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which children learn to produce and understand sentences. A second possibility is that children acquire language through conditioning. Adults may reward children when they produce a grammatical sentence and correct them when children make mistakes. For this to work, parents would have to respond to every detail in a child's speech. However, Brown, Cazden, and Bellugi (1969) found that parents do not pay attention to how the child says something, as long as the statement is comprehensible. Also, attempts to correct a child (and, hence, apply conditioning) are often futile.

Hypothesis testing

The problem with imitation and conditioning is that they focus on specific utterances. However, children often learn something general as a rule. They seem to form a hypothesis about a rule of language, test it, and retain it if it works.

Innate factors

Some of our knowledge about language is inborn or innate. If our innate knowledge is very rich or detailed, the process of language acquisition should be similar for different languages, even if the opportunities for learning differ among cultures unique to the human species?

The richness of innate knowledge

All children, regardless of their culture and language, seem to go through the same sequence of language development, which is as follows:

- When children are one, they speak a few isolated words.
- At about two years of age, they speaks two- and three-word sentences.
- At three years, sentences become more grammatical.
- At four years, the children's speech sounds much like that of an adult.

Cultures differ markedly in the opportunities they provide for children to learn from adults. In some cultures, parents are constantly speaking to their children, whereas in others parents verbally ignore their children. The fact is that this sequence is so consistent across cultures which indicate that our innate knowledge about language is very rich.

Indeed, our innate knowledge of language seems to be so rich that children can go through the normal course of language acquisition even when there are no language users around them to serve as models or teachers.

Critical periods

More recent research indicates that there is also a critical period for learning syntax. With respect to understanding and producing words with multiple morphemes, such as 'untimely', which consists of the morphemes 'un;, 'time', and 'ly', native signers did better than those who learned ASL when entering school, who in turn did better than those who learned ASL after age twelve (Meier, 1991; Newport, 1990).

NOTES

CHECK YOUR PROGRESS

14. What are the two factors involved in retrieval?
15. List the three problem-solving strategies.
16. Define heuristics.
17. What are the two types of reasoning?
18. What is morpheme?

3.16 SUMMARY

- Learning pervades our lives. It helps us in mastering a new skill, developing social interaction, personality, emotions, etc.
- Learning is relatively a permanent change in behaviour that occurs through experience.
- Maturation may be considered as development brought about by growth of the normal and muscular system, while learning is an outcome of stimulating situations.
- Educational psychologists and pedagogues have identified several principles of learning, also referred to as laws of learning, which seem generally applicable to the learning process.
- Classical conditioning is a learning process in which a neutral stimulus associates with another stimulus through repeated pairing with that stimulus.
- Classical conditioning occurs with reflexive, involuntary behaviour. Learning which is due to voluntary behaviour is called operant conditioning.
- Learning is acquiring new or modifying existing knowledge, behaviours, skills, values, or preferences and may involve synthesizing different types of information.
- Observational learning (also known as vicarious learning, imitation, social learning, or modelling) is a type of learning that occurs as a function of observing, retaining and replicating novel behaviour executed by others.
- Cognitive learning is a powerful mechanism that provides the means of knowledge and goes well beyond simple imitation of others.
- Learning is based on experience and leads to long-term changes in behaviour potential. Behaviour potential designates the possible behaviour of an individual, not actual behaviour.
- The central concept of specific learning disabilities (SLD) involves disorders of learning and cognition that are intrinsic to the individual SLD.
- Memory is the retention of information over time through three different stages—encoding, storage and retrieval.

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- The two-process theory of memory can also be referred to as the memory information processing theory, which was first proposed by R.C. Atkinson and R.M. Shiffrin (1968).
- There are different types of remembering, which depends on how well we know the information.
- People often interpret what they see in terms of what they expect and their memories reflect that.
- Repressed memory is a hypothetical concept used to describe a significant memory, usually of a traumatic nature, that has become unavailable for recall; also called motivated forgetting in which a subject blocks out painful or traumatic times in one's life.
- Thinking is manipulating information as when we form concept, solve problem, think critically reason and make decision.
- Language is our primary means of communicating thought. Everyone can master and use an enormously complex linguistic system.
- Development occurs at all three levels of language. It starts at the level of phonemes, proceeds to the level of words and other morphemes, and then moves on to the level of sentence units, or syntax.

3.17 KEY TERMS

- **Reflex action:** A direct automatic and immediate response of a muscles or a gland to the stimulation of a sense organ
- **Stimulus discrimination:** The process of learning to response to a particular stimuli and not to others
- **Reinforcement:** Term for the process of increasing the rate or probability of a behaviour by the delivery or emergence of a stimulus immediately or shortly after the behaviour, called a 'response', is performed
- **Observational learning:** The learning of new behaviour through the observation of a model (watching someone else who is doing that behaviour)
- **Learned helplessness:** The tendency to fail to act escape in a situation because of a history of repeated failure in the past
- **Memory:** Retention of information over time through three different stages—encoding, storage and retrieval
- **Chunking:** The process or recording or reorganizing
- **Primary effect:** Refers to better recall for items at the beginning of a list
- **Recency effect:** Refers to better recall for items at the end of the list
- **Deductive reasoning:** Reasoning from the general to specific
- **Inductive reasoning:** Reasoning from the specific to general

3.18 ANSWERS TO 'CHECK YOUR PROGRESS'

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1. Learning can be classified into verbal learning and motor learning.
2. Retraining is made simpler by the fact that the extinguished response is not gone, just suppressed.
3. Learning which is due to voluntary behaviour is called operant conditioning.
4. According to the Law of Effect, behaviours followed by positive outcomes are strengthened, whereas behaviours followed by negative outcomes are weakened.
5. Punishment by application is one in which something unpleasant is added to the situation.
6. The fact that learning can take place without actual performance (a kind of latent learning) is called the learning/performance distinction.
7. A cognitive map is an organism's mental representation of the structure of physical space.
8. Programmed learning is a teaching technique in which a learner is presented with a small chunk of information, and is asked to answer a question after understanding it. If the answer is correct, the learner may proceed to the next chunk, otherwise go back to a previous piece of information and proceed from there.
9. Programmed-learning books differ from traditional workbooks because they actually teach new information through this step-by-step stimulus-response method rather than simply offering practice material for already-learned skills.
10. Transfer of learning is the process of applying or carrying over the knowledge, skills, habits, attitudes or other responses from one learning situation, in which they were initially acquired, to a different learning situation.
11. Comorbidity is either the presence of one or more disorders (or diseases) in addition to a primary disease or disorder, or the effect of such additional disorders or diseases.
12. The three interrelated systems of STM are a central executive that controls and coordinates the other two systems, a visual sketch pad of sorts and a kind of auditory recorder.
13. The types of remembering are recall method, recognition method, relearning and reconstruction method.
14. Two factors involved in retrieval are: (i) the nature of the cues that can prompt your memory, and (ii) the retrieval task that you set for yourself.
15. The three problem-solving strategies are difference reduction, means-ends analysis, and working backward.

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16. A heuristic is a short-cut procedure that is relatively easy to apply and can often yield the correct answer, but not inevitably so.
17. The two types of reasoning are inductive or deductive.
18. The term morpheme is used to refer to any small linguistic unit that carries meaning.

3.19 QUESTIONS AND EXERCISES

Short-Answer Questions

1. What is maturation?
2. Define verbal and motor learning.
3. According to Pavlov, what are the key elements that are responsible for conditioning to take place?
4. What is the Conditioning Theory of Learning?
5. What is positive and negative punishment? Give examples for both.
6. Briefly describe the types of transfer of learning.
7. Write a note on different learning styles.
8. What are the four stages of information processing in learning?
9. Write a short note on learning disabilities briefly describing any two types of learning disorders.
10. What is sensory memory and what are its types?
11. What are the various reasons of forgetting anything?
12. Briefly explain the process language development.

Long-Answers Questions

1. Learning is relatively a permanent change in behaviour. Elaborate the statement.
2. Describe the process of classical conditioning.
3. Elaborate upon the applications of classical conditioning.
4. Explain Thorndike's S-R theory.
5. What is reinforcement? Describe the various types of reinforcement.
6. What is operant conditioning? Mention applications of operant conditioning.
7. Describe the various methods of learning.
8. What is observational learning? What are the elements of observational learning?
9. What is latent learning? Discuss Tolman's latent learning experiment.
10. Explain programmed learning and automated instructions.

11. Analyse the two processes of memory information in detail.
12. Elaborate upon the process of memory retrieval.
13. Describe the steps in problem-solving
14. Write a detailed note on language development. Also, describe language acquisition and its root.
15. What do you understand by cognitive learning? Describe the purposive theory.
16. How is depression related to learned helplessness? Briefly analyse Seligman's experiment with the dogs to describe the relation.
17. What are the various approaches to thinking? Describe them in brief.

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UNIT 4 INTRODUCTION TO MOTIVATION AND EMOTION

NOTES

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4.0 INTRODUCTION

In this unit, you will be familiarized with the concept of motivation and emotion. Motives are internal source of man's behaviour. Man's thinking, feeling, and actions are determined not only by the environment in which he lives; they are also determined by his motives. The unit will also introduce you to the physiological basis of motivation, current status of motivational concept, theories of motivation and motivational factors in aggression. The unit will concentrate upon emotions, emotional expressions and theories of

emotions. Also, the unit will introduce you to PTSD as well as the ways of dealing with it. Examination-related anxiety and enhancing positive emotions are also discussed in detail in the unit.

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4.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Describe the concept of motivation and emotion
- Learn about the physiological bases of motivation
- Explain the different theories of motivation
- Highlight the motivational factors in aggression
- Describe the nature and theories of emotion along with expression of emotion
- Explain the important factors for managing negative emotions
- Describe the term PTSD
- Highlight the important measures to minimize examination anxiety

4.2 MOTIVATION AND EMOTION

The word 'motivation' comes from the Latin word 'movers', which means to move. In other words, they reside within the individual and initiate them to move for the fulfilment of needs. Needs, wants and desire of a man are also called motives. Some of these motives exist from the beginning of the life of an individual. Other motives are acquired in the course of one's life and development, and it also appears to be a part of an individual's personality. When a motive is aroused and organism is driven towards a goal, it produces tension within the individual. The state of tension continues as long as the goal is not reached. It is difficult to define emotion because it is a complex process that comprises feeling and widespread bodily activities. A widespread activity overtakes one's entire organism. In emotional stages, like afraid, delighted or sad, changes in normal activities are observed. Meeting a friend after a long time produce pleasure in us, the news of the illness of dear one makes us unhappy, when praised by an elder we feel proud of ourselves. In our daily life, we experience different types of emotions like joy and sorrow, excitement and disappointment, love and fear and many more emotions. However, it can be conclude that that emotion is a disturbed state of organism accompanied by an unpleasant or pleasant feeling.

4.2.1 The Current Status of Concept of Motivation

Motives are internal source of man's behaviour. Man's thinking, feeling, and actions are determined not only by the environment in which man lives. They are determined also by his motives. A hungry man enters a hotel to buy food. He pays for it and leaves the place. The hotel-keeper supplies the food,

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receives payment and stays in. The two persons behave in different ways in very much the same environment, because their motives are different. One needs to buy food the other needs to sell food. Man is influenced by his external environment. He is also influenced by his own motives. Both types of influences act and interact on him. To explain this behaviour we have to take account of both. Different motives become active at different times and in different situations. Each motive, when active, moves the person to behave in a particular way. When a motive becomes active, the organism is said to be motivated. Motivation is, thus, a process of arousal of motive. At one moment a person is motivated by hunger. At the next moment, he is motivated by thirst. At another moment he may be motivated by love or by aggression. A motive is aroused when there is a condition of want or lack within the organism. When a person is hungry, there is want or lack of food. When he is thirsty, there is want or lack of moisture.

A motivated behaviour is directed towards a goal. The behaviour persists without interruption, which means it is a continuous process. It may, in some cases, be interrupted and again resumed. When the hunger motive is aroused, reaching and eating food is the goal to which the activity of the person is directed.

Motivation is the driving force which directs an organism to achieve certain goals. We cannot observe motivation directly; it can only produce an idea about the behavioural pattern of an individual. Often, we are unaware of different motives as these motives are governed by unconscious thoughts. There are different types of motivation, like extrinsic and intrinsic. In extrinsic motivation, a person performs an action because it leads to an outcome that is separate from the person (Ryan and Deci, 2000). Intrinsic motivation is focussed on the biological determined and innate pattern of behaviour. For example the employees are motivated for the extrinsic rewards. On the other hand, intrinsic behaviour indicates that some human behaviour is controlled by hereditary factors.

Following are some factors as well as emotions that tend to motivate a person:

- **Need:** Need is that condition which is essential for survival. Need leads to physical and psychological tension within us that motivates us to act in order to fulfil the need and reduce the tension.
- **Drive:** We sometimes have an internal state of tension that motivates us to engage in activities that should (hopefully) reduce this tension. This tension is called drive (Hull, 1943). There are two kinds of drives, viz., primary drive and acquired drive. Primary drive is also know as survival need of the body like hunger, thirst, sex, sleep, air, etc. Acquired drives are learned drive, such as need for security, affection, status, etc.
- **Goal:** The states of tension continue until we reach the goal or fulfil our needs. Food taken by a hungry man seems to be an achieved goal.

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- **Incentives:** Incentives attract or lure people into action and the behaviour. It is explained in terms of the external stimulus and its rewarding properties.
- **Instinct:** The instinct is responsible for sexual behaviour, territorial protection, etc. It may be related to aggressive behaviour.

4.3 PHYSIOLOGICAL BASES OF MOTIVATION

Motivation has been broadly classified as physiological and psychological. The physiological motives are also called biological or biogenic motives, whereas the psychological motives are called social or socio-psychogenic motives. The basic biological or physiological motives are hunger, thirst, sex and air. These motives are discussed in detail in the following sections.

4.3.1 Motives of Hunger and Thirst

The body needs fats, proteins, carbohydrates, vitamins and few minerals like iron, salt, etc. These substances are supplied to the body by the food that we take.

Blood chemistry

Glucose (blood sugar) is an important factor in hunger, probably because the brain is critically dependent on sugar for energy. One set of sugar receptors, located in the brain itself, triggers hunger when sugar levels fall too low. Another set of sugar receptors is in the liver, which stores excess sugar and releases it into the blood when needed. The sugar receptors in the liver signal the brain when its sugar supply falls, and this signal can make us hungry.

Insulin

Insulin is a hormone in our body which is related to hunger. Thus, insulin injections cause profound hunger because they lower blood sugar drastically. Psychologist Judith Rodin (1984) has investigated the role of insulin and glucose in hunger and eating behaviour. She has pointed out that, when we eat complex carbohydrates, such as cereals, bread and pasta, insulin levels go up and then fall off gradually. When we consume simple sugars, such as candy bars and Cokes, insulin levels rise and then fall off sharply. Glucose levels in the blood are affected by complex carbohydrates and simple sugars in similar ways. The consequence is that we are more likely to feel hungry within the next several hours after eating simple sugars than after eating complex carbohydrates. Also, the food we eat at one meal often influences how much we will eat at our next meal.

Leptin

Leptin, a protein that is released by fat cells, decreases food intake and increases energy expenditure (Mito and others, 2004; Oberbauer and others, 2001). Leptin strongly affects metabolism and eating, acting as an anti-obesity hormone (Misra and others, 2001).

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Brain processes

Activity in two areas of the hypothalamus contributes to our understanding of hunger—the lateral hypothalamus and the ventromedial hypothalamus. The lateral hypothalamus is involved in stimulating eating. When it is electrically stimulated in a well-fed animal, the animal begins to eat, and if this area of the hypothalamus is destroyed, even a starving animal will show no interest in food. The ventromedial hypothalamus is involved in reducing hunger and restricting eating. When this area of an animal's brain is stimulated, the animal stops eating. When the area is destroyed, the animal eats profusely and quickly becomes obese.

Today, neuroscientists believe that much more of the brain helps in determining hunger than these on/off centres in the hypothalamus. They are exploring how neurotransmitters and neural circuits (clusters of neurons that often involve different parts of the brain) function in hunger.

Thirst

The thirst motive also serves a physiological or biological need. The body needs moisture. The water we drink supplies the moisture. The moisture contained in the body is, however, eliminated from the body. Perspiration and urination drain out the moisture from the body. The lack of moisture has to be removed. The thirst motive serves the purpose. The motive is satisfied by drinking water or any other liquid..

4.3.2 Motive of Sex and the Need for Air

Motivation for sexual behaviour is centred in the hypothalamus (Carter, 1998). However, like many other areas of motivation, brain functioning related to sex radiates outward to connect with a wide range of other brain areas in both the limbic system and the cerebral cortex. In humans, the temporal lobes of the neo-cortex play an important role in moderating sexual arousal and directing it to an appropriate goal (Cheasty, Condren, and Cooney, 2002).

Sex and the brain

The brain tissues that produce sexual feelings and behaviours are activated by various neurotransmitters in conjunction with various sex hormones. Sexual motivation also is characterized by a basic urge-reward-relief neural circuit. The motivation for sex is generated by excitatory neurotransmitters. The intense reward of orgasm is caused by a massive rush of dopamine, and the deep feeling of relaxation that follows is linked with a hormone called oxytocin.

Sex hormones

Sex hormones are powerful chemicals that are controlled by the master gland in the brain, the pituitary gland. The two main classes of sex hormones are estrogens and androgens. Estrogens, the class of sex hormones that

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predominate in females, are produced mainly by the ovaries. Androgens, the class of sex hormones that predominate in males, are produced by the testes in males and by the adrenal glands in both males and females. Testosterone is an androgen. Estrogens and androgens can influence sexual motivation in both sexes.

The secretion of sex hormones is regulated by a feedback system. The pituitary gland, regulated by the hypothalamus, monitors hormone levels. The pituitary gland signals the testes or ovaries to manufacture the hormone. Then the pituitary gland, through interaction with the hypothalamus, detects the point at which an optimal hormone level is reached and stops production of the hormone.

The role of hormones in motivating human sexual behaviour, especially for females, is not clear (Crooks and Bauer, 2002). For human males, higher androgen levels are associated with sexual motivation and orgasm frequency (Booth, Johnson, and Granger, 1999; Thiessen, 2002). Nonetheless, sexual behaviour is so individualized in humans that it is difficult to specify the effects of hormones (Susman and Rogol, 2004).

The need for air

The need for air is another physiological or biological motive. The body needs oxygen which the air contains. Our blood contains sugar that is supplied by the food we eat, which is stored in the lever. The air we breathe in supplies oxygen to the blood. Thus, the blood contains both blood-sugar and oxygen in it, which it carries to the muscles. As the oxygen burns sugar, it produces energy which is used by the muscles. Oxygen, like blood-sugar, is thus essential for the activities of the body. The breathing activity satisfies the body's need for oxygen. At high altitudes, the air does not contain sufficient oxygen obstructing the oxygen need of the body. Therefore, artificial supply of oxygen becomes necessary for the need to be served. Same thing happens with divers when they plunge deep into the sea or ocean. The condition produced by the deficiency or loss of oxygen is called asphyxia. Such condition causes death, if nothing is done to remedy it.

Check Your Progress

1. Define need.
2. Why do insulin injections cause hunger?
3. What are the two areas of the hypothalamus that affect hunger?
4. What are the two main classes of sex hormones?
5. Name the condition caused by the loss or deficiency of oxygen.

4.4 THEORIES OF MOTIVATION

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There are various theories of motivation, like the need reduction theory, Maslow's hierarchy of needs theory, cognitive approach, optimum arousal theory, and evolutionary approach. These theories are discussed in detail.

4.4.1 Drive Reduction Theory

An aroused state due to an unfulfilled physiological need is called a drive. A need is a deprivation which will energize the drive to reduce or eliminate the deprivation. According to this theory, there are two kinds of drives, viz., primary drive and secondary drive. Primary drives involve survival need of the body, such as hunger and thirst, and secondary drives—also known as acquired drive—are learned through experience, such as need for money, social approval, etc. The body's need for food arouses our hunger drive. Hunger motivates us to do something, for example, to go out for food to reduce the drive and satisfy the need. Hence, drive is a psychological state whereas need involves a physiological state.

The goal of drive reduction is homeostasis, the body's tendency to maintain an equilibrium or steady state. Literally, hundreds of biological states—temperature, blood sugar level, potassium and sodium levels, oxygen, and so on—must be maintained within a certain range in our bodies. These physiological changes occur automatically to keep our body in an optimal state of functioning.

Psychologists believe that people behave in different manner as sometime motivation and need increases the drive rather than reducing it. Hence, we cannot get the complete picture of motivation on the basis of drive reduction theory. For example, people might skip meals in an effort to lose weight, which can increase their hunger drive rather than reduce it.

4.4.2 Maslow's Hierarchy of Needs Theory

According to humanistic theorist Abraham Maslow (1954, 1971), our basic needs like food, water and rest must be satisfied before moving towards higher needs. Maslow's need hierarchy explains that once those needs are met, safety needs becomes important. Belongingness and love are the needs for friends and companions as well as to be accepted by others, and self esteem is the need to feel good and earn the esteem of others. Although Maslow's original hierarchy included only one growth need—self actualization. Maslow later differentiated the growth need of self-actualization, specifically naming two lower-level growth needs prior to the general level of self-actualization (Maslow and Lowery, 1998). At the top level the cognitive need and the need to know and understand the world exists. Cognitive needs are aesthetic needs, which include the need for order

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and beauty. Once all these needs are met, it is concerned about self-actualization needs. Maslow also added a higher need called transcendence above the self-actualization needs. Figure 4.1 illustrates Maslow's hierarchy of needs.

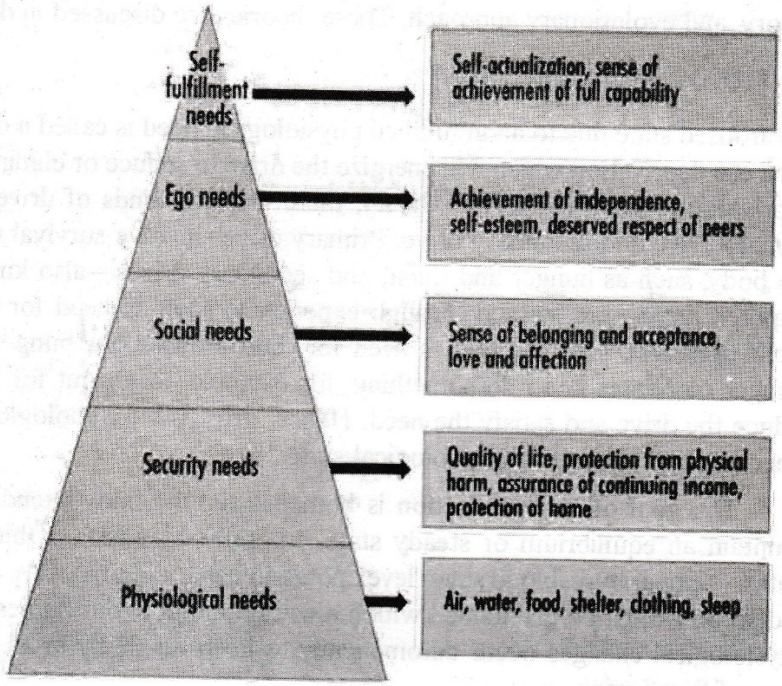

Fig 4.1 Maslow's Hierarchy of Needs

The idea that human motives are hierarchically arranged is an appealing one. Maslow's theory stimulates us to think about the ordering of motives in our own lives. However, ordering is somewhat subjective. Some people might seek advancement in a career to achieve self-esteem while putting on hold their needs for love and belongingness.

4.4.3 Cognitive Approach

Cognitive motivation is a theory of motivation that states that behaviour is an active result of the analysis and processing of available information, rather than an innate and mechanical set of rules that the mind uses to respond to situations. The theory assumes that behaviour is based on a process of thought rather than on a preprogrammed set of mental instructions. The term *cognition* refers to any process of thought, and *motivation* is the activation of behaviour or action. There are two different forms of cognitive motivation, intrinsic and extrinsic motivation. Intrinsic motivation refers to tasks that are rewarding in and of themselves, such as the pleasure of solving a puzzle, learning, or playing a game. The motivating factors for taking such actions are not external, but internal. Extrinsic motivation is the opposite and involves engaging in a

task because of external factors. This can mean working for money and food, or it can involve taking actions to avoid harm.

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Research often reveals that people whose motivation is intrinsic show more interest, excitement and confidence in what they are doing than those whose motivation is extrinsic. Intrinsic motivation often results in improved performance, persistence, creativity, and self-esteem (Deci and Ryan, 1995; Ryan and Deci, 2000, 2001; Sheldon and others, 1997). Apparently, self-determination (which is intrinsic) produces a sense of personal control that benefits the individual (deCharms, 1984; Deci and Ryan, 1994; Ryan and Deci, 2000, 2001). For example, researches have revealed that intrinsic interest and internal motivation of students in any school task increases when they are given a responsibility for their learning ir given a choice (Eccles, 2004; Eccles and Wigfield, 2002; Stipek, 2001). Some psychologists stress that many highly successful individuals are both intrinsically motivated (have a high personal standard of achievement and emphasize personal effort), and are extrinsically motivated (are highly competitive).

Cognitive psychologist believes that there are three inborn and universal needs that help people in gaining a complete sense of self and others. These three needs of self-determination are autonomy (the ablity to master the challenging task of one's life), relatedness (a sense of belonging, intimacy and security in relationship with others) and competence. Researcher believes that if a person has a supportive environment and has a good relationship with others, it provides satisfaction. This satisfaction not only promotes psychological growth, but also increases the individual intrinsic motivation, which mean internally rewarded or satisfying act. Extrinsic motivation decreases the degree of creativity.

4.4.4 Optimum Arousal Theory

Arousal theory involves the need of stimulation. A stimulus motive is one that appears to be unlearned, but it causes an increase in stimulation; for example, curiosity, playing and exploration. According to this theory, people are said to have an optimal level of tension. For task performance, moderate level of arousal seems to be best as compare to too high or low levels of arousal. The relationship between task performance and arousal is called the Yerkes-Dodson Law (Teigen, 1994). However, this effect is modified by the difficulty level of the task. Easy task demands a high-moderate level for optimal performance (to increase motiation), whereas difficult task require a low-moderate level (to facilitate concentration). Maintaining a optimal level of arousal may involve reducing tension or creating it (Hebb, 1955).

4.4.5 Evolutionary Approach

The evolutionary approach emphasize on the role of instincts in motivation. An instinct is an innate (unlearned), biological pattern of the behaviour that

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is assumed to be universal throughout species. Evolutionary psychology believes in the biological basis of motivation. Evolutionary psychologists argue that aggression, sex, achievement, and other behaviours are rooted in our evolutionary past (Buss, 2000, 2004; Cosmides and others, 2003). Thus, if a specie is highly competitive, its competitiveness improved the chance for survival and was passed down through the genes from generation to generation.

4.4.6 Motivational Factors in Aggression

Freud's Psychoanalytic and Bandura's social learning theory described the concept of aggression in different ways. Freud believed aggression as a drive whereas Bandura viewed it as learned response.

Aggression as a drive

Freud's psychoanalytic theory viewed that all organisms' behaviour is guided by instinct, particularly by sex instinct. When these instincts are frustrated due to non-fulfilment of the desires, it produces an aggressive drive. Later, he proposed that whenever a person's effort to reach a goal is blocked, an aggressive drive is induced that motivates behaviour intended to injure the obstacles (person or object) causing the frustration (Dollard, Doob, Miller, Mowrer and Sears, 1939). However, it was concluded that frustration leads to aggression and the basic drive serve as the property of it.

Aggression through observation or imitation

According, to Bandura, aggression can be learnt through observation or imitation. Also, the more often it is reinforced, the more likely it is to occur. Children are more likely to express aggressive responses when they are reinforced for such actions, than when they are punished for the action. If aggression is a drive,, expression of aggression should be cathartic, resulting in a reduction in the intensity of aggressive feeling and actions. On the other hand, if aggression is a learned response, expression of aggression could result in an increase in such actions (if the aggression is reinforced).

4.5 EMOTION AND ITS NATURE

Emotion can be defined as a feeling, an aspect of consciousness characterized by a certain physical arousal, a certain behaviour that reveals the feeling to both the outer and the inner world. Emotions can be pleasant as well as unpleasant, when we are angry and afraid we get an unpleasant feeling, when we are delighted we get a pleasant feeling. There are the following aspects to emotions:

- **Cognitive aspects:** These emphasize the importance of cognition and thinking in the determination of emotion.

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- **Physiological aspects:** When we experience any emotion, there is an arousal created by the sympathetic nervous system; for example, the heart rate increases, breathing becomes more rapid, the pupils dilate, etc.
- **Behavioural aspects:** The behaviour of a person also changes, like there are facial expression, body movement and actions that indicate the feeling of a person.

4.5.1 Expression of Emotion

We reveal our felt emotions in bodily responses and express behaviour. Facial expression—frowns, smiles and sad expression—combined with hand gesture—the turning of once body—and spoken words produce an understanding of emotion. We fight, run, laugh, yell, along with countless other action stemming from the emotions we feel. There are individual differences found in the expression of emotions. The expression of the emotions not only communicates, but also intensifies the felt emotion. It also activates the body to respond accordingly. In India, the expression of emotions was introduced by Sage Bharata during 5th century. Eight major emotions were described in Natyashastra. Later on they were translated into 'rasa', which means aesthetic relish. Now, we will discuss the important form of emotional expression.

Facial expressions

Each emotion has its characteristic facial expression. Facial expression can vary across different cultures, although some aspects of facial expression seem to be universal. Charles Darwin (1998) was one of the first to theorize that emotions were a product of evolution and, therefore, universal; all human beings, no matter what their culture, would show the same facial expression because of the facial muscles evolved to communicate specific information to onlookers. Researchers believe that although the facial expressions appear to be universal, exactly when, where and how an emotion is expressed may be determined by the culture. There are display rule which vary from culture to culture (Ekman, 1973).

According to the facial feedback hypothesis, expressions can reflect emotions as well as influence them. Facial muscles signal the brain that helps us in recognizing the emotion we are experiencing (Keillor and others, 2002). For example, we feel happier when we smile and sadder when we frown. Support for this hypothesis comes from an experiment by Ekman and his colleagues (1983). Following are the key forms of emotional expressions:

- **Facial expressions:** Every emotion has its characteristic facial expression. The nose, lips, eyes and forehead take different forms by twitching and twisting. Three dimensions of emotional expression are shown by the facial expressions.