transmit information with the help of dendrites, soma, axon and terminal buttons by converting stimuli into electrical impulses. This is done by the following method: Dendrites → soma → axon → terminal buttons

- Dendrites receive the informing neural impulses from adjacent neurons or directly from sense organs.
- The nerve impulse is then passed on the main body of the neuron i.e. soma.
- From soma the impulse is passed on to the axon.
- The axon transmits the information/impulse along its length to terminal buttons.
- The terminal buttons transmit the information to another neuron, gland or muscle.

Question 3. Name the four lobes of the cerebral cortex. What functions do they perform?

Answer : Four lobes of the cerebral cortex are:

(1) Frontal lobe (3) Temporal lobe

(2) Parietal lobe (4) Occipital lobe

Functions of these four lobes are following:

1. Frontal lobe:

- Frontal lobe is mainly concerned with cognitive functions, such as attention, thinking, memory, learning, and reasoning.
- It also exerts inhibitory effects on autonomic and emotional responses.

2. Parietal lobe: The Parietal lobe is mainly concerned with cutaneous sensations and their coordination with visual and auditory sensations.

3. Temporal lobe:

- Temporal lobe is primarily concerned with the processing of auditory information.
- Memory for symbolic sounds and words resides here.
- Understanding of speech and written languages depends on this lobe.

4. Occipital lobe:

- Occipital lobe is mainly concerned with visual information.
- It is believed that interpretation of visual impulses, memory for visual stimuli and colour visual orientation is performed by this lobe.

Question 4. Name the various endocrine glands and the hormones secreted by them. How does the endocrine system affect our behaviour?

Answer: Name and functions of the endocrine glands are following:

- The chemical substances secreted from the endocrine are known as HORMONES. These hormones influence the functions of the body and the course of its development and in the growth of personality.
- Endocrine glands also control and regulate the individual's behaviour, for instance, when there is extra-supply of sugar in the blood-stream, certain ductless glands secrete insulin which reduces the sugar level in the blood to normal state.
- Endocrine glands play role in co-ordinating the body activities. Like in sudden, fear or danger, secretion from the endocrine system is mixed with blood which brings widely diverse activities to help us face this situation.
- The different endocrine glands work intimately to maintain equilibrium and coordinate body functions. For instance, if one gland is secreting more than optimum, the other gland may secrete a hormone to reduce the excess hormone and maintain equilibrium.

Question 5. How does the autonomic nervous system help us in dealing with an emergency situation?

Answer: The autonomic nervous system helps in dealing with emergency situations with the help of its two divisions : Sympathetic division and Parasympathetic division.

- **Sympathetic division** deals with emergencies when the action must be quick and powerful, such as in situations of fight or flight. During this period, the digestion stops, blood flows from internal organs to the muscles and breathing rate, oxygen supply, etc. increases.
- **Parasympathetic division** is mainly concerned with the conservation of energy. It monitors the routine functions of the internal system of the body. When the emergency is over the sympathetic activation calms down the individual to a normal condition. As a result, all body functions like breathing rate, oxygen supply, etc. return to their normal level.

Question 6. Explain the meaning of culture and describe its important features.

Answer:

Culture: Culture refers to widely shared customs, beliefs, values, norms, institutions and other products of a community that are transmitted socially across generation.

- Culture refers to "the man-made part of the environment."
- It comprises diverse products of the behaviour of many people, including ourselves. These products can be material objects (e.g. tools, sculptures), ideas (e.g. categories, norms) or social institutions (e.g. family, school).
- Culture may be defined as a shared way of life of a group of socially interacting people and is transmitted from generation through socialization and related processes.

Important features of culture are following:

- Culture includes behavioural products of others who preceded us. It indicates both substantial and abstract particulars that have prior existence in one form or another.
- It contains values that will be expressed and a language in which to express them.
- Culture characterized by sharing reflects presence and experience of cultural attributes psychologically.
- Cultural involves transmission of learned behaviour from one generation to the other within a community.

Question 7. Do you agree with the statement that "biology plays an enabling role, while specific aspects of behaviour are related to cultural factors"? Give reasons in support of your answer.

Answer: No doubt those biological factors do play enabling in determinants human behaviour. Biological factors basically set the limits but our behaviour is more complex than the behaviour of animal.

- Major reason for the complexity is the role of culture to regulate human behaviour.
- We can explain the concept with the help of two example hunger is a basic need of human beings as well as of animals but the way this need is gratified by human beings is extremely complex.

Different people in different cultures eat different things in a different manner e.g. directly with hand or with the help of spoons, forks and knives.

- Sexual behaviour can be taken as another example sex is a physiological need. The structure and functioning is determinant by biological mechanism but its expression is different in different cultures.
- At the human level, we find evidence for a dual inheritance theory. Biological inheritance takes place through genes, while cultural inheritance takes place through memes.
- The former takes place in a “top-down” manner (i.e. from parents to children), while the latter many also take place in a “bottom-up” manner (i.e. from children to parents). Dual inheritance theory also shows that although biological and cultural forces may involve different processes, they work as parallel forces, and interact with each other in offering explanation of an individual's behaviour.

Question 8. Describe the main agents of socialisation.

Answer: Socialization is a process of social learning through which a child acquires the norms, attitudes, beliefs and behaviours that are acceptable in his/her culture.

Main agents of socialization are following:

1. Parents:

- Parents have the most direct and significant impact on children's development.
- Parents encourage certain behaviours by rewarding them verbally (e.g. praising).
- They also discourage certain behaviours through non-approving behaviours.
- The conditions of life in which parents live (poverty, illness, job stress, nature of family) also influence the styles they adopt in socializing children.

2. School:

- In schools children learn not only cognitive skills (e.g. reading, writing, doing mathematics) but also many social skills (e.g. way of behaving with elders and age mates, accepting roles, fulfilling responsibilities).
- Several other positive qualities such as self-initiative, self-control responsibility, and creativity are encouraged in schools.

3. Peer-Groups:

- Friendship provides children not only with a good opportunity to be in company of others, but also for organizing various activities (e.g. play) collectively with the member of their own age.
- Qualities like sharing, trust, mutual understanding, role acceptance and fulfillment develop on interaction with peers.
- Development of self-identity is greatly facilitated by the peer groups.

4. Media-Influences:

- The exposure to violence on television enhances aggressive behaviour among children.
- In recent years media has also acquired the property of a socializing agent therefore children learn about many things from newspapers, television, books and cinema.

Question 9. How can we distinguish between enculturation and socialisation ? Explain.

Answer: Enculturation refers to all learning that takes place without direct, deliberate teaching.

- It refers to all learning that occurs in human life because of its availability in our socio-cultural context.
- Observation is the key element of enculturation

- The contents are culturally shaped by our preceding generations. A major part of our behaviour is the product of enculturation.
- Socialisation is a process by which individuals acquire knowledge, skills and dispositions, which enable them to participate as effective members of groups and society.
- It is a process that continues over the entire life-span, and through which one learns and develops ways of effective functioning at any stage of development. Socialisation forms the basis of social and cultural transmission from one generation to the next.

Question 10. What is meant by acculturation? Is acculturation a smooth process? Discuss.

Answer: Acculturation refers to cultural and psychological changes resulting from contact with other cultures. Contact may be direct (e.g. when one moves and settles in a new culture) or indirect (e.g. through media or other means). It may be voluntary (e.g. when one goes abroad for higher studies, training, job, or trade) or involuntary (e.g. through colonial experience, invasion, political refuge).

- Changes due to acculturation may be examined at subjective and objective levels.
- At the subjective level, changes are often reflected in people's attitude towards change. They are referred to as acculturation attitudes.
- At the subjective level, changes are often reflected in people's day to day behaviours and activities. These are referred to as acculturation strategies.

Question 11. Discuss the acculturative strategies adopted by individuals during the course of acculturation.

Answer: The following four acculturative strategies have been derived:

- **Integration:** It refers to an attitude in which there is an interest in both, maintaining one's original culture and identity, while staying in daily interaction with other cultural groups.
- **Assimilation:** It refers to an attitude, which people do not wish to maintain their cultural identity, and they move to become an integral part of the other culture.
- **Separation:** It refers to an attitude in which people seem to place a value on holding on to their original culture, and wish to avoid interaction with other cultural groups.
- **Marginalization:** It refers to an attitude in which there is little possibility or interest or interest in one's cultural maintenance, and little interest in having relations with other cultural groups.