
UNIT 1 CONCEPT AND BASIC ISSUES

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1.0 INTRODUCTION

Motivation is the activation or energisation of goal oriented behaviour. Motivation is said to be intrinsic or extrinsic. It is to give reason, incentive, enthusiasm, or interest that causes a specific action or certain behaviour. Motivation is present in every life function. Simple acts such as eating are motivated by hunger. Education is motivated by desire for knowledge. Motivators can be anything from reward to coercion.

Emotion is associated with mood, temperament, personality and disposition, and motivation. Emotions are our feelings. We feel them in our bodies as tingles, hot spots and muscular tension. There are cognitive aspects, but the physical sensation is what makes them really different.

In this unit, we will discuss the concept and basic issues in motivation and emotion.

1.1 OBJECTIVES

After completing this unit, you will be able to:

- Define Motivation;
- Describe the characteristic features of motivation;
- Differentiate between intrinsic and extrinsic motivation;
- Elucidate the models of behaviour change;

- Delineate the basic issues in motivation;
- Describe aggressive and achievement motivation;
- Define emotion;
- Describe the characteristics of emotion;
- Discuss the conscious and unconscious aspects of emotion;
- Delineate the basic issues in emotion; and
- Analyse the factors that cause emotions.

1.2 CONCEPT OF MOTIVATION

Motivation is the activation or energisation of goal oriented behaviour. It is to give reason, incentive, enthusiasm, or interest that causes a specific action or certain behaviour. Motivation is present in every life function. Simple acts such as eating are motivated by hunger. Education is motivated by desire for knowledge. Motivators can be anything from reward to coercion.

According to various theories, motivation may be rooted in the basic need to minimise physical pain and maximise pleasure, or it may include specific needs such as eating and resting, or a desired object, hobby, goal, state of being, ideal, or it may be attributed to less-apparent reasons such as altruism, selfishness, morality, or avoiding mortality. Conceptually, motivation should not be confused with either volition or optimism. Motivation is related to, but distinct from, emotion.

Motivation is a general term applied to the entire class of drives, desires, needs, wishes and similar forces. To say that managers motivate their subordinates is to say that they do those things which they hope will satisfy these drives and desires and induce the subordinates to act in a desired manner.

To motivate others is the most important of management tasks. It comprises the abilities to communicate, to set an example, to challenge, to encourage, to obtain feedback, to involve, to delegate, to develop and train, to inform, to brief and to provide a just reward.

In the initial period a person starts feeling a kind of emptiness. There is an arousal of need so urgent, that the bearer has to venture in search to satisfy it. This leads to creation of tension, which urges the person to forget everything else and cater to the aroused need first. This tension also creates drives and attitudes regarding the type of satisfaction that is desired. This leads a person to venture into the search of information. This ultimately leads to evaluation of alternatives where the best alternative is chosen. After choosing the alternative, an action is taken. Because of the performance of the activity satisfaction is achieved which then relieves the tension in the individual.

Motivation is said to be intrinsic or extrinsic. Intrinsic motivation is internal. It occurs when people are compelled to do something out of pleasure, importance, or desire. Extrinsic motivation occurs when external factors compel the person to do something. However, many theories show reward motivation. For example: "I will give you a candy bar if you clean your room."

A common place that we see the need to apply motivation is in the work place. In the work force, we can see motivation play a key role in leadership success. A person unable to grasp motivation and apply it will not become or stay a leader.

Salary, benefits, working conditions, supervision, policy, safety, security, affiliation, and relationships are all externally motivated needs. Achievement, advancement, recognition, growth, responsibility, and job nature are internal motivators. They occur when the person motivates himself (after external motivation needs are met).

Another area in which motivation plays a key role is in education. A teacher who implements motivational techniques will see an increased participation, effort, and higher grades. Part of the teacher’s job is to provide an environment that is motivationally charged. This environment accounts for students who lack their own internal motivation. One of the first places people begin to set goals for themselves is in school. School is where we are most likely to learn the correlation between goals, and the definition of motivation.

1.2.1 Intrinsic Motivation

Intrinsic motivation is internal. It occurs when people are compelled to do something out of pleasure, importance, or desire. This form of motivation has been studied by social and educational psychologists since the early 1970s. Intrinsic motivation has been explained by Fritz Heider’s attribution theory, Bandura’s work on self-efficacy, and Ryan and Deci’s cognitive evaluation theory.

Students are likely to be intrinsically motivated if they:

- 1) attribute their educational results to internal factors that they can control (e.g. the amount of effort they put in),
- 2) believe they can be effective agents in reaching desired goals (i.e. the results are not determined by luck),
- 3) are interested in mastering a topic, rather than just rote-learning to achieve good grades.

Intrinsic motivation and the 16 basic desires theory

Professor Steven Reiss has proposed a theory that finds 16 basic desires that guide nearly all human behaviours. The desires are:

Acceptance, the need for approval	Physical Activity, the need for exercise
Curiosity, the need to learn	Power, the need for influence of will
Eating, the need for food	Romance, the need for sex
Family, the need to raise children	Saving, the need to collect
Honor, the need to be loyal to the traditional values of one's clan/ethnic group	Social Contact, the need for friends (peer relationships)
Idealism, the need for social justice	Status, the need for social standing/importance
Independence, the need for individuality	Tranquility, the need to be safe
Order, the need for organised, stable, predictable environments	Vengeance, the need to strike back/ to win

In this model, people differ in these basic desires. These basic desires represent intrinsic desires that directly motivate a person’s behaviour, and not aimed at indirectly satisfying other desires. People may also be motivated by non-basic desires, but in this case this does not relate to deep motivation, or only as a means to achieve other basic desires.

1.2.2 Extrinsic Motivation

Extrinsic motivation occurs when external factors compel the person to do something. It comes from outside of the individual. Money is one of the obvious example, but coercion and threat of punishment are also common extrinsic motivations.

While competing, the crowd may cheer on the performer, which may motivate him or her to do well. Trophies are also extrinsic incentives. Competition is in general are extrinsic because it encourages the performer to win and beat others, not to enjoy the intrinsic rewards of the activity.

Social psychological research has indicated that extrinsic rewards can lead to overjustification and a subsequent reduction in intrinsic motivation. In one study demonstrating this effect, children who expected to be (and were) rewarded with a ribbon and a gold star for drawing pictures spent less time playing with the drawing materials in subsequent observations than children who were assigned to an unexpected reward condition and to children who received no extrinsic reward.

1.2.3 Models of Behaviour Change

Social cognitive models of behaviour change include the constructs of motivation and volition. Motivation is seen as a process that leads to the forming of behavioural intentions. Volition is seen as a process that leads from intention to actual behaviour.

In other words, motivation and volition refer to goal setting and goal pursuit, respectively. Both processes require self-regulatory efforts. Several self-regulatory constructs are needed to operate in orchestration to attain goals. An example of such a motivational and volitional construct is perceived self-efficacy. Self-efficacy is supposed to facilitate the forming of behavioural intentions, the development of action plans, and the initiation of action. It can support the translation of intentions into action.

1.2.4 Unconscious Motivation

Some psychologists believe that a significant portion of human behaviour is energised and directed by unconscious motives. According to Maslow, “Psychoanalysis has often demonstrated that the relationship between a conscious desire and the ultimate unconscious aim that underlies it need not be at all direct”. In other words, stated motives do not always match those inferred by skilled observers.

For example, it is possible that a person can be accident-prone because he has an unconscious desire to hurt himself and not because he is careless or ignorant of the safety rules. Similarly, some overweight people are not hungry at all for food but for fighting and kissing. Eating is merely a defensive reaction to lack of attention. Some workers damage more equipment than others do because they harbor unconscious feelings of aggression toward authority figures.

Psychotherapists point out that some behaviour is so automatic that the reasons for it are not available in the individual’s conscious mind. Compulsive cigarette smoking is an example. Sometimes maintaining self-esteem is so important and the motive for an activity is so threatening that it is simply not recognised and, in fact, may be disguised or repressed. Rationalisation, or “explaining away”, is one such disguise, or defense mechanism, as it is called. Another is projecting or attributing one’s own faults to others. “I feel I am to blame”, becomes “It is her fault; she is selfish”. Repression of powerful but socially unacceptable motives may result in outward

behaviour that is the opposite of the repressed tendencies. An example of this would be the employee who hates his boss but overworks himself on the job to show that he holds him in high regard.

Unconscious motives add to the hazards of interpreting human behaviour and, to the extent that they are present, complicate the life of the administrator. On the other hand, knowledge that unconscious motives exist can lead to a more careful assessment of behavioural problems. Although few contemporary psychologists deny the existence of unconscious factors, many do believe that these are activated only in times of anxiety and stress, and that in the ordinary course of events, human behaviour — from the subject’s point of view — is rationally purposeful.

Self Assessment Questions

1) Define Motivation in your words.

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2) Give True (T) or False (F) for the following statements:

- a) Motivation is present in every life situation _____.
- b) Intrinsic Motivation is when a person is compelled from outside to do something _____.
- c) Motivation is process which leads to the forming of behavioural intentions _____.
- d) Rationalisation is not the defense mechanism used for unconscious motivation _____.

3) Give one word for the following sentence:

- a) When a person is compelled from an external force to do something is called _____.
- b) A process that leads from intentions to actual behaviour _____.
- c) It can support a translation of intentions into action _____.
- d) It is her fault; she is selfish _____.

1.3 BASIC ISSUES IN MOTIVATION

Nearly all the conscious behaviour of human being is motivated. The internal needs and drives lead to tensions, which in turn result into actions. The need for food results into hunger and hence a person is motivated to eat.

A manager requires creating and maintaining an environment in which individuals work together in groups towards the accomplishment of common objectives. A manager cannot do a job without knowing what motivates people. The building of motivating factors into organisational roles, the staffing of these roles and the entire process of leading people must be built on knowledge of motivation.

It is necessary to remember that level of motivation varies both between individuals and within individuals at different times. Today in the increasingly competitive environment maintaining a highly motivated workforce is the most challenging task. The art of motivation starts by learning how to influence the behaviour of the individual. This understanding helps to achieve both, the individual as well as organisational objectives.

Motivation is a powerful tool in the hands of leaders. It can persuade convince and propel. People to act.

1.3.1 Aggressive Motivation

Aggressive motivation or the desires to inflict harm on others, play an all too common role in human behaviour. While human beings don't always express aggressive motivation overtly (often they simply fantasize about such behaviour), they often do engage in various forms of aggression against others-effort to harm them in some manner.

Most psychologists believe that aggression is elicited by a wide range of external events and stimuli. In other words, it is often "pulled" from without rather than "pushed" or driven from within by irresistible, perhaps inherited tendencies. The incidence of aggression suggest that such behaviour is strongly influenced by social and cultural factors, and that even it stems in part from innate tendencies, these are less important than social conditions and other factors. This is not to imply that biological or genetic factors play no role in human aggression, but most experts agree that aggression is influenced more strongly by a wide range of situational factors that evoke its occurrence and shape its form and targets than by inherited tendencies or mechanisms.

Social Factors: The chances are good that your aggressive motivation stemmed from the actions of another person. For instance, the other person may have done something that blocked or thwarted you from reaching your goals, in other words, this person may have frustrated you. Frustration can be viewed as the major cause of aggression. Frustration is the blocking of ongoing and goal directed behaviour. Frustration does not always produce aggression. Aggression does not always stem form frustration, often, individual aggress against others because it is part of their role or job, not because they are feeling frustrated (for example, treatment of a police officer towards the thief).

Another social factor that often plays an important role in aggression is direct provocation from another person. Verbal insult or physical actions interpreted as aggressive in nature often lead the party on the receiving end to reciprocate, with the result that a powerful spiral of aggression-counter aggression can develop. Exposure to violence in media- television, movies, and so on, has been found to increase aggression on the part of viewers.

1.3.2 Achievement Motivation

Hunger, sex, aggression-these are motives we share with many other forms of life. There are some motives, however, that appear to be unique to our own species. Achievement motivation (often termed as need for motivation) is the desire to accomplish difficult tasks and to excel. Individuals differ greatly in the desire for achievement is obvious. For some persons, accomplishing difficult tasks and meeting high standards of excellence are extremely important; whereas for others, just getting by is quite enough.

Persons high in achievement differ from persons low in this motive in other respects too. Persons high in achievement motivation tend to prefer tasks that are moderately difficult and challenging. The reason why they tend to avoid very easy tasks is that such tasks don't pose enough challenge to the persons with high in achievement motivation. These persons prefer difficult tasks because chance of failing on extremely difficult tasks is too high, and such persons want success above everything else.

Another characteristic of persons high in achievement motivation is that they have a stronger than average desire for feedback on their performance. They want to know how well they are doing so they can adjust their goals to make these challenging-but not impossible. Because of this desire for feedback, persons high in achievement motivation tend to prefer jobs in which rewards are closely related to individual performance-*merit based pay system*. They generally don't like working in situations where everyone receives the same-across the – board raises regardless of their performance. They tend to excel under conditions in which their achievement motive is activated. Situations in which they are challenged to do their best, are confronted with difficult goals, or in which they compete against others are “grist for the mill” of high- achievement persons, and they generally rise to the occasion in terms of excellent performance.

Self Assessment Questions
1) Define and discuss aggressive motivation. Give appropriate examples.
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2) What is achievement motivation? What are the important characteristic features of achievement motivation?
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1.4 CONCEPT OF EMOTION

Emotions are reactions consisting of subjective cognitive states, physiological reactions and expressive behaviours.

Emotion is associated with *mood, temperament, personality and disposition, and motivation*. A related distinction is between the emotion and the results of the emotion, principally behaviours and emotional expressions. People often behave in certain ways as a direct result of their emotional state, such as crying, fighting or fleeing. If one can have the emotion without the corresponding behaviour, then we may consider the behaviour not to be essential to the emotion. Neuroscientific research suggests that there is a “magic quarter second” during which it's possible to catch a thought before it becomes an emotional reaction. In that instant, one can catch a feeling before allowing it to take hold.

There are basic and complex categories, where some basic emotions can be modified in some way to form complex emotions (for example, Paul). In one model, the complex emotions could arise from cultural conditioning or association combined with the basic emotions. Alternatively, analogous to the way primary colours combine, *primary emotions* could blend to form the full spectrum of human emotional experience. For example interpersonal anger and disgust could blend to form contempt.

Robert Plutchik proposed a three-dimensional “circumplex model” which describes the relations among emotions. This model is similar to a colour wheel. The vertical dimension represents intensity, and the circle represents degrees of similarity among the emotions. He posited eight primary emotion dimensions arranged as four pairs of opposites. Some have also argued for the existence of meta-emotions which are emotions about emotions.

Another important means of distinguishing emotions concerns their occurrence in time. Some emotions occur over a period of seconds (for example, surprise), whereas others can last years (for example, love). The latter could be regarded as a long term *tendency* to have an emotion regarding a certain object rather than an emotion proper (though this is disputed). A distinction is then made between emotion episodes and emotional dispositions.

Dispositions are also comparable to character traits, where someone may be said to be generally disposed to experience certain emotions, though about different objects. For example an irritable person is generally disposed to feel irritation more easily or quickly than others do. Finally, some theorists (for example, Klaus Scherer, 2005) place emotions within a more general category of ‘affective states’ where affective states can also include emotion-related phenomena such as pleasure and pain, motivational states (for example, hunger or curiosity), moods, dispositions and traits.

1.4.1 Unconscious Ideas

The mental concept that is associated with an emotion actually creates the boundaries of that emotion. If the mental concept changes, the emotion does not change; instead, it fades away and a different emotion arises, one that fits the current mental concept. The mental concepts of emotions are not normally a part of our awareness. Emotions are not unique to any particular individual, so the mental concepts that underlie them come from the unconscious mind. Since the mental concepts are unconscious they are extremely difficult to identify. The mental concept is normally unconscious, so it is called as an unconscious concept or an unconscious idea.

An emotion is not unique to any particular individual, so the mental concept that underlies it comes from the unconscious mind.

Now an unconscious idea has two values: it is good or it is bad. The good value generates the pleasant feeling, the bad value the unpleasant feeling. This division leads to two choices. One choice gives rise to one emotion, the other choice to its complement. In general, emotion is an unconscious idea powered by either a pleasant or an unpleasant feeling.

Self Assessment Questions

1) Define emotions.

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2) Elucidate the following terms:

a) Primary emotions

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b) Circumplex model

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c) Disposition

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d) Unconscious idea

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1.5 BASIC ISSUES IN EMOTION

1.5.1 Emotion and Logic

Some things in life cause people to feel, these are called emotional reactions. Some things in life cause people to think, these are sometimes called logical or intellectual reactions. Thus life is divided between things that make you feel and things that make you think. The question is, if someone is feeling, does that mean that they are thinking less? It probably does. If part of your brain is being occupied by feeling, then it makes sense that you have less capacity for thought. That is obvious if you take emotional extremes, such as crying, where people can barely think at all. This does not mean that emotional people are not intelligent; it just means that they might be dumber during the times in which they are emotional. Emotion goes on and off for everyone, sometimes people cry, and sometimes they are completely serious.

1.5.2 Factors that Cause Emotions

Some things in life can identifiably cause more emotion than other things.

- 1) Colour causes more emotion than black and white. So anything with more colour in it is going to be more emotional to look at, whether it is the difference between a gold or silver sword, or a gold or silver computer. In both cases the gold is going to be more emotional.
- 2) Things that are personal are emotional, personal things that people like and that they feel are “close” to them. Things like home or anything someone likes actually. After all that is a definition of emotion, something that causes feeling. So if you like it, it is probably going to cause more feeling.
- 3) Other things aside from liking something could cause emotions from it, such as

curiosity, but usually like is one of the stronger emotions. You could say that the two are directly proportional, the more you like something, the more it is going to cause feeling.

1.5.3 Factors that Cause Thoughts

Thoughts are separate from emotions because thought is a period of thinking and thought requires more concentration than feeling does. You can be emotional and have more attention, but usually if you are emotional you are going to be less attentive than you would be if you were thinking more.

Then again, if you are emotional you are being attentive to your emotions, whatever they may be, and if your emotions are on something like the sun, then when you see the sun you are going to be attentive to it, but not be thinking about it. So you can pay attention to something and not be thinking about it at the same time. Thought is more attention than emotions.

So, the more you like something (or hate something, or have any strong emotional reaction to anything), the more emotional it is, but that doesn't mean that it might not also cause you to think about it.

There are other factors involved, things like adrenaline and physical action, which might also cause increased attention that is not either emotional or thoughtful. When you are running you have a lot of attention on the fact that you are running, and you're not thinking about it or being emotional about it. This means that just because you like something, does not mean that it is emotional. Liking can be just objective and rational. There may be no emotions in it.

Thus once you find out what is causing the emotion, it is no longer an emotion, but it is a thought (that is, you now call the emotion a thought, so the thought is still probably generating emotion. In your mind then there is still an emotion, but this emotion is now "part" of a thought, it becomes part of the thought associated with it because you created this link, and hence you would call the emotion/thought just a thought because while thoughts can generate emotions, emotions cannot generate thoughts (by themselves). Unless you realise what the emotion is (then you are generating the thought, not the emotion generating it), you are realising that it is a thought, not an emotion. This realisation takes over and now the emotion is part of that realisation (because you consider the emotion a part of you, and you generated the realisation), instead of the realisation being a part of the emotion.

1.5.4 Emotions and Unconscious Thoughts

Thus, emotional things are really any feelings that cause unconscious or conscious thought. Feeling is also another word for unconscious thought. That then leads to the conclusion that thought can be emotional (because thoughts are going to be about things that can cause emotion). I think that emotions can be more emotional than thought, however, because emotions can contain more than one thought (while thoughts are very slow consciously), therefore causing it to cause more feeling, or be more emotional. While you can only express a few thoughts a minute, your emotions can contain endless numbers of thoughts per minute – they are not as exact and hence don't make as much sense as thoughts do.

Both feelings and emotions are composed of unconscious thoughts, but feelings are easier to identify than emotions. Feelings are faster than emotions in terms of response (the response time of the feeling, how fast it responds to real world stimulation) and it takes less time to recognise feelings because they are faster. Feelings are closer

to sensory stimulation, that is if you touch something, you feel it and that is a fast reaction. You care about the feeling so you can separate it out in your head from the other feelings. “You care” if this is translated into feelings, the feeling is intense, so you feel it and can identify it easily.

Emotion can be “any strong feeling”. Basic (or primary) emotions can be made up of secondary emotions like love. Love can contain feelings or emotions of lust, love and longing. Feelings can be described in more detail than emotions because you can have a specific feeling for anything, each feeling is unique and might not have a name.

For instance, if you are upset by one person that might have its own feeling because that person upsets you in a certain way. That feeling doesn’t have a defined name because it is your personal feeling. The feeling may also be an emotion, say anger. “Upset” is probably too weak to be an emotion, but that doesn’t mean that it is not strong like emotions. Cold is also just a feeling.

There is a large overlap between how feelings feel and how emotions feel, they are to a large extent similar in nature. So there are only a few defined emotions, but there are an infinite number ways of feeling things. You can have a “small” emotion of hate and you could say that you have the feeling ‘hate’, then, if it is large you could say you are being emotional about hate, or are experiencing the emotion ‘hate’. You can have the same emotion of hate in different situations, but each time the feeling is going to be at least slightly different.

You can recognise any feeling that is what makes it a feeling. If you are sad that is a feeling, but if you are depressed that isn’t a feeling it is more like an emotion. You can’t identify why you are depressed but you can usually identify why you are sad. Feelings are more immediate, if something happens or is happening, it is going to result in a feeling.

However, if something happened a long time ago, you are going to think about it unconsciously and that is going to bring up unconscious feelings (the reason the things that happened previously are going to be more similar to emotion than things that are happening currently is that sensory stimulation (or things happening currently) is a lot closer to feelings than things that are less linked to direct sensory stimulation (such as emotions which are therefore usually going to be about things which require memory to figure out, things like thoughts that are less like feelings and more like emotion)). So emotions are unconscious feelings that are the result of mostly unconscious thoughts (instead of feelings – a feeling can trigger an emotion, but it isn’t a part of it). Feeling defined there as something you can identify. Also, you can’t identify the unconscious thought that caused the unconscious feeling, but you can identify the unconscious feeling itself (aka emotion).

Another aspect of unconscious thought, emotion, or unconscious feeling (all three are the same) is that it tends to be mixed into the rest of your system because it is unconscious. If it was conscious then it remains as an individual feeling, but in its unconscious form you confuse it with the other emotions and feelings and it affects your entire system. For example, in the case of sadness and a depression, a depression lowers your mood and affects all your feelings and emotions, but sadness is just that individual feeling. So the reason that the depression affects all your other feelings is because you can no longer recognise the individual sad emotions that caused it. The feelings become mixed. If someone can identify the reason they are sad then they become no longer depressed, just sad. Once they forget that was the reason they are depressed however, they will become depressed again.

Emotions, feelings and thoughts are made up of real experiences. A thought isn't just a thing in your head, but it is something that has components that are real in the world. Those things might be sounds (when you think about someone speaking, you make that sound in your head). A sound in your head is just like a sound in reality, you are mimicking the emotion that the sound in reality is causing in your head by yourself, without having the real sound be there. Just try it and think about any sound, it produces the same emotions as when the sound itself occurred outside your head.

So when you think about an emotion you are intensifying the feeling of those real experiences.

Self Assessment Questions

1) Discuss the basic concept of emotions.

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2) What are the factors that cause emotions?

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3) Discuss the emotions in terms of unconscious thoughts.

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4) Discuss and differentiate between emotions and feelings.

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1.6 LET US SUM UP

Motivation is the activation or energisation of goal-oriented behaviour. It is to give reason, incentive, enthusiasm, or interest that causes a specific action or certain behaviour. The internal needs and drives lead to tensions, which in turn result into actions. The need for food results into hunger and hence a person is motivated to eat. Motivation is said to be intrinsic or extrinsic. Intrinsic motivation is internal. It occurs when people are compelled to do something out of pleasure, importance, or

desire. Extrinsic motivation occurs when external factors compel the person to do something. It comes from outside of the performer. Motivation is seen as a process that leads to the forming of behavioural intentions. Motivation and volition refer to goal setting and goal pursuit, respectively. Both processes require self-regulatory efforts. Aggressive motivation or the desires to inflict harm on others, play an all too common role in human behaviour. Achievement motivation (often termed as need for motivation) is the desire to accomplish difficult tasks and to excel.

Emotions are reactions consisting of subjective cognitive states, physiological reactions and expressive behaviours. Emotion is associated with *mood*, *temperament*, *personality* and *disposition*, and *motivation*. An emotion is not unique to any particular individual, so the mental concept that underlies it comes from the unconscious mind. In general, emotion is an unconscious idea powered by either a pleasant or an unpleasant feeling. Emotion can be “any strong feeling”. Unconscious thought, emotion, or unconscious feeling (all three are the same) is that it tends to be mixed into the rest of your system because it is unconscious. Unconscious thought, emotion, or unconscious feeling (all three are the same) is that it tends to be mixed into the rest of your system because it is unconscious.

1.7 UNIT END QUESTIONS

- 1) What are the different types of motivation?
- 2) What is intrinsic motivation a? Differentiate intrinsic from extrinsic motivation
- 3) How does unconscious motivation influence our behaviour?
- 4) What are the basic issues in motivation?
- 5) Discuss motivation in terms of causative factors.
- 6) What are emotions, discuss the various types of emotions.
- 7) Discuss emotions, feelings and thoughts. How do these impact on human behaviours?

1.8 SUGGESTED READINGS

Erikson Erik (1993). *Childhood and Society* New York, W.W.Norton & Co.

Franken, R (2001). *Human Motivation* (5th edition) Pacific Grove, CA., Brooks/Cole

Gorman, Phil (2004). *Motivation and Emotion* Routledge, East Sussex.

McClelland, D(1985). *Human Motivation* New York, Scott Foresman

UNIT 2 DEFINITION OF MOTIVATION AND EMOTION

Structure

- 2.0 Introduction
- 2.1 Objectives
- 2.2 Definition and Meaning of Motivation
 - 2.2.1 Characteristics of Motivation
 - 2.2.2 Categories of Motives
- 2.3 Theories of Motivation
 - 2.3.1 Biological Explanation: Instinct Theory
 - 2.3.2 Drive Reduction Theory
 - 2.3.3 Arousal Theory
 - 2.3.4 Incentive Theory
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 - 2.3.6 Psychological Explanations of Motivation
 - 2.3.7 Maslow's Hierarchy of Needs
- 2.4 Types of Motivation
 - 2.4.1 Intrinsic and Extrinsic Motivation
- 2.5 Definition and Meaning of Emotion
 - 2.5.1 Elements of Emotion
 - 2.5.2 Characteristics of Emotion
 - 2.5.3 Theories of Emotion
 - 2.5.4 Non-Verbal Expression of Emotion
- 2.6 Emotion and Feeling
- 2.7 Let Us Sum Up
- 2.8 Unit End Questions
- 2.9 Suggested Readings

2.0 INTRODUCTION

Motivation is defined as an inner state of need or desire. That state of desire creates a movement or activity towards satisfying that desire. It depends to some degree upon whether we look at the internal forces, or the resultant external behaviours. Motivation is present in every life function. Simple acts such as eating are motivated by hunger. Education is motivated by desire for knowledge.

Emotion is associated with mood, temperament, personality and disposition, and motivation. An affective state of consciousness in which joy, sorrow, fear, hate, or the like, is experienced, as distinguished from cognitive and volitional states of consciousness.

This unit will define motivation and emotion. We would discuss the meaning of motivation and emotion in an individual's life. We will present the categories of motives, theories of motivation and types of motivation. There will be a discussion on intrinsic and extrinsic motivations. This is followed by a section on emotions. We

define and describe emotions and its characteristic features. We then differentiate between emotions and feelings.

2.1 OBJECTIVES

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

- Define motivation;
- Describe the characteristics of motivation;
- Elucidate the theories of motivation;
- Explain the types of motivation;
- Define and conceptualise emotions;
- Describe the characteristics of emotions; and
- Differentiate between emotions and feelings.

2.2 DEFINITION AND MEANING OF MOTIVATION

Motivation refers to complex reactions consisting of:

- 1) physiological responses such as changes in blood pressure and heart rate;
- 2) the subjective feelings we describe as happiness, anger, sorrow, disgust and so on; and
- 3) expressive reactions that reflect these internal states, such as changes in facial expression or posture.

Motivation is simply the reason for an action and that which gives purpose and direction to behaviour. Motivation is “WHAT drives you” to behave in a certain way or to take a particular action. It is your WHY.

Do you know the definition of motivation? More importantly, do you know why you need to know?

The definition of motivation is to give reason, incentive, enthusiasm, or interest that causes a specific action or certain behaviour. Motivation is present in every life function.

Simple acts such as eating are motivated by hunger.

Education is motivated by desire for knowledge.

Motivators can be anything from reward to coercion.

Motivation is defined as communicating to an internal force that actuates a behavioural pattern, thought process, action or reaction. Negative forces or positive forces can act as actuators.

In general it could include but is not limited to the use of words, circumstances, situations, and external and internal forces.

2.2.1 Characteristics of Motivation

There are many theories and labels that serve as sub titles to the definition of motivation. For example: “I will give you a candy bar if you clean your room.” This is an example of reward motivation.

Motivation is an important element of self understanding, it is helpful to know your reasons for those life paths which you choose to follow. Many people know motivation as the driving force behind an action.

Motivation is the way you interact with the world, in fact your whole reason for doing anything is determined by what motivates you. It is why you do something.

The state of motivation is in fact a time of being motivated. The definition of this simply means having an incentive to do something, maybe to go somewhere, maybe even to improve ourselves as a person. Incentives create motivation. There are a number of ways you can describe the definition of motivation. For example, motivation is something that encourages.

Therefore the definition of motivation can include things such as encouragement, stimulation and inspiration. These things are all definitions of motivation. Another known definition of motivation is: something that creates a given response. Or a further definition of motivation is a basis used for an action or decision to be made.

Motivation deals with the question as to why we do what we do. The answer to this is that we do what we do because of our instincts, drives, arousal or excitement, incentives of goals, achievement, for power, affiliation or friendship and for self fulfillment. Psychologists define motivation as the internal and external factors that cause and direct behaviour. As a psychological concept, “motive” is proposed as a unifying link between stimuli and behaviour.

2.2.2 Categories of Motives

Motives can be divided into four categories, viz., biological, emotional, cognitive and social.

- i) **Biological motives:** Biological motives include hunger, thirst, the pursuit of pleasure, and the avoidance of pain. An early attempt to specify how these motives affect animal behaviour was the ambitious theory of Clark Hull. Hull tried to explain all human and animal motivation using mathematical formulas. Hull borrowed from the concept of homeostasis or biological regulation. His assumption that biological motives followed the pattern of homeostasis is reflected in modern concepts such as the *set-point* for fat regulation.
- ii) **Emotional motives:** Things like having the desire to know that you can always have someone to talk to and share things with. To be able to open up to others and communicate. Emotional motives imply the selection of goals according to personal or subjective criteria
- iii) **Cognitive motives:** Influence of implicit motivation on both basic and complex cognitive processes in the stages of attention and encoding as well as rehearsal, organisation, and retrieval. Data from narrative essays as well as experimentally controlled studies demonstrate that individual differences in implicit motives have an influence on each step of learning and memory processes. Implicit motives influence the cognitive processing of motive-related information to facilitate desired affective end states.
- iv) **Social motives:** Social motives are when people do or give things because they feel they have a sense of responsibility to their community. People with social motives may have endured racial discrimination, poverty or may want to live in a selfless way. The five social motives are:

- 1) **Belonging:** People are motivated to affiliate and bond with each other.
- 2) **Understanding:** to belong, people are motivated to create an accurate-enough shared social understanding.
- 3) **Controlling:** People are motivated to feel competitive and effective in their dealings with the animate and inanimate environment.
- 4) **Enhancing Self:** Hoping that other will see you as socially worthy fits the core social motive of enhancing self.
- 5) **Trusting:** Viewing the world as benevolent enables people to participate in many group activities without undue suspicion or vigilance.

Self Assessment Questions

1) Define motivation and bring out the meaning of motivation.

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2) What are the characteristics of motivation?

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3) What are the various categories of motives?

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2.3 THEORIES OF MOTIVATION

2.3.1 Biological Explanations: Instinct Theory

Some of the first theories of motivation attributed behaviour to instincts, in born patterns of behaviour.

One scheme from the 1920's listed the following instincts in humans:

acquisitiveness	escape	mating	rivalry	submission
cleanliness	fear	modesty	secretiveness	sympathy
combativeness	food-seeking	parental love	self-assertion	
constructiveness	hunting	play	shyness	
curiosity	jealousy	repulsion	sociability	

The complexity and variety of behaviour along with the undeniable role of learning and other environmental factors were taken as arguments against instinct theory.

A more useful definition emerged in the 1950's: An instinct is an adaptive pattern of behaviour formed by an interaction of genetics and ordinary developmental processes. An instinct is not invariant, but is widespread and similar among members of a species.

Culture and learning are often cited as alternatives to instinct, but they are not. If we do not define instinct as behaviour which excludes learning or memory, we may just as easily possess instincts that allow humans to learn and form culture. Primary reinforcers can be thought of as instinctively reinforcing.

2.3.2 Drive Reduction Theory

We act so as to reduce the push exerted by drives, internal stimuli that represent biological needs. This is reasonable to the extent that our behaviour helps us to maintain homeostasis, or a steady biological state. When some internal system is out of balance, a drive builds up to force behaviour that restores balance. For example, if you are cold, you put on a sweater or turn up the heat. This explanation suits basic behaviours related to basic needs, such as food and water.

Still, our behaviour is not always consistent with our drives. You may be hungry right now, but you're not eating. Perhaps the biggest hole in this theory is that some behaviours do not decrease internal tensions, they increase them. Thus the next theory:

2.3.3 Arousal Theory

Arousal is a term used for a general state of physiological activation. You could think of it as the extent to which your body and mind are "revved up." Arousal theory holds that we act so as to bring about an optimal level of arousal. When we are too aroused (e.g., hungry) we act to reduce arousal (e.g., eat).

When we are not aroused enough (e.g., bored), we act to increase arousal (e.g., read a book).

The idea that there is an optimal level of arousal has some support from the observations underlying the Yerkes-Dodson law. The graph of performance vs arousal is an inverted U: Performance improves with increased arousal up to a point, then it drops off. Optimum performance on an easy task occurs at a higher level of arousal than on a difficult task.

Hence, your ability to do a menial job may actually be improved by having music on, and so forth. In contrast, a difficult task will require less distraction.

2.3.4 Incentive Theory

Arousal theory focuses on internal stimuli. Incentive theory holds that certain external stimuli act as incentives, pulling us toward some behaviour. Incentives are pleasing external stimuli that can serve as goals toward which our behaviour is directed. Cognitive factors are thought to be important relative to incentives.

2.3.5 Rotter's Expectancy Value Theory

This theory proposes that a particular stimulus exerts a pull based on its value to us and our expectation of achieving it through some course of action.

We evaluate behaviour based on: (1) What we expect the outcome to be and (2) the value we place on that outcome. This theory places cognitive variables between stimulus and response. Our behaviour is not influenced entirely by the history of reinforcement (as Skinner proposed). Rather, our expectation of reinforcement guides us.

2.3.6 Psychological Explanations of Motivation

- a) **Sensation seeking:** Thrill seeking may be a trait (stable, measurable personal attribute). Thrill seekers actually are motivated by a desire for new experiences. They do not necessarily like danger per se, but rather are simply not deterred by danger. Thrill seekers tend to be independent free thinkers. Thrill seekers resist authority but are not more antisocial (e.g, criminal).
- b) **Competence and achievement:** People motivated by a need to demonstrate competence have a desire to be capable and exercise control. Individuals can be motivated by achievement. Achieving a goal may be an incentive. Achievement-motivated individuals seek competition or at least comparison interested in knowing the score. High achievement motivation is correlated with typical success: money, prestige, good job, etc.
- c) **Self-efficacy:** This is defined by Albert Bandura as the degree to which an individual perceives himself or herself able to meet the demands of a given situation. Those with high self-efficacy often have a high motivation to succeed and are able to pick suitable challenges.

2.3.7 Maslow's Hierarchy of Needs

Humanist psychologist Abraham Maslow synthesized a number of different theories into a hierarchy of needs. If and only if our needs at a lower level are met, we can be motivated by higher level needs. Once we are fed, safe, loved, and accomplished, we strive to be all that we can be. This theory is intuitively appealing, but is difficult to validate experimentally. Maslow himself admitted that self actualisation is difficult to achieve, even difficult to define.

Employee motivation and satisfaction: Freedom and control lead to both improved morale and higher productivity. Employees do best when they:

- have input into decisions that affect them
- are challenged by their work
- are cross trained
- are made responsible and held accountable for their work (though one without the other can be a problem)
- are applauded for their efforts
- Clearly defined goals that are important and meaningful to employees are most helpful in improving performance and motivation.

“WHY” is the strong reason for a person to desire something? It is not what the person desire, but the strong reason that the person desires it. For example, if a person wants to stop working and go into business for himself here are some possible explanations:

- The person desires to have his own business
- His reason to be independent,

- To have more time for your family
- To have more time to pursue his dreams.

So you see that your WHY often goes beyond the physical objectives themselves. The person's why often satisfies a psychological need. That is important. If his reason for doing something is just material (e.g. to own a Mercedes or have a huge house), it is unlikely to see him through the difficult times to achieving his dreams.

His WHY has to look beyond the physical? It has to be from deep within. That way when the going gets tough, his WHY will see him through it because it is a strong, burning reason? It is a reason that will stand strong in the face of opposition.

If the person's reason for wanting something is strong enough, then it would motivate him to do something about it. It would not necessarily require him to know how to achieve it, pursue it. It has often been said that when a person desires something strongly enough the whole universe conspires to bring about the circumstances, people and resources he will need to achieve that purpose.

Negative and positive motivational forces could include coercion, desire, fear, influence and need. Depending on how coercion, fear and influence are framed, they could be either negative or positive forces that act as actuators. For instance a fear (negative force) of bodily injury could be a motivation to implement the use of safety equipment (positive force).

Self Assessment Questions

1) Elucidate the theories of motivation.

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2) Give the biological theory of motivation and elucidate the instinct theory.

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3) What are drive reduction theory of motivation? Explain.

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4) Describe arousal theory of motivation.

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5) Present the psychological explanation of motivation.

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2.4 TYPES OF MOTIVATION

2.4.1 Intrinsic and Extrinsic Motivation

These forces can be either intrinsic or extrinsic. Intrinsic is when the force comes from within oneself. Extrinsic is when the external forces, positive or negative, produce a behavioural change.

Definition of Motivation of the Extrinsic Kind

Extrinsic motivation would include circumstances, situations, rewards or punishment, both tangible and intangible that participation in results in an external benefit.

Tangible benefits could include monetary reward or a prize. Intangible could include things like adoration, recognition, and praise.

Definition of Motivation of the Intrinsic Kind

Intrinsic motivation would include involvement in behavioural pattern, thought process, action, activity or reaction for its own sake and without an obvious external incentive for doing so. A hobby is an example.

If a person is desirous of mastering public speaking for the sake of mastery and not any reward, then it may be said that the person has experienced intrinsic motivation.

In addition to forces that produce an actuation, there is a need to have the ability to fulfill the motivation.

For example, a paraplegic may have the desire to get out of a wheelchair and walk, but lacks the ability.

Definition of Motivation of the Neural Kind

Neuro-linguistic Programming is another way of accessing the mental actuator which helps the person change the way they think resulting in changed behaviour.

Essentially, Neuro-linguistic Programming actuates a behaviour through a change in the mental process. It could be considered a biological change as it involves creating a new thought process complete with new neural synaptic connections. It yields the same result as other motivations only by a different means.

It is an intrinsic form of change. Unlike other motivations, it could be likened to running a new program rather than putting a patch or removing a virus on an existing mental program our brains run on.

Self Assessment Questions

1) “Motivation is your WHY”. Discuss with examples.

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2) What is the definition of motivation of the neural kind?

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3) Differentiate between Intrinsic and Extrinsic Motivation?

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2.5 DEFINITION AND MEANING OF EMOTION

Can you imagine a life without emotions- without joy, anger, sorrow, or fear? What would such an existence be like? A would life be without any feelings?

Emotion is a reaction consisting of subjective cognitive states, physiological reactions and expressive behaviours. They involve three major components:

(1) physiological changes within our bodies-shifts in heart rate, blood pressure and so on; (2) subjective cognitive states, that is, the personal experience we label as emotions; and (3) expressive behaviours that is outward signs of these internal reactions.

Emotion is associated with mood, temperament, personality and disposition, and motivation. Emotions can be considered as thoughts that you can not identify. For instance when you feel something, it must be that you are thinking about something unconsciously. We feel them in our bodies as tingles, hot spots and muscular tension. There are cognitive aspects, but the physical sensation is what makes them really different.

Emotions are partly derived from feelings. A model of consciousness can be used to explain this derivation. Consciousness has three modes or parts, viz., will, mind and feeling.

Consciousness is the totality of the person, whilst mind is only one feature of it. However, this model has an innovative feature: the three modes are separate, but they interlock by the production of desires and emotions.

Like so many psychological phenomena, emotion is easily recognised but hard to define. Most theories hold that emotion is a syndrome, a complex entity with many components

2.5.1 Elements of Emotion

Emotions have these elements:

- physiological responses (autonomic nervous system)
- cognitive events
- sensory input
- behavioural correlates, e.g., expressions of emotion

2.5.2 Characteristics of Emotion

Emotions have certain characteristics:

- temporary or transitory
- valence or quality: we feel good or bad
- to some degree passive: we don't directly choose how we feel
- experience: we know what emotions feel like
- learning

Psychological theories suggest that emotions:

- prepare us for action (e.g., fear preps us to run)
- shape behaviour (perhaps emotion can be reinforcing)
- regulate social interaction and facilitate communication (as we shall see below, emotions are probably inseparable from the communication of emotion)

2.5.3 Theories of Emotion

- i) **James-Lange theory:** A visceral experience (gut reaction) is labeled as an emotional state. We have some autonomic reaction to stimuli. We observe these physical sensations and label them as feelings. This theory is a start but has many problems:
 - The visceral response may not occur quickly enough to account for sudden emotions.
 - Some visceral responses are not interpreted as emotions.
- ii) **Cannon-Bard theory:** When presented with a stimulus, the thalamus activates both a physiological reaction and an emotional response. (Remember that the thalamus is a crossroads for sensory pathways). The thalamus simultaneously signals the autonomic nervous system and the cerebral cortex. But: The rest of the limbic system, particularly the hypothalamus and amygdala are now known to play a role in emotional responses. Physiological response and emotional reaction may not be simultaneous.
- iii) **Schachter-Singer theory (the “two factor theory” or cognitive-arousal theory):** This is the theoretical basis of canned laughter. A stimulus causes

physiological arousal. This is considered in light of environmental and social cues. The arousal is then interpreted as an emotional state based on the cues.

In other words, the environment, particularly the behaviour of other people, is used to explain the physiological state. Events significant to one's own well-being are particularly important in determining emotional response. Emotions can occur without physiological arousal. Physiological factors alone (e.g, drug states) can cause emotions.

- iv) **Lazarus' cognitive mediational theory:** This theory is an extension of Schacter-Singer theory. Cognitive appraisal of a situation is of primary importance in emotional states. The emotional state strongly influences the cognitive appraisal.

More recently, cognitive scientists have proposed that there may be different components to our response to stimuli, but it is not productive to segregate them into cognitive vs. emotional categories.

2.5.4 Non-Verbal Expression of Emotion

Humans have many means of expressing their emotional state, without using words.

- 1) facial expressions
- 2) eye movements and eye contact
- 3) posture
- 4) non-verbal vocalisations
- 5) tone of voice
- 6) non-word sounds

Facial expressions appear to be innate. People everywhere show six basic emotions in their faces: happiness, sadness, surprise, fear, anger, and disgust.

The facial feedback hypothesis holds that facial expressions may be crucial to the experience of an emotional state, and may even cause emotional reactions.

Mind has two aspects, intelligence and intellect. Intelligence links to will and to feeling, and intellect is the source of abstraction. The former expresses the activity of the mind, whilst the latter is an indication of the degree of maturity of the mind. Mind is the key to consciousness. Mind is the 'cement' that keeps all aspects of consciousness together.

Will, or will power, is a pure striving, an undirected effort. When will is united with mind, it generates desire. Desire is the activity of will directed into a mental concept. The concept governs the use of will. The concept directs the will.

For example, will plus the concept '*social status*' gives rise to the desire to achieve social status. (*Will + 'Social Status' = desire to achieve social status*).

Will plus the concept '*fame*' gives rise to the desire for fame. (*Will + 'Fame' = desire for fame*).

Without the presence of desire it is very difficult to sustain the use of will; if a person tries to renounce desire then he / she is quite likely to become lethargic.

When feeling is united with mind, it generates emotion. Emotion is the activity of feeling directed into a mental concept. The feeling energises a conceptual response to a stimulus.

Feelings are primarily either pleasant or unpleasant; rarely are they neutral. Hence there are two possible conceptual responses to any stimulus, which in turn leads to two possible emotional responses.

For example, feeling plus the concept '*domination*' gives rise to the emotions of anger and fear (*feeling + domination=anger and fear*) :

Anger arises because the pleasant feeling makes domination of other people acceptable to me, whereas the unpleasant feeling makes fear arise when I become subject to domination by other people.

Another example: feeling plus the concept '*identity*' gives rise to the emotions of love and hate (*feeling+ identity=love and hate*).

Here the pleasant feeling makes a social identity acceptable to me, since I am the same as everyone else: identity produces love. The unpleasant feeling makes me reject a social identity and I prefer to be different and have an individual identity. When there is a difference it produces hate.

Self Assessment Questions

1) Define emotions and bring out the importance of emotions.

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2) What elements constitute emotions? Explain in detail.

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3) What are the characteristics of emotions?

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4) What is non-verbal expression of emotions?

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5) Put forward the various theories of emotions.

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2.6 EMOTION AND FEELING

Emotion is more similar to conscious thought than feelings are to conscious thought.

Although emotion and feeling can be described as unconscious thought, one of them is going to be more similar to conscious thought. Feelings are more like sensations, when you touch something you get a feeling.

Therefore feelings are faster than emotions and thought, because when you touch something there is a slight delay before you can think of something about it (thought), or feel something deeply about it (emotion).

Emotion is therefore just unconscious thought. Actually it would better be described as unconscious feeling (so a feeling is like a conscious emotion because you can “feel” it better and easier but emotion is a deeper, more unconscious experience similar to unconscious thought, but emotions are also more similar to conscious thought because thought is a deep experience while feelings are intense or shallow, but not deep).

Emotion can be “any strong feeling”. From that description many conclusions can be drawn. Basic (or primary) emotions can be made up of secondary emotions like love can contain feelings or emotions of lust, love and longing.

Feelings can be described in more detail than emotions because you can have a specific feeling for anything, each feeling is unique and might not have a name. For instance, if you are upset by one person that might have its own feeling because that person upsets you in a certain way. That feeling does not have a defined name because it is your personal feeling.

The feeling may also be an emotion, say anger. “Upset” is probably too weak to be an emotion, but that doesn’t mean that it is not strong like emotions. Cold is also just a feeling. There is a large overlap between how feelings feel and how emotions feel, they are similar in nature. So there are only a few defined emotions, but there are an infinite number ways of feeling things.

You can have a “small” emotion of hate and you could say that you have the feeling hate then, if it is large you could say you are being emotional about hate, or are experiencing the emotion hate. You can have the same emotion of hate in different situations, but each time the feeling is going to be at least slightly different.

You can recognise any feeling that is what makes it a feeling. If you are sad that is a feeling, but if you are depressed that is not a feeling it is more like an emotion. You can not identify why you are depressed but you can usually identify why you are sad.

Feelings are more immediate, if something happens or is happening, it is going to result in a feeling. However, if something happened a long time ago, you are going to think about it unconsciously and that is going to bring up unconscious feelings. So emotions are unconscious feelings that are the result of mostly unconscious thoughts. Feeling is defined as something you can identify. Also, you can not identify the unconscious thought that caused the unconscious feeling, but you can identify the unconscious feeling itself, that is emotion.

Another aspect of unconscious thought, emotion, or unconscious feeling (all three are the same) is that it tends to be mixed into the rest of your system because it is unconscious. If it was conscious then it remains as an individual feeling, but in its

unconscious form you confuse it with the other emotions and feelings and it affects your entire system. Therefore most of what people are feeling is just a mix of feelings that their mind cannot separate out individually. That is the difference between sadness and depression. While depression lowers the person's mood and affects all his feelings and emotions, sadness is just what the individual feeling. So the reason that the depression affects all other feelings is because the person can no longer recognise the individual sad emotions that caused it. The feelings become mixed. If someone can identify the reason they are sad then they become no longer depressed, just sad.

That is why an initial event might make someone sad, and then that sadness would later lead into a depression, is because you forget why you originally got sad. You might not consciously forget, but unconsciously you do.

That is, it feels like you forget, the desire to get revenge on whatever caused the sadness fades away. When that happens it is like you "forgetting" what caused it. You may also consciously forget but what matters is how much you care about that sadness. It might be that consciously understanding why you are depressed or sad changes how much you care about your sadness, however. That would therefore change the emotion/feeling of sadness.

The more you care about the sadness/depression, the more like a feeling it becomes and less like an emotion. That is because the difference between feelings and emotions is that feelings are easier to identify (because you can "feel" them easier).

Anger as an emotion takes more energy to maintain, so if someone is punched or something, they are only likely to be mad for a brief period of time, but the sadness that it incurred might last for a much longer time.

That sadness is only going to be recognisable to the person punched for a brief period of time as attributable to the person who did the punching, after that the sadness would sink into their system like a miniature depression. Affecting the other parts of their system like a depression.

In review, both feelings and emotions are composed of unconscious thoughts, but feelings are easier to identify than emotions. Feelings are faster than emotions in terms of response (the response time of the feeling, how fast it responds to real world stimulation) and it takes someone less time to recognise feelings because they are faster.

Feelings are closer to sensory stimulation, if you touch something, you feel it and that is a fast reaction. You care about the feeling so you can separate it out in your head from the other feelings. "You care" in that sentence could be translated into, the feeling is intense, so you feel it and can identify it easily. That is different from consciously understanding why you are depressed or sad. You can consciously understand why you are depressed or sad, but that might or might not affect the intensity of that sadness.

If the intensity of the sadness is brought up enough, then you can feel that sadness and it is not like a depression anymore. It is more like an individual feeling than something that affects your mood and brings your system down.

Also, if you clearly enough understand what the sadness is then it is going to remain a sadness and not affect the rest of your system. That is because the feeling would get mixed in with the other feelings and start affecting them.

The difference between emotion and feeling is that feelings are easier to identify because they are faster, a feeling is something you are feeling right then. An emotion might be a deeper experience because it might affect more of you, but that is only because it is mixed into the rest of your system. That is, a depression affects more of you than just an isolated feeling of sadness. In other words, people can only have a few feelings at a time, but they can have many emotions at the same time. Emotions are mixed in, but to feel something you have to be able to identify what it is, or it is going to be so intense that you would be able to identify what it is. Emotions just feel deeper because it is all your feelings being affected at once.

Emotions are greater than feelings and therefore they must have more parts in order to cause that greater feeling. Feelings are easy to understand because they are simple, but emotions are harder to understand because they are more complicated. A moody person would be described as emotional because emotion is a component of mood. Emotion is something that affects your entire system like a depression does. A feeling such as sadness is only an individual feeling and can be identified as such.

If something is intense, then it is a feeling, emotions are not intense they are deep. They are not as intense as feelings but you could call them intense. Feelings are more intense because that is how we define feelings, if you can feel something then it is a feeling because, well, you “feel” it. Emotion is just something that affects you, your mood, how you are, etc. That is why feelings are easier to identify, because they are more intense. Emotions are deeper, however, when someone becomes emotional you can’t just snap out of it instantly, it hangs around in your system. That is why they are probably made up of more parts than feelings are.

Why then do some simple things cause us to become more emotional if emotion is a deeper experience? That is because the feeling must trigger emotions, the simple thing is actually a feeling itself, but it triggers emotions. Like how colour can be more emotional than black and white. It is actually that colour causes more feeling, and we become emotional then about that feeling. But while you are looking at the colour it is a feeling which you are feeling, not an emotion. The feeling made you feel good, however, and that good feeling infects the rest of your feelings and emotions, and then you become emotional.

In fact, all feelings make someone more emotional. The only difference between feeling and emotion is that feeling is the immediate feeling you get from something. It is the thing which you are experiencing currently. Feeling is another word for current stimulation. You can only feel something that you are either thinking about or experiencing. Otherwise you aren’t really feeling it, and it is an emotion. That is why the word feeling is the word feeling, because you can feel it intimately, closely.

Emotion is such a strong feeling that it must be the combination of thoughts and feelings. By a combination of feeling and thought it means a combination of what it feels like to have a thought, with the feeling of what it feels like to have a feeling – It don’t mean the combination of actual verbal thoughts with feelings, but non-verbal thoughts which are like verbal thoughts in that they are about something, you just can’t identify what it is all the time because it is non-verbal.

Since thoughts are conscious and unconscious, emotion could be redefined as the combination of feeling and thought – that you only have emotion when you are thinking about something, and feeling something at the same time, and the combination of the two results in individual emotions. There is evidence for this from the facts that you can only experience one strong emotion at a time, and you can also only think about one strong emotion at a time.

That shows how emotions are pulled up by thoughts, or controlled and generated by them. It might be that this only applies to strong emotions, but it depends on each individual's definition of emotion (it might vary), but I don't think anyone can experience two strong emotions simultaneously. You can feel it for yourself, try and feel any combination of the following emotions (strongly) at the same time – anger, fear, sadness, disgust, surprise, curiosity, acceptance, or joy. You just can't do it. A slight feeling of curiosity is exactly that, a feeling and not an emotion. Emotions are stronger than feelings, and stronger than thoughts, but what are they made of? The only logical conclusion is that they are made up of thoughts and feelings.

2.7 LET US SUM UP

Motivation is the activation or energisation of goal-oriented behaviour. Motivation is said to be intrinsic or extrinsic. Motivation is to give reason, incentive, enthusiasm, or interest that causes a specific action or certain behaviour. Motivation is present in every life function. Simple acts such as eating are motivated by hunger. Education is motivated by desire for knowledge. Motivators can be anything from reward to coercion.

Emotions are our feelings. We feel them in our bodies as tingles, hot spots and muscular tension. There are cognitive aspects, but the physical sensation is what makes them really different. Emotions often lead to coping activities. When we feel something, we consequently respond to that feeling. This can be both in the immediate (and often subconscious) response to the feeling and also in the more thoughtful handling of the aftermath. Where this has been a negative feeling, the response may range from vigorous justification of our actions to conciliatory apologies and other 'making up'.

2.8 UNIT END QUESTIONS

- 1) Define and bring out the meaning of motivation.
- 2) Discuss the theories of motivation?
- 3) Elucidate the drive reduction theory and arousal theory of motivation.
- 4) What is the theory of motivation of Rotter's? Explain.
- 5) What are the psychological explanations of motivation?
- 6) Discuss Maslow's theory of hierarchy of needs and relate it to motivation.
- 7) What are the various types of motivation? Differentiate between the intrinsic and extrinsic motivation.
- 8) Define emotions and bring out the characteristic features of emotions.
- 9) Elucidate the theories of emotion.
- 10) Discuss the importance and relationship of feelings and emotions.

2.9 SUGGESTED READINGS

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UNIT 3 NEEDS, DRIVE AND MOTIVES

Structure

- 3.0 Introduction
- 3.1 Objectives
- 3.2 Needs, Drives and Motives
- 3.3 Needs
 - 3.3.1 Need Model
 - 3.3.2 Murray's Needs
 - 3.3.3 Psychogenic Needs
 - 3.3.4 Kano's Needs
 - 3.3.5 Glasser's Five Needs
- 3.4 Drives
 - 3.4.1 Drive Reduction Theory
 - 3.4.2 Drive Theory: Behavioural Approaches to Drive
- 3.5 Motives
 - 3.5.1 Definition and Meaning of Motives
 - 3.5.2 Motivation and Feedback Control System
 - 3.5.3 Motivation and Ethnology
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3.0 INTRODUCTION

In this unit we will be dealing with Needs, Drives and motives. We start with defining needs, and present the various models related to needs. The importance of needs in the behaviour of the individual is discussed in detail. Murray's concept of needs and the psychogenic needs as against the physiological needs are discussed. Kano's and Glasser's needs are also presented and how these incite behaviours. Then we define drives, and the theories related to drives such as the drive reduction theory and the behavioural approach to drive reduction. We discuss Hull's concept of drive and drive reduction in detail. Then we deal with Motives, we define motives and

elucidate the characteristics of motives. Then we present the various theories of motivation and how important these are in motivating behaviours. Then we present the methods of motivation and give a number of examples from organisational and work settings as to what methods are used in motivating the employees to perform at their best level. Then we present the theories of motivation followed by a discussion on stimulus motives and social motives in which we present McClelland's components of motivation.

3.1 OBJECTIVES

After completing this unit, you will be able to:

- Define needs, drives and motives;
- Elucidate their characteristic features;
- Elucidate the theories of needs;
- Define drives and bring out the characteristic features;
- Elucidate the theories of drives and drive reduction theory;
- Define motives and bring out the characteristic features of motives;
- Delineate the theories of motivation;
- Explain stimulus motives; and
- Describe the achievement motivation of and its various components.

3.2 NEEDS, DRIVES AND MOTIVES

A need is something that is necessary for organisms to live a healthy life. Needs are distinguished from wants because a deficiency would cause a clear negative outcome, such as dysfunction or death. Needs can be objective and physical, such as food and water, or they can be subjective and psychological, such as the need for self-esteem. Drive is the force that goads the organism to satisfy the needs. A drive has a direction and a valence. The Drive is not always that clear or simple. It sustains motivation. Motivation is the reason we do something that we do. Motive is an impulse that acts as an incitement to action. In this unit, we will discuss the definition, characteristics, theories and role of needs, drives, and motives. Needs are something you fulfill because you have to. They are basic and quite often instinctive. Drive is something that makes you keep going. It is more individual in the sense that some people are more driven than others. Motives however are indicative of why you do what you do. Motives are factors within a human being or animal that arouses and direct goal oriented behaviour. Motivation has long been a central subject of study in psychology. Early researchers, influenced by *Charles Darwin*, ascribed much of animal and human behaviour to instinct. *Sigmund Freud* believed that much of human behaviour was also based on irrational instinctive urges or unconscious motives. *Walter B. Cannon* proposed that basic human drives served homeostatic functions by directing energies toward the reduction of physiological tensions. Behavioural psychologists, in contrast, stress the importance of external goals in prompting action, while humanistic psychologists examine the role of felt needs. Cognitive psychologists have found that a motive sensitizes a person to information relating to that motive, as for instance, a hungry subject, will perceive food stimuli as larger than other stimuli.

3.3 NEEDS

What are needs? Needs are a kind of natural mental programming that make us want things. They essentially motivate us into action as a stimulated need leads to the inner tension that drives us into action.

A need is something that is *necessary* for organisms to live a healthy *life*. Needs are distinguished from *wants* because a deficiency of a need would cause a clear negative outcome, such as dysfunction or death. Needs can be *objective* and *physical*, such as food and water, or they can be *subjective* and psychological, such as the need for *self-esteem*.

To most psychologists, need is a psychological feature that arouses an organism to action toward a goal and the reason for that action, giving purpose and direction to behaviour. Abraham Maslow in his hierarchical model of needs proposed that people have a hierarchy of psychological needs, which range from security to self-actualisation. One of the problems with a psychological theory of needs is that conceptions of “need” may vary radically between different cultures or different parts of the same society. One person’s view of need may easily be seen as paternalistic by another.

According to Ian Gough and Len Doyal, an individual’s needs are representative of the costs of being human within society. A person, who does not have his or her needs fulfilled, will function poorly in society.

In their view, each person has an objective interest in avoiding serious harm that prevents the endeavor to attain his or her vision of what’s good, no matter what that is exactly. This attempt requires the ability to participate in the societal setting in which an individual lives.

More specifically, each person needs to have both physical health and personal autonomy. The latter refers to the capacity to make informed choices about what should be done and how to implement that. This requires mental health, cognitive skills, and chances to participate in society’s activities and collective decision making.

How are such needs satisfied? Doyal and Gough point to eleven broad categories of “intermediate needs” that define how the need for physical health and personal autonomy are fulfilled:

- Adequate nutritional food and water
- Adequate protective housing
- A safe environment for working
- A safe physical environment
- Appropriate health care
- Security in childhood,
- Significant primary relationships with others
- Physical security
- Economic security
- Safe birth control and child-bearing
- Appropriate basic and cross-cultural education.

The satisfaction of human needs cannot be imposed “from above”. Those with more internal “assets” or “capacities” (e.g., education, sanity, physical strength, etc.) have more capabilities (i.e., more available choices, more positive freedom) to fulfill the needs. They are thus more able to escape or avoid poverty and many other deprivations. Those with more capabilities fulfill more of their needs.

3.3.1 Need Model

There are a number of theories and models of needs that have been proposed, including:

Maslow’s hierarchy of needs

Maslow’s hierarchy of needs is a theory in psychology, proposed by Abraham Maslow. Maslow’s hierarchy of needs is often portrayed in the shape of a pyramid, with the largest and lowest levels of needs at the bottom, and the need for self-actualisation at the top.

A key aspect of the model is the hierarchical nature of the needs. The lower the needs in the hierarchy, the more fundamental they are and the more a person will tend to abandon the higher needs in order to pay attention to sufficiently meeting the lower needs. For example, when we are ill, we care little for what others think about us: all we want is to get better.

The five needs

- i) Physiological needs are to do with the maintenance of the human body. If we are unwell, then little else matters until we recover.
- ii) Safety needs are about putting a roof over our heads and keeping us from harm. If we are rich, strong and powerful, or have good friends, we can make ourselves safe.
- iii) Belonging needs introduce our tribal nature. If we are helpful and kind to others they will want us as friends.
- iv) Esteem needs are for a higher position within a group. If people respect us, we have greater power.
- v) Self-actualisation needs are to ‘become what we are capable of becoming’, which would be our greatest achievement.

Three more needs

These are the needs that are most commonly discussed and used. In fact Maslow later added three more needs by splitting two of the above five needs.

- Between esteem and self-actualisation needs was added:
- Need to know and understand, which explains the cognitive need of the academic.
- The need for aesthetic beauty, which is the emotional need of the artist.
- Self-actualisation was divided into:
- Self-actualisation, which is realising one’s own potential, as above.
- Transcendence, which is helping others to achieve their potential.

Using it: It is used to distract people from higher needs, threaten their lower needs.

It is no surprise that poison has been effectively used to bring down kings and princes without necessarily killing them.

Perceive and help people to meet the needs on which they are currently focussed. Their attention is here and they will thank you for assistance in meeting their present needs. Encourage them reach up to higher needs. Create a tension which you can use for your purpose.

Defending: Seek only needs at your current level. Neither retreat too rapidly to lower needs nor reach too quickly for higher needs. When you are ready, only then reach in your own time for higher needs. If other people seek to help you, you may accept their help but are not obliged to repay in any way they demand.

3.3.2 Murray's Need

Henry Murray, a psychologist was active in developing a theory of motivation. He believed that a need is a potentiality or readiness to respond in a certain way under certain given circumstances. It is a noun which stands for the fact that a certain trend is apt to recur.

Murray identified needs as primary and secondary needs. Primary needs refer to the needs that are based upon biological demands, such as the need for oxygen, food, and water. Secondary needs are generally psychological, such as the need for nurturing, independence, and achievement.

Murray and his colleagues identified 24 needs and called them as psychogenic needs.

3.3.3 Psychogenic Needs

The following is a partial list of 24 needs identified by Murray and his colleagues. According to Murray, all people have these needs, but each individual tends to have a certain dominant level of each need.

1) **Ambition Needs**

Achievement: Success, accomplishment, and overcoming obstacles.

Exhibition: Shocking or thrilling other people.

Recognition: Displaying achievements and gaining social status.

2) **Materialistic Needs**

Acquisition: Obtaining things.

Construction: Creating things.

Order: Making things neat and organised.

Retention: Keeping things.

3) **Power Needs**

Abasement: Confessing and apologising.

Autonomy: Independence and resistance.

Aggression: Attacking or ridiculing others.

Blame Avoidance: Following the rules and avoiding blame.

Deference: Obeying and cooperating with others.

Dominance: Controlling others.

4) **Affection Needs**

Affiliation: Spending time with other people.

Nurturance: Taking care of another person.

Play: Having fun with others.

Rejection: Rejecting other people.

Succorance: Being helped or protected by others.

5) **Information Needs**

Cognizance: Seeking knowledge and asking questions.

Exposition: Education others.

Influences of Psychogenic Needs: Each need is important in and of itself, but Murray also believed that needs can be interrelated, can support other needs, and can conflict with other needs. For example, the need for dominance may conflict with the need for affiliation when overly controlling behaviour drives away friends, family, and romantic partners. Murray also believed that environmental factors play a role in how these psychogenic needs are displayed in behaviour. Murray called these environmental forces “presses.”

3.3.4 Kano’s Needs

Japanese consultant Noriaki Kano has produced a simple diagram that was intended for use in understanding business customer needs, but also is applicable to general psychological situations.

- 1) **Basic needs:** They are the things that we expect to get without having to ask for them. When they are being met, we hardly notice them. When we buy a second hand car, we expect it to have five fully inflated tyres with good amount of tread on them. If we got home and found the spare was bald and punctured, we would not be happy.
- 2) **Performance needs:** Performance needs are those things which are at the top of our consciousness and which we will deliberately seek. If these are well met we are happy; if they are not well met, we become dissatisfied. To take the above example of buying a second hand car, these are the things that we will ask about, such as traction control and modern styling.

Performance needs come from two sources. When basic needs have not been met before, they may escalate next time to performance needs. More commonly, they come from expectations that have been set, either from such as magazines and friends or by the persuader. Thus the car salesperson may point out that the new safety protection system is something that every family is asking about these days.

- 3) **Excitement needs:** Beyond basic and performance needs, excitement needs are those things that we did not expect, those little extras that make us gasp with delight. Thus you may be amazed by new hands—free radio system or even something as simple as a soft-hold padded steering wheel.

A simple equation that has been put forward fits here:

$$\text{Delight} = \text{Expectation} + 1.$$

This equates to doing small things beyond performance needs. The essence of excitement is surprise, and the essence of surprise is unexpectedness. You can surprise by revealing carefully or sudden appearance.

3.3.5 Glasser’s Five Needs

William Glasser, in his ‘Control Theory’ (later renamed as ‘Choice Theory’) detailed five needs that are quite close to Maslow’s Hierarchy, but with some interesting twists.

- 1) **Survival:** This is similar to Maslow’s Physiological and Safety level. They are basic needs which are of little interest unless they are threatened.
- 2) **Love and belonging:** This is the same as Maslow’s Belonging need and recognises how important it is for us as a tribal species to be accepted by our peers.
- 3) **Power or recognition:** This maps to some extent to Maslow’s Esteem need, although the Power element focuses on our ability to achieve our goals (which is perhaps a lower-level control need).
- 4) **Freedom:** This is the ability to do what we want, to have free choice. It is connected with procedural justice where we seek fair play.
- 5) **Fun:** An interesting ultimate goal. When all else is satisfied, we just ‘want to have fun’.

You can leverage needs in two ways, stimulating or satisfying them.

Stimulate needs: The simplest way of stimulating needs is to make them visible. Show people what they have not got. Show them the future, and how their needs might be met. If you have the power, you can even take things away from them.

Satisfy needs: When people have needs (perhaps those which you have stimulated), you can promise to satisfy them. It puts you in a position of being able to negotiate.

Self Assessment Questions

- 1) Discuss the relationship between needs, drives and motives.

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- 2) Define needs and bring out its characteristic features.

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3) What is Needs Model? Explain it.

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4) What needs did Murra's model put across?

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5) What are psychogenic needs?

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6) Discuss Kano's and Glasser's models of needs.

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3.4 DRIVES

A drive is a psychological state of arousal that compels humans to take action to restore their homeostatic balance. When balance is restored, the drive is reduced. Examples are primary and secondary drives.

Hull viewed the drive as a stimulus, arising from a tissue need, which in turn stimulates behaviour. The strength of the drive is determined upon the length of the deprivation, or the intensity / strength of the resulting behaviour. He believed the drive to be non-specific, which means that the drive does not direct behaviour rather it functions to energise it. In addition this drive reduction is the reinforcement. Hull recognised that organisms were motivated by other forces, secondary reinforcements. This means that previously neutral stimuli may assume drive characteristics because they are capable of eliciting responses that are similar to those aroused by the original need state or primary drive (Schultz & Schultz, 1987, p 240). So learning must be taking place within the organism.

Hull's learning theory focuses mainly on the principle of reinforcement. When a Stimulus (S) – Response (R) that is a S-R relationship is followed by a reduction of the need, the probability increases that in future similar situations the same stimulus

will create the same prior response. Reinforcement can be defined in terms of reduction of a primary need. Just as Hull believed that there were secondary drives, he also felt that there were secondary reinforcements. He stated that if the intensity of the stimulus is reduced as the result of a secondary or learned drive, it will act as a secondary reinforcement. The way to strengthen the S-R response is to increase the number of reinforcements, habit strength.

Clark Hull's Mathematical Deductive Theory of Behaviour relied on the belief that the link between the S-R relationship could be anything that might effect how an organism responds. Learning, fatigue, disease, injury, motivation, etc are some of the ways in which an organism responds. He labeled this relationship as "E", a reaction potential, or as **sEr**. Clark goal was to make a science out of all of these intervening factors. He classified his formula

$$\mathbf{sEr} = (\mathbf{sHr} \times \mathbf{D} \times \mathbf{K} \times \mathbf{V}) - (\mathbf{sIr} + \mathbf{Ir}) \pm \mathbf{sOr}$$

as the Global Theory of Behaviour. Habit strength, **sHr**, is determined by the number of reinforces. Drive strength, **D**, is measured by the hours of deprivation of a need. **K**, is the incentive value of a stimulus, and **V** is a measure of the connectiveness. Inhibitory strength, **sIr**, is the number of non reinforces. Reactive inhibition, **Ir**, is when the organism has to work hard for a reward and becomes fatigued. The last variable in his formula is **sOr**, which accounts for random error. Hull believed that this formula could account for all behaviour, and that it would generate more accurate empirical data, which would eliminate all ineffective introspective methods within the laboratory.

Although Hull was a great contributor to psychology, his theory was criticized for the lack of generalisability due to the way he defined his variables in such precise quantitative terms.

3.4.1 Drive Reduction Theory

The Drive Reduction Theory grows out of the concept that we have certain biological drives, such as hunger. As time passes the strength of the drive increases if it is not satisfied (in this case by eating). Upon satisfying a drive the drive's strength is reduced.

Drive theory has some intuitive or folk validity. For instance when preparing food, the drive model appears to be compatible with sensations of rising hunger as the food is prepared, and, after the food has been consumed, a decrease in subjective hunger. There are several problems, however, that leave the validity of drive reduction open for debate. The first problem is that it does not explain how secondary reinforcers reduce drive. For example, money satisfies no biological or psychological needs, but a pay cheque appears to reduce drive through second order conditioning. Secondly, a drive, such as hunger, is viewed as having a "desire" to eat, making the drive a homuncular (a diminutive human) being. This idea is criticized as simply moving the fundamental problem behind this "small man" and his desires.

In addition, it is clear that drive reduction theory cannot be a complete theory of behaviour, or a hungry human could not prepare a meal without eating the food before he finished cooking it. The ability of drive theory to cope with all kinds of behaviour, from not satisfying a drive (by adding on other traits such as restraint), or adding additional drives for "tasty" food, which combine with drives for "food" in order to explain cooking render it hard to test.

Drive theory states that biological needs, which are created by imbalances in homeostasis, produce drives. (*Example:* Rana has not had anything to drink for hours. He has a need for fluids, which has caused a drive to find something to drink.

- i) **Primary drives** are drives that arise from biological needs. (*Example:* Rana has primary drives for obtaining food, water, and warmth. These are basic biological needs.
- ii) **Secondary drives** are learned through operant or classical conditioning. Humans learn drives that prompt them to obtain objects that are associated with the reduction of a primary drive. (*Example:* Rana lives in Shimla. He has learned that it is necessary to pay his power bill on time (secondary drive) in order to stay warm (primary drive) during the winter.

3.4.2 Drive Theory: Behavioural Approaches to Drive

The **behavioural** approach to understanding motivation deals with drives, both learned and unlearned, and with incentives.

By early 1950s drive theory had replaced instinct theory as the major model of human motivation. Its foremost proponent was Clark Hull who believed that humans have biological needs such as the need for food, water and sex that demand satisfaction.

A need is a state of deprivation or deficiency. A drive is a state of bodily tension such as hunger or thirst that arises from an unmet needs. The satisfaction of a drive is called drive reduction.

Drive theory is based on the principle of homeostasis, the tendency of the body to maintain a steady internal state. According to drive theory when homeostasis is disturbed, drives activate the behaviour needed to restore a steady balance.

Though needs and drives are related, they are distinct from each other.

We may have a bodily need for a certain vitamin but not become aware of it until we develop vitamin deficiency disorder. In other words, the need may exist in the absence of a corresponding drive. Also the strength of a need and the drive to satisfy may differ. Unlike instinct theory, drive theory posits an important role for learning, especially operant conditioning. We learn responses like ordering food when we are hungry. These responses are reinforced by drive reduction.

A behaviour that results in drive reduction is more likely to be repeated the next time the need arises.

Drives may also be acquired through experience. Biological drives such as hunger, thirst and sexual desire are called primary drives because they are considered inborn. Drives that are the result of experience are called secondary drives. For example, a drive to achieve monetary wealth is not something we are born with. We acquire it as a secondary drive because we learn that money can be used to satisfy primary and other secondary drives.

Woodworth took the concept of drive from the field of mechanics and viewed it as the source of motive power or force in organismic functioning. Thereafter until the 1960's this concept was extensively used in human or animal behaviour by psychologists. Often distinctions were made between the following:

- Innate and Acquired drives
- Primary and Secondary drives
- Viscerogenic and psychogenic drives

Miller and Dollard emphasised the role of learned secondary drives in human behaviour. For example, anxiety was viewed as a secondary drive based on the primary drive of pain. The anxiety drive is important because it can be learned quickly, become a strong motivating force and lead to a variety of behaviours relevant to normal and abnormal behaviours.

Drive theory thus involves the concepts of unlearned (or primary) drives, drive reduction, and learned (secondary) drives. It is based on the fact that all living organisms have **physiological needs** that must be satisfied for survival (for example, the need for food, water, sleep, and so forth) to maintain a state of **homeostasis**, that is, a steady internal state.

Disruption of an organism's homeostatic state causes a state of tension (arousal) called an **unlearned, or primary, drive**. If the aroused state has been created by hunger, it is called a **hunger drive**, and the drive can be *reduced* by food. Drive reduction moves toward the re-establishment of homeostasis. Drives, then, may be thought of as the consequence of a physiological need, which an organism is impelled to reduce or eliminate.

Drives may also be **learned, or secondary**. Fear (or anxiety), for example, is often considered a secondary drive that can be learned through either classical or operant conditioning. In Neal Miller's well known operant conditioning experiment, a rat was placed in a black box and then given a mild electrical shock. Eventually, the rat learned to react to the experience of being put in a black box (with no shock given) with the response of turning a wheel to escape. In this case, the black box is said to have elicited the learned drive of fear.

Self Assessment Questions

1) Define drives and bring out the characteristic features of drives.

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2) Discuss Hull's concept of drives and how he made it mathematical in approach.

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3) Elucidate drive reduction theory.

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4) Discuss the behavioural approach to drive theory.

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5) Differentiate between primary and secondary drives.

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3.5 MOTIVES

The intentions, desires, goals, and needs that determine human and animal behaviour. An inquiry is made into a person's motives in order to explain that person's actions.

3.5.1 Definition and Meaning of Motives

Motives are hypothetical state that activates behaviour and propels one towards goals.

Meaning of motive is the reason for doing something or behaving in a specific way. Different roles have been assigned to motivational factors in the *causation* of behaviour. Some have defined motivation as a *nonspecific* energising of all behaviour. Others define it as recruiting and directing behaviour, selecting which of many possible actions the organism will perform. The likely answer is that both aspects exist. More specific determinants of action may be *superimposed* on a dimension of activation or arousal that affects a variety of actions non selectively. The situation determines what the organism does, arousal level affects the *vigor*, promptness, or persistence with which the organism does it.

Early drive theorists saw motivated behaviour as *adjunct* to physiological mechanisms of *homeostasis*, that is, the mechanisms by which the body regulates internal variables such as temperature, blood sugar level, and the volume and concentration of body fluids.

However, the homeostatic model was not satisfactory. This was so because of the following reasons:

- 1) Not all "basic biological drives" work this way.
- 2) Motivated behaviour can be influenced by external as well as internal factors.
- 3) Since these external influences are not coupled with the animal's internal state, they can lead to behaviour that does not promote homeostasis and may even threaten it.
- 4) Internal and external factors are not independent and additive; rather they interact with each other. In such cases, internal influences affect behaviour by setting the organism's responsiveness to certain external signals.

- 5) The interaction occurs in the opposite direction as well that is, external signals can affect internal state.
- 6) In humans, vigorous and persistent goal directed behaviour can occur in the absence of any physiological need.
- 7) Even relatively simple motives such as hunger and thirst can be influenced by much more than the existing internal and external situation. They respond to potential or expected factors, as registered by cognitive apparatus.

To a hungry rat, food becomes a goal. The rat will make various responses, including arbitrarily learned ones or operants, that lead to contact with food. A rat can be trained to do whatever else is necessary (within its capabilities) to attain its goal. It is this flexibility of goal directed behaviour that justifies the concept of motivation. If an animal will do whatever is necessary to obtain food, it must first of all *want* food. Internal factors then may act by setting the goal status of environmental commodities. That is, the effect of hunger is to make food a goal.

3.5.2 Motivation and Feedback Control System

Motivated behaviour can be thought of as guided by a feedback control system with a set point. A set point establishes a goal state which the control system seeks to bring about. Behaviour is controlled, not by present external or internal stimuli alone, but by a comparison between the existing state of affairs and a desired state of affairs, that is, the set point or goal, registered or specified within the brain. The organism then acts to reduce the difference between the existing and the desired state of affairs.

This way of looking at motivation helps bridge the gap between simple motives in animals and complex ones in humans. If to be motivated is to do whatever is necessary to bring about an imagined state of affairs, then human motives can literally be as complex, and be projected as far into the future, as human imaginations permit.

3.5.3 Motivation and Ethnology

Another approach to motivation comes from ethnology, which has formed links with cognitive psychology. Motivation and emotion are closely related. Indeed, it has been argued that emotions are the true motivators and that other factors internal, situational, and cognitive take hold of behaviour by way of the emotions they evoke.

In the simplest case, pleasure and displeasure have been recognised for centuries as having motivational force. In more complex cases, the role of cognitive operations, such as how an individual feels about an event, as well as what is done about it, can depend heavily on how an individual thinks about it.

The culture in which an individual is raised has a powerful effect on how the individual behaves. It has been argued that culture teaches its members what to believe are the consequences of a specific action (cognitive), and how the individuals should feel about those consequences or about the actions themselves (emotional/ motivational).

3.5.4 Motivation and Learning Theory

Motivation is a pivotal concept in most theories of learning. It is closely related to arousal, attention, anxiety, and feedback/reinforcement. For example, a person needs to be motivated enough to pay attention while learning; anxiety can decrease our motivation to learn. Receiving a reward or feedback for an action usually increases

the likelihood that the action will be repeated. Weiner (1990) points out that behavioural theories tended to focus on extrinsic motivation (i.e., rewards) while cognitive theories deal with intrinsic motivation (i.e., goals).

In most forms of behavioural theory, motivation was strictly a function of primary drives such as hunger, sex, sleep, or comfort. According to Hull's Drive Reduction theory, learning reduces drives and therefore motivation is essential to learning. The degree of the learning achieved can be manipulated by the strength of the drive and its underlying motivation.

In cognitive theory, motivation serves to create intentions and goal seeking acts. One well developed area of research highly relevant to learning is achievement motivation. Motivation to achieve is a function of the individual's desire for success, the expectancy of success, and the incentives provided. Studies show that in general people prefer tasks of intermediate difficulty. In addition, students with a high need to achieve, obtain better grades in courses which they perceive as highly relevant to their career goals. On the other hand, according to Carl Rogers, the humanist theorist, all individuals have a drive to self actualise and this motivates learning.

3.5.5 Intrinsic Motivation

Malone (1981) presented a theoretical framework for intrinsic motivation and is of the view that intrinsic motivation is created by three qualities: challenge, fantasy, and curiosity.

Challenge depends upon activities that involve uncertain outcomes due to variable levels, hidden information or randomness.

Fantasy depends upon skills required for the instruction.

Curiosity can be aroused when learners believe their knowledge structures are incomplete, inconsistent, or unparsimonious.

According to Malone, intrinsically motivating activities provide learners with a broad range of challenge, concrete feedback, and clear cut criteria for performance.

Keller (1983) presents an instructional design model for motivation that is based upon a number of other theories. His model suggests a design strategy that encompasses four components of motivation:

- arousing interest,
- creating relevance,
- developing an expectancy of success, and
- producing satisfaction through intrinsic/extrinsic rewards.

One approach to employee motivation has been to view "add-ins" to an individual's job as the primary factors in improving performance. Endless mixes of employee benefits such as health care, life insurance, profit sharing, employee stock ownership plans, exercise facilities, subsidized meal plans, child care availability, company cars, and more have been used by companies in their efforts to maintain happy employees in the belief that happy employees are motivated employees.

Many modern theorists, however, propose that the motivation an employee feels toward his or her job has less to do with material rewards than with the design of the job itself. On the academic front, Turner and Lawrence suggested that there are

three basic characteristics of a “motivating” job:

- 1) It must allow a worker to feel personally responsible for a meaningful portion of the work accomplished. An employee must feel ownership of and connection with the work he or she performs.
- 2) It must provide outcomes which have intrinsic meaning to the individual. Effective work that does not lead a worker to feel that his or her efforts matter will not be maintained. The outcome of an employee’s work must have value to himself or herself and to others in the organisation.
- 3) It must provide the employee with feedback about his or her accomplishments. A constructive, believable critique of the work performed is crucial to a worker’s motivation to improve.

3.5.6 Motivation Methods

There are as many different methods of motivating employees today as there are companies operating in the global business environment.

Empowerment: Giving employees more responsibility and decision making authority increases their realm of control over the tasks for which they are held responsible and better equips them to carry out those tasks. As a result, feelings of frustration arising from being held accountable for something one does not have the resources to carry out are diminished. Energy is diverted from self-preservation to improved task accomplishment.

Creativity and innovation: In many companies, employees with creative ideas do not express them to management for fear that their input will be ignored or ridiculed. When the power to create in the organisation is pushed down from the top to line personnel, employees who know a job, product, or service best are given the opportunity to use their ideas to improve it. The power to create motivates employees and benefits the organisation in having a more flexible work force, using more wisely the experience of its employees, and increasing the exchange of ideas and information among employees and departments.

Learning: If employees are given the tools and the opportunities to accomplish more, most will take on the challenge. Companies can motivate employees to achieve more by committing to perpetual enhancement of employee skills. Accreditation and licensing programs for employees are an increasingly popular and effective way to bring about growth in employee knowledge and motivation. Often, these programs improve employees’ attitudes toward the client and the company, while bolstering self-confidence.

Quality of life: The number of hours worked each week by American workers is on the rise, and many families have two adults working those increased hours. Under these circumstances, many workers are left wondering how to meet the demands of their lives beyond the workplace. Often, this concern occurs while at work and may reduce an employee’s productivity and morale. Companies that have instituted flexible employee arrangements have gained motivated employees whose productivity has increased.

Programs incorporating flextime, condensed workweeks, or job sharing, for example, have been successful in focusing overwhelmed employees toward the work to be done and away from the demands of their private lives.

Monetary incentive: For all the championing of alternative motivators, money still occupies a major place in the mix of motivators. The sharing of a company's profits gives incentive to employees to produce a quality product, perform a quality service, or improve the quality of a process within the company. What benefits the company directly benefits the employee. Monetary and other rewards are being given to employees for generating cost savings or process improving ideas, to boost productivity and reduce absenteeism. Money is effective when it is directly tied to an employee's ideas or accomplishments.

Other incentives: Monetary systems are insufficient motivators, in part because expectations often exceed results and because disparity between salaried individuals may divide rather than unite employees. Proven nonmonetary positive motivators foster team spirit and include recognition, responsibility, and advancement. Managers who recognise the "small wins" of employees, promote participatory environments, and treat employees with fairness and respect will find their employees to be more highly motivated.

High motivation is the key to success in any endeavour. It may come from within a person (intrinsic motivation) or from external influences (extrinsic motivation). For example, intrinsic motivation is derived from engaging in exercise for its own sake, for the satisfaction and the sheer enjoyment it brings, and for no external reason. Those who are intrinsically motivated give up less easily and generally achieve higher levels of fitness than those who are solely motivated by external rewards such as praise, money, and trophies.

Motivational strategies include providing competition; giving pep talks, praise and constructive criticism; and setting appropriate short term goals. In order to train successfully, exercisers must have sufficient motivation to expend time and energy on their training and be able to endure a certain amount of fatigue, boredom, and discomfort. Many coaches adopt the attitude encapsulated in the phrase 'No pain, no gain!', but this should not be taken as an exhortation to overtrain and become injured or ill.

Self Assessment Questions

1) Define motives and bring out the meaning of motives.

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2) Discuss motivation and feedback control system.

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3) Discuss the relationship between motivation and learning theory.

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4) What is intrinsic motivation and how does Malone conceptualise the same?

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4) What are the various methods of motivating persons? Give examples from workplace situations.

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3.6 THEORIES OF MOTIVATION

3.6.1 Maslow's Theory of Need Hierarchy

This is one of the most widely discussed theories of motivation.

The theory can be summarized as follows:

- Human beings have wants and desires which influence their behaviour. Only unsatisfied needs influence behaviour, satisfied needs do not.
- Since needs are many, they are arranged in order of importance, from the basic to the complex.
- The person advances to the next level of needs only after the lower level need is at least minimally satisfied.
- The further the progress up the hierarchy, the more individuality, humanness and psychological health a person will show.

The needs, listed from basic (lowest-earliest) to most complex (highest-latest) are as follows:

- Physiology (hunger, thirst etc.)
- Safety / security / shelter / health
- Belongingness / love/ friendship
- Self esteem / recognition / achievement
- Self actualisation

3.6.2 Alderfer's Model

Alderfer identified three groups of core needs.

1) Existence, 2) Relatedness and 3) Growth

The existence needs are concerned with survival (physiological well-being).

The relatedness needs stress the importance of interpersonal, social relationships.

The growth needs concerned with the individual's intrinsic desire for personal development.

3.6.3 Herzberg's Two Factor Theory

Hygiene factors

- Company policy and administration
- Supervision, technical
- Salary
- Interpersonal relations, supervisor behaviour
- Working conditions

Motivators

- Achievement
- Recognition
- Work itself
- Responsibility
- Advancement

Luthans has commented that although such a content approach has surface logic, is easy to understand and can be readily translated into practice, the research evidence points out some definite limitations. There is very little research support for these models' theoretical basis and predictability. The trade-off for simplicity sacrifices true understanding of the complexity of work motivation. On the positive side, however, the content models have given emphasis to important content factors. In addition, the Alderfer model allows more flexibility, and the Herzberg model is useful as an explanation for job satisfaction and as a point of departure for practical application to enrich jobs.

3.6.4 Process Theories

The process theories provide a much sounder theoretical explanation of work motivation. The expectancy model of Vroom and the extensions and refinements provided by Porter and Lawler help explain the important cognitive variables and how they relate to one another in the complex process of work motivation. The Porter-Lawler model also gives specific attention to the important relationship between performance and satisfaction. Porter and Lawler propose that performance leads to satisfaction, instead of the human relations assumption of the reverse.

A growing research literature is somewhat supportive of these expectancy models, but conceptual and methodological problems remain. Unlike the content models,

these expectancy models are relatively complex and difficult to translate into actual practice, and, consequently, they have made a contribution but are not the final answer for motivation in the field of organisational behaviour and human resource performance.

3.6.5 Equity Theory

More recently, in academic circles, equity theory has received increased attention. Equity theory, which is based on perceived input-outcome ratios of oneself compared to relevant other(s), can lead to increased understanding of the complex cognitive process of work motivation but has the same limitation as the expectancy models for prediction and control in the practice of human resource management. More recently, this equity theory has been applied to the analysis of organisational justice in the workplace.

Control and agency theories, coming from other disciplines, are representative of other approaches receiving recent research attention in organisational behaviour.

Self Assessment Questions

1) Discuss Maslow's hierarchy of needs theory in terms of motivation.

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2) Elucidate Alderfer's model of motivation.

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3) Discuss Herzberg's two factor theory of motivation.

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4) What are process theories?

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5) Explain Equity theory of motivation.

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3.7 STIMULUS MOTIVES

These motives increase the stimulus on an object, as for example Sensory Stimulation and Activity

- i) **Sensory Deprivation:** Research method that systematically decreases the amount of stimulation on sensory receptors; sensory deprivation is intolerable; people seek different levels of stimulation.
- ii) **Exploration and Manipulation:** Novel Stimulation – Unusual source of arousal or excitement; people are motivated to seek it. People explore and manipulate their environment f3.7.1. or reduction of primary drives or for their own sake

The Search for Optimal Arousal

- *Arousal* – General level of activity or motivation in an organism.
- *Optimal Arousal* – The level of arousal at which we function best.
- *Fiske and Maddi* – Theorized that people behave in ways to increase their arousal when their levels are too low and ways to decrease their arousal when their levels are too high.
- *Yerkes-Dodson Law* – A high level of motivation increases efficiency in the performance of simple tasks, whereas a low level of motivation increases the efficiency in the performance of complex tasks.

3.7.1 Social Motives

These are learned or acquired motives.

Henry Murray developed Thematic Apperception Test (TAT)

David McClelland helped pioneer assessment of need for achievement; found that motives measured by the TAT permit the production of long-term behaviour patterns

McClelland identified three key motivating drives that work for everyone. He named these key drives as:

- The Need for Achievement
- The Need for Affiliation
- The Need for Power

He also identified how these needs each vary in strength between different people. Everyone, says McClelland, is motivated by all of these, but to motivate individuals, the manager needs to consider what the primary drivers in each case are.

Achievement

- How to recognise the Achievement Motive in a person
- They like working by themselves and making their own decisions
- They like realistic challenges and getting things done
- They do not work well under close supervision
- *How to deal with them and arouse their Motivation*

Introduction

- *Be factual, to the point and straightforward, minimise discussions*
- *Use a business-like approach, no unproductive encounters or 'passing the time of day'*
- *Offer ideas and suggestions and avoid telling them precisely what to do*
- *Let them play a significant role in making the decision as this will commit them to it.*

Affiliation

- How to recognise the Affiliation Motive in a person
- They seek the company of others and seek to make friends
- They are eager to interact and need to be liked as a person
- They are warm and can appear non-assertive
- They may talk at length about family, friends and outside interests and engage in social ritual
- *How to deal with them and arouse their motivation*
- *They respond to warm human qualities, a smile and interest in family, social activities*
- *Be prepared to spend time developing a warm relationship with them as they will do things for people they like*
- *They are motivated by friendship and relationships and do things for people they relate to on a personal basis.*

Power

- How to recognise the power motive in a person
- They tend to be firm, direct and competitive, and they try to be persuasive in their dealings
- They like to impress and may express their status needs by displaying objects, such as trophies, medals and works of art
- Like to act as a representative and spokesman for other people and to give advice
- *How to deal with them and arouse their motivation*
- *Treat them as important people and recognise and refer to their status objects*
- *They are impressed by manner of dress, the size of the office, club membership, salary, type of car and status achievements of the people they associate with*
- *Ask their advice and opinion on matters, and listen to their point of view.*
- *They pay particular attention to the manner of presentation of reports of discussions, they like things to 'look good' as well as be good.*

3.8 LET US SUM UP

In this unit we have studied needs, drives and motives. Motivation can be defined as the driving force behind all the actions of an individual. The influence of an individual's needs and desires both have a strong impact on the direction of their behaviour. Motivation is based on your emotions and achievement-related goals. Motivation is the basic drive for all of our actions. Motivation refers to the dynamics of our behaviour, which involves our needs, desires, drives, motives and ambitions in life. Achievement motivation is based on reaching success and achieving all of our aspirations in life.

A need is something that is necessary for organisms to live a healthy life. Needs are distinguished from wants because a deficiency would cause a clear negative outcome, such as dysfunction or death. Needs can be objective and physical, such as food and water, or they can be subjective and psychological, such as the need for self-esteem.

A Drive is an internal state of tension that motivates an organism to engage in activities that should (hopefully) reduce this tension. Motives are based on needs: States of tension within a person, and as need is satisfied, tension is reduced. It propels people to perceive, think, and act in ways that serve to satisfy a need.

Needs are created or come into existence whenever there is a physiological or psychological imbalance. A need exists when cells in the body are experiencing a shortage of food or water. A drive is a deficiency with a direction. Drives denote actions and intention to act by individuals and they are exhibited to alleviate needs.

Drives and motives are terms used interchangeably. Drives provide an energising thrust toward reaching an incentive or goal. The drives, or motives, may be classified into *primary (and general)*, and *secondary* categories. Anything that will alleviate a need is an incentive or goal in the motivation cycle. Attaining an incentive or goal will tend to restore physiological or psychological balance and will reduce the drive up to zero level. The primary motives are unlearned and physiologically based, such as, hunger, thirst, sleep, avoidance of pain, sex, and maternal concern. Secondary motives are learned motives. The needs for power, achievement, affiliation, security, and status are major motivating forces in the behaviour of organisational participants. Motivator can be a general term that can describe a need, a motive, incentive or a person.

3.9 UNIT END QUESTIONS

- 1) What are needs? Explain in terms of the various theories of needs.
- 2) What are drives? Discuss Hull's contribution to drives and relate it to motivation.
- 3) Define motives and bring out its characteristic features in terms of different aspects.
- 4) Discuss Herzberg's two factor theory and process theories from motivation point of view.
- 5) Put forward Maslow's theory of need hierarchy and discuss its importance for motivation.
- 6) What are stimulus motives? Explain
- 7) What are social Motives?

- 9) Discuss the needs for achievement, affiliation and power and indicate how these can be used to motivate persons to perform at the highest level?

3.10 SUGGESTED READINGS

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UNIT 4 FEELINGS, AFFECTION AND EMOTION

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- 4.1 Objectives
- 4.2 Emotion, Feeling and Affection
 - 4.2.1 Definition of Emotion
 - 4.2.2 Emotion and Affection
 - 4.2.3 Definition of Feeling
- 4.3 Difference between Emotion and Feeling
 - 4.3.1 Overlap between Emotions and Feelings
 - 4.3.2 Caring and not Caring about Feelings
- 4.4 Definition of Affection
 - 4.4.1 Difference between Emotion and Affection
 - 4.4.2 Approaches to Affection
 - 4.4.3 Approaches to Studying Affectionate Communication
 - 4.4.4 Affection and its Effects
 - 4.4.5 Affection as Social Help
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 - 4.4.7 Emotion of Love or Affection
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 - 4.5.5 Emotions are Derived from Feelings
 - 4.5.6 Feelings Unites with Mind to Generate Emotions
- 4.6 Influence of Value
- 4.7 Let Us Sum Up
- 4.8 Unit End Questions
- 4.9 Suggested Readings

4.0 INTRODUCTION

In this unit we will be dealing with emotions, feelings and affection. We start the unit with definition of emotions and bring out its important features. We discuss what is emotion and what is affection and how they are related. Then we define feelings and elucidate the characteristic features of feelings. Then differentiate between emotions and feelings and how they differ in a large number of dimensions and ways. In the process we also discuss the similarities between feelings and emotions and the overlapping aspects in them. Then we move on to affection, we first define affection and describe the same. We delineate the important characteristic features of affection and relate affection with emotions. We discuss the approaches to the study of

affection and affectionate communications. Then we put forth how affection brings about changes in the behaviour, stress etc. in individuals. We then discuss the signs of affection and affection as social help and point out how affection is important for the very survival of the human species. Then we present the emotions of love and affection emotions and thoughts and how thoughts are directed by emotions etc. We bring out the relationship between emotions and thoughts and feelings.

4.1 OBJECTIVES

After completing this unit, you will be able to:

- Define emotions;
- Define feelings;
- Describe the characteristic features of emotions and feelings;
- Differentiate between emotions and feelings;
- Elucidate the overlaps between emotions and feelings and the caring and non caring aspects of feelings;
- Define and elucidate the characteristic features of affection;
- Explain the different approaches to the study of affection and affectionate communication;
- Describe affection as a social help;
- Present the signs of affection and its effects on behaviour;
- Analyse the relationship between emotions and thoughts;
- Analyse the relationship between emotions, feelings and thoughts.

4.2 EMOTION, FEELING AND AFFECTION

Emotions and feelings: These are often spoken of as being one and the same, and it is easy to get them mixed up and confused. Although related, there is a difference between emotions and feelings, and they each serve in unique ways.

Affection: a positive feeling of liking. To give an example, “He had trouble expressing the affection he felt”; The child won everyone’s heart”. “The warmness of his welcome made us feel right at home”.

Affection means a tender feeling toward another; fondness.

4.2.1 Definition of Emotion

Objects evoke an emotion which is a natural phenomenon, and is essential for human survival. When an unknown thing is encountered one may have a range of reactions such as curiosity, fear etc. When this reaction to the object is given a name it attains a meaning. It is through this process emotions get attached to an object. On a daily basis these emotions can be as subtle as: “like”, “dislike” or “ambivalence”. Even a state of ambivalence is a state of meaning.

Emotions offer the sense of life itself. Emotions are an abstract, metaphysical state of mind and they are essential impressions of the world and one’s relationship with

it. Emotions establish the person's attitude toward reality, and provide the needed drive for all of life's pleasures.

Additionally, these emotions are connected to the biological systems, and are designed to alert the person of danger, or to draw the person to something pleasurable. If the person does not have emotions, he would carelessly walk right up to a lion in the forest.

Emotions provide awareness, bodily changes, interpretation and action. As the objects in the world induce emotions in a person, they are collected in the subconscious and begin to accumulate. This is especially so when the events are repeated. Ultimately they form a final emotional conclusion about life, how to live it, and more importantly, how to survive physically and mentally in a world of chaos. When this happens a feeling is born. In this way, emotions serve as a sort of, "Feelings Factory".

4.2.2 Emotion and Affect

- **Emotion** is the umbrella term for all of the behavioural, expressive, cognitive and physiological changes that occur.
- **Affect** is the conscious experience of an emotion.
- **Emotional affect** is the unconscious component of emotion.
- **Non-emotional affect** is rather a vague term that just includes everything that is not an emotional affect, e.g. nausea and pain

The well-known neurologist and emotion researcher Antonio Damasio has suggested the following taxonomy:

- **A state of emotion** can be started and executed unconsciously.
- **A state of feeling** is unconscious.
- **A state of feeling made conscious** means it is the emotion and feeling made conscious
- **Affect**, then, is the conscious experience of emotion.

Davidson (2003) used the words 'affect' and 'emotion' interchangeably.

Affect is subcortical. There is a tendency among some investigators to regard emotions as largely subcortical and to sometimes also assume that cognitions are cortical.

One may also state that Affect is a Feeling or emotion, especially as manifested by facial expression or body language, but, clearly for psychologists and those in related fields, the word's technical usage has yet to settle down.

4.2.3 Definition of Feeling

Feelings in a general sense, are what we may feel in any part of our body. These may be simple bodily sensations, such as hot or cold, pain, a touch or else they may be feelings associated with emotions, such as love or hate, joy or anger.

Feelings generated by mechanical or chemical means, commonly from the outside will be called 'body sensations' or simply 'sensations'.

Emotions, on the other hand, are feelings or reactions about someone or something,

and usually involving our ego. We are angry about someone, afraid of something, in love with someone. These emotions may be directly felt in the body or we may just react strongly with thoughts or verbal displays originating from our head.

This means, we may have a strong reaction without actually being aware of a feeling in the body. We may even smash something in anger without feeling the energy of the anger itself in our body. This can be termed as ‘cold anger’, a strong emotion without feeling.

A feeling is the inner body experience that we have if we can directly feel the energy associated with an emotion.

Another group of feelings are associated with energy flows within the body that we may experience during meditation, guided imagery, bodywork or other forms of healing. We may experience a part of our body become warm or tingling or notice pleasant streamings in the pelvic area, we may also feel our muscles being tense or relaxed, our head being clear or congested. These however are not emotions.

You can recognise any feeling, that is what makes it a feeling. If you are sad that is a feeling, but if you are depressed that is not a feeling it is more like an emotion. You can not identify why you are depressed but you can usually identify why you are sad.

Feelings are more immediate, if something happens or is happening, it is going to result in a feeling. However, if something happened a long time ago, you are going to think about it unconsciously and that is going to bring up unconscious feelings. This is known as emotion. So emotions are unconscious feelings that are the result of unconscious thoughts. Moods are generalised feelings usually beyond our conscious control, and often with a somewhat negative connotation.

Sentiment’ are more tender feelings but usually about something and may then be grouped with the emotions.

Desires, too, are about ‘something’ and, therefore, emotions.

Passions are generally regarded as strongly felt and expressed emotions.

Once feelings are established, they often feed back into emotions to produce the appropriate result to ensure survivability.

Take an example: Imagine you observe your child approaching an electrical outlet with a paper clip in hand. Your sustained feeling of love for your child, will generate the temporary emotion of fear, and you quickly act by yelling “No!” and swatting your child’s hand away from the outlet. Perhaps your child responds with surprise and anger, and defiantly attempts to insert the paperclip into the outlet again. Your sustained feeling of love for your child, may generate the temporary emotion of anger because your child is expressing stubbornness, and disrespect to your attempts at preserving their life.

Self Assessment Questions

1) Define emotions and feelings.

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2) Describe the characteristic features of emotions and feelings.

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3) What is the relationship between emotions and feelings?

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4) How are emotion and affect related?

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4.3 DIFFERENCE BETWEEN EMOTIONS AND FEELING

Emotion is more similar to conscious thought than feelings are to conscious thought. Although emotion and feeling can be described as unconscious thought, one of them is going to be more similar to conscious thought. Feelings are more like sensations, when you touch something you get a feeling. Therefore feelings are faster than emotions and thought.

Emotion can be considered just unconscious thought. Actually it would better be described as unconscious feeling because you can “feel” it better and easier. However emotion is a deeper, more unconscious experience similar to unconscious thought, but emotions are also more similar to conscious thought because thought is a deep experience while feelings are intense or shallow, and not deep.

4.3.1 Overlap between Emotions and Feelings

There is a large overlap between how feelings feel and how emotions feel, they are similar in nature. So there are only a few defined emotions, but there are an infinite number ways of feeling things. You can have a “small” emotion of hate and you could say that you have the feeling hate then, if it is large you could say you are being emotional about hate, or are experiencing the emotion hate. You can have the same emotion of hate in different situations, but each time the feeling is going to be at least slightly different.

Feelings are more immediate, if something happens or is happening, it is going to result in a feeling. However, if something happened a long time ago, we may think about it unconsciously and that is going to bring up unconscious feelings. Emotions are unconscious feelings that are the result of mostly unconscious thoughts. Feelings

defined there can be identified. While you can not identify the unconscious thought that caused the unconscious feeling, you can identify the unconscious feeling itself.

There is a difference between sadness and depression. Depression lowers your mood and affects all your feelings and emotions, but sadness is just that individual feeling. So the reason that the depression affects all your other feelings is because you can no longer recognise the individual's sad emotions that caused it. The feelings become mixed. If someone can identify the reason they are sad then they become no longer depressed, just sad. Once they forget that that was the reason they are depressed however, they will become depressed again.

4.3.2 Caring and not Caring about a Feeling

The following is a good example of the transition from caring about a feeling to not caring about a feeling. Anger as an emotion takes more energy to maintain, so if someone is punched or something, they are only likely to be mad for a brief period of time, but the sadness that it incurred might last for a much longer time. That sadness is only going to be recognisable to the person punched for a brief period of time as attributable to the person who did the punching, after that the sadness would sink into their system like a miniature depression.

To state briefly about feelings and emotions, it may be stated as follows:

- a) both feelings and emotions are composed of unconscious thoughts,
- b) feelings are easier to identify than emotions.
- c) Feelings are faster than emotions in terms of response (the response time of the feeling, how fast it responds to real world stimulation) and
- d) it takes someone less time to recognise feelings because they are faster.
- e) Feelings are closer to sensory stimulation, if you touch something, you feel it and that is a fast reaction.
- f) You care about the feeling so you can separate it out in your head from the other feelings.
- g) You can consciously understand why you are depressed or sad, but that might or might not affect the intensity of that sadness.
- h) If the intensity of the sadness is brought up enough, then you can feel that sadness and it isn't like a depression anymore, it is more like an individual feeling than something that affects your mood and brings your system down (aka a depression).
- i) Also, if you clearly enough understand what the sadness is then it is going to remain a sadness and not affect the rest of your system.
- j) Emotions are stronger than feelings.
- k) Feelings however are a more directed focus. When you feel something you can always identify what that one thing is. When you have an emotion, the emotion is more distant, but stronger.
- l) All your feelings must feel a certain way about whatever is causing the emotion.
- m) Feelings can be defined as immediate unconscious thought and emotions as unconscious thought.

Feelings are thus products of emotions. But unlike short term, intense emotions, feelings are of low key, stable and sustained over time. Table below gives the difference between emotions and feelings.

Table: The Differences between Emotions and Feelings

Feelings	Emotions
Feelings tell us “how to live.”	Emotions tell us what we “like” and “dislike.”
Feelings deliver the message: “There is a right and wrong way to be.”	Emotions deliver the message: “There are good and bad actions.”
Feelings deliver the message: “your emotions matter.”	Emotions deliver the message: “The external world matters.”
Feelings establish our long term attitude toward reality.	Emotions establish our initial attitude toward reality.
Feelings alert us to anticipated dangers and prepare us for action.	Emotion alert us to immediate dangers and prepares us for action
Feelings ensure long-term survival of self. (body and mind.)	Emotions ensure immediate survival of self. (body and mind.)
Feelings are Low-key but Sustainable.	Emotions are Intense but Temporary.
Happiness: is a feeling.	Joy: is an emotion.
Worry: is a feeling.	Fear: is an emotion.
Contentment: is a feeling.	Enthusiasm: is an emotion.
Bitterness: is a feeling.	Anger: is an emotion.
Love: is a feeling.	Lust: is an emotion.
Depression: is a feeling.	Sadness: is an emotion.

The difference between emotions and feelings is crucial to one’s personal growth. If a person is dissatisfied in life, the uniqueness of the person’s feelings can provide the person with a new understanding that can lead to many positive changes for that person.

Self Assessment Questions

1) Differentiate between emotions and feelings.

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2) What are the overlapping dimensions in emotions and feelings?

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3) What is meant by caring and non caring about a feeling?

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4.4 DEFINITION OF AFFECTION

Affection is usually identified with emotion, but actually these are very different phenomena although closely related. Whereas the emotion is an internal individual response which informs of the survival probabilities that every concrete situation offers, affection is a process of social interaction between two or more organisms.

Considering the use that we make of the word ‘affection’ in every day’s life, it can be inferred that affection is something that can be given to others. We say that we “give affection” or we “receive affection”. This way, it seems that affection may be something that we can provide and receive. On the contrary, emotions are neither given nor taken, they are only experienced by oneself without the requirement of any other person.

We usually describe our emotional state using expressions like “I feel tired” or “I’m feeling a great joy”, while we describe the affective processes as “he gives me his love” or “I give her my trust”. Generally, we do not say “she gives me her emotion” or “ he gives me his feeling” but we say “he/she gives me his/her affection”.

But, when we use the word ‘emotion’ in relation to another person, we say “you move me” or “you produce in me such and such emotion”.

Unlike emotions, affection is something that can be stored (accumulated). We talk about holidays, for instance, as a time of “loading batteries”, having in mind a better disposition to assist our children, friends, clients, students, partners, etc.

This means that in certain circumstances, we store a high capacity of affection, the affection that we can give to other people. It seems that affection is a phenomenon like the mass or the energy that it can be stored and moved or transported.

On the other hand, our experience teaches us that giving affection is something that requires some effort. Taking care, helping or understanding another person cannot be carried out without an effort. Sometimes, we do not realise the effort made. For example, the illusion of a new relationship does not let us see the effort that we carry out to please our partner and take care of his/her well being.

To understand this, we must distinguish between our good and happy predisposition to give affection (this is a positive emotion) and the physical amount of energy that we spend when we give affection. And that positive emotion may frequently hide the efforts made.

For example, caring for somebody who is sick requires an effort and it is a way of providing affection. Trying to understand the problems of the other people is an effort

and it is another way of giving affection. Trying to please others, to respect their freedom, to make them happy with a gift, etc., are all actions that require an effort (energy expenditure) and they all are different ways of providing affection.

4.4.1 Difference between Emotion and Affection

Affection is intimately related to emotions, given that similar terms can be used to express one or the other. We designate the affection received by the particular emotion that it brings us.

Affection is something essential in the humans.

None denies the necessity of affection that people have. In this sense, we all share the sensation that human species needs in great measure affection contrary to other species as cats or snakes, for example. This necessity is accentuated to the maximum in certain circumstances, for example, in the childhood and in the illness.

In summary, our knowledge of affection allows us to point out some clear characteristics:

- Affection is something that flows among people, something that one gives and one receives.
- To provide affection is something that requires effort.
- Affection is something essential for human species, especially in the childhood and in the illness.

4.4.2 Approaches to Affection

The importance of affection in human social interaction has been recognised by researchers and clinicians alike for some time. For example, Rotter, Chance, and Phares (1972) referred to “love and affection” as one of six fundamental human needs. Frank (1973) and Koch (1959) both stressed the importance of affection and warmth in therapeutic interventions, and others have indicated that affection plays a critical role in developmental psychological processes (e.g., Bowlby, 1953; Harlow, 1974).

Affectionate communication is also critical for relational development and definition. Most forms of emotional expression carry some type of relational meaning in addition to their literal meaning. For example, when one relational partner expresses fear or anxiety to another, he or she is also implicitly communicating a perception of trust for the other.

4.4.3 Approaches to Studying Affectionate Communication

Studies of affectionate communication have taken a number of approaches to defining the construct operationally. First, it is important to distinguish between affection and affectionate communication.

Affection represents an internal psychological state of positive, often intimate regard for another. Affectionate communication on the other hand focuses on on the communication of affection, which we conceptualise as an individual’s intentional and overt enactment or expression of feelings of closeness, care, and fondness for another. There are three approaches to operationalizing the construct of affectionate communication.

The first approach has been to measure affectionate behaviour without providing an explicit definition of the particular behaviours assessed.

Second, a more common approach has been to use observers to code the frequency of behaviours specified a priori. Early studies adopting this method focused on relatively few behaviours, most of them nonverbal. This approach is advantageous because the specific behaviours being assessed are specified, thus allowing the results to be interpreted with reference to particular behaviours.

Included in this are four classes of affectionate behaviour: (1) smiling and laughing; (2) affectionate words, such as verbal statements expressing love, praise, or friendship; (3) active affectionate physical contact, including kissing, hugging, and patting; and, (4) passive affectionate physical contact, such as sitting on another's lap.

The third approach to measuring affectionate communication is one in which participants provide self reports of their behaviours.

4.4.4 Affection and its Effects

Reaching out and touching someone, and holding them tight are all ways of saying you care. Its effects are immediate: for both, the hugger and the person being hugged, feel good.

“Touch is an important component of attachment as it creates bonds between two individuals,” says Dr Bhagat. For Malhotra, who describes herself as a friendly, warm, affectionate and demonstrative person, hugging is simply a natural expression of showing that you love and care.

Affection also has a direct response on the reduction of stress which prevents many diseases. Recent research has found that stresses that affect the brain can hurt the body at the cellular and molecular level, resulting in diminished health and quality of life. On the other hand, maintaining a positive frame of mind can help people fend off some of these stress effects, combat disease and live longer.

4.4.5 Affection as Social Help

Living beings can be divided into social and asocial species. Asocial species are those whose individuals do not need the collaboration of other individuals of their species to survive. This means that an individual of an asocial species can obtain the resources needed by itself. It exist a great number of asocial species, such as mosquitoes, crabs or blackberries.

While help and cooperation is a requirement in all social species, the humans especially need, for quite long periods of time, the collaboration of other members of their species to survive. A social individual cannot obtain by itself all the resources that it needs to survive. Without help, without cooperation of the others, an individual of a social species cannot survive. This means that a human being cannot survive alone, without the direct or indirect collaboration of other persons. Since the time the humans are born, they constantly need the collaboration of their fellow men. This social dependence has its benefits because, as a result of collaboration, the group becomes stronger and the individual has more probabilities to survive and to reproduce.

Affection is the means through which such help and cooperation are provided by members of the species to the other members. Thus affection is a kind of social help which is given without remuneration or asking in turn for something else. Then, when people usually say that the human beings need affection for their well-being, we maintain that they are referring actually to the fact that they need the help and

cooperation of other human beings to survive. That is to say, people express this need of social help as a necessity of affection. Hence, affection is considered something essential in the life of every human being. Giving affection means to help the others, provide for their welfare and procure their survival.

Sociability is, then, the result of needing the others in order to survive. Social species have very different degrees of need and social organisation.

Many species are social only during a part of their life, normally while they are young, and later they become solitary individuals.

Other species are social during all their life. Species like ants, lions or men are highly social, since they cannot survive without the collaboration and help of other individuals of their species.

Of course, the degree of social complexity and social necessity varies at length from one species to another. Within mammals, human being is undoubtedly the most social species.

Of course, there are very many ways of providing affection, given that a person can carry out a lot of diverse activities that benefit the other people.

Also, we should distinguish affective work of what we know as remunerated work. In modern societies people talk very often about work referring exclusively to that work that is made in exchange for an economic remuneration. But we shouldn't forget that work as any action that consumes energy and then, in fact, we never quit working. Even when we sleep we carry out a little amount of work.

We define affection, then, as the non-remunerated work done in benefit of the survival of other people or other living beings. Generally, this work consists of giving others, or helping them to obtain, some resources (food, territory, security or knowledge) needed for their survival.

Every individual's affective capacity is determined by its capacity to work in benefit of others in a non-remunerated way. The capacity of helping others that an individual has is limited, since it depends directly on the amount of resources he/she can obtain and on his/her work efficiency. Therefore, we can also say that the affective capacity (or social help capacity) is something that can be accumulated, that is to say, it is something that can vary in time and according to each individual, since both the available resources and the capacity of work are accumulative variables. If emotion behaves as an intensive state variable, affection does it as an extensive state variable (the total value is equal to the addition of the parts).

Lastly, the need of affection varies among individuals. This way, the most socially dependent individuals such as children, old people, sick people, etc., are groups that need more affection to survive. On the contrary, the mature individuals that have experienced an appropriate development, they need much less affection and so, they can provide more affection to the others.

4.4.6 Signs of Affection

We have expressed that affection is a necessity of all social species, since it refers to the help that any social individual needs from the others to survive.

Particularly, affective signs are expressed in a wide repertoire of genetically and culturally stereotyped behaviours, whose function is to ensure the affective readiness of the one who emits them with regard to the receiver.

Smiling, cordial greetings, signs of acceptance, promises of support, etc., they show the commitment of the person who emits them and they constitute a source of potential affection for the receiver. Both Ethology and Anthropology study profusely this type of signs or behaviours.

A social individual not only needs to ensure the support from his/her group in the present, but rather, it also needs to have some security that this support will be provided in the future. The function of the affective signs lies in satisfying this necessity. When people smile to others they transmit them the promise that they can count on them in the future. This means that they are and will be recognised as members of the group and therefore, that they are willing to provide their affection (work) when needed. The result is that the person that receives the smile experiences a positive emotion.

Nevertheless, the fact of emitting affective signs does not assure a future transmission of affection in all cases, because this will depend on the real working capacity that the transmitter has. This explains why, in practice, people that emit affective signs (smiles, greetings, promises, etc.) not always can provide the help expected. This difference between affective intention and real affection give rise to frequent and varied conflicts within the human relationships.

Thus we may state that affection is the help and collaboration from others that all social individual need to survive. Affection is provided through the execution of any type of work (non-remunerated work in the modern human species) done in benefit of the survival of another individual and, therefore, it is transferable, limited and accumulative.

4.4.7 Emotion of Love or Affection

Love or affection refers to:

- 1) A caring relationship between two people,
- 2) Desiring or participating in affection and physical intimacy, usually but not necessarily reciprocated.
- 3) A deep, tender, ineffable feeling of affection and solicitude toward a person.
- 4) Limbic Resonance.

The word “love” can refer both to an acute passionate emotion, lasting for minutes, hours, or days as well as to a lasting sentiment, enduring for years through many ups and downs. The phrase “in love” often refers to the sentiment. “Passion” describes the emotion.

Emotions allow us to sense the inner states and motives of the people around us. We can detect what others are feeling and rapidly adjust our own thinking, feeling, physiology, and actions to precisely match the situation. We have a capacity for limbic resonance which is a complex and rapid exchange of information, largely non-verbal, between two people about one’s own state and one’s adaptations to the other’s state.

Limbic Resonance (Limbic resonance is a concept of empathic harmony arising from the limbic system of the brain. It was first advanced in the book A General Theory of Love (2000)

This limbic resonance is what makes gazing into the face of another person so fascinating. Limbic resonance allows for a deep, personal connection, below the level

of consciousness. It is emotional harmony. It draws emotions into *congruence*. It is the mechanism that provides the “bonding” between mother and infant and even between an owner and his dog. Limbic resonance is the mechanism of love.

Some things in life cause people to feel and these are called emotional reactions. Some things in life cause people to think and these are sometimes called logical or intellectual reactions. Thus life is divided between things that make you feel and things that make you think. The question is if someone is feeling, does that mean that they are thinking less? If part of your brain is being occupied by feeling, then it makes sense that you have less capacity for thought. This issue is being discussed in emotion and thought.

Self Assessment Questions

1) Define affection and delineate its important features.

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2) What is the difference between emotion and affect?

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3) What are the various approaches to study of affection?

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4) Delineate the effects of affection.

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5) Discuss affection as a social help.

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6) What are the signs of affection?
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7) Discuss emotion of love or affection.
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4.5 EMOTION AND THOUGHT

A person may like something and it may cause the person to think. Thoughts thus are separate from emotions. Thinking then means one can think about emotions, as for example, “how did I feel then?” etc. Would this mean that thought requires increased attention, or is it a sharp spike in attention focused on one particular thing? It is hard to focus that much if a person is feeling a lot, however.

But there are still parts of thought that do not have feeling or emotion in them, and parts of emotion that do not have thought in them. That means thought requires more concentration than feeling does. Thought thus requires more attention, more focus, etc. If a person is feeling and is emotional, the energy that is focused on thought gets distributed to feeling and thus the focus and attention on thought become lesser than otherwise.

Then again, if a person is emotional it means that he is being attentive to his emotions, whatever they may be, and if his emotions are on something like the sun, then when he sees the sun he is going to be attentive to it, but not be thinking about it. So one can pay attention to something and not be thinking about it at the same time.

Suppose a person is thinking that sun is bad, then he is going to feel that it is bad. Thus thought and feeling are highly related. But thoughts are really clearer than feelings. Thought and feeling may result in the same amount of attention to something, but thought is more precise.

So, the more something is liked or disliked, or have any strong emotional reaction to anything, the more emotional it is, but that does not mean that it might not also cause the person to think about it. One can not label everything in life as either emotion or thought however.

Life is not a scale with emotion on one end and thought on the other. There are other factors involved, things like adrenaline and physical action, which might also cause increased attention that is not either emotional or thoughtful. When one is running or jogging he does have a lot of attention on the fact that he is jogging or running but he is not thinking about it or being emotional about it.

This means that just because one likes something one may not necessarily be emotional about it. One might like jogging, but it does not cause emotions in the person.. What does emotion mean then? Emotions are then thoughts that one can not identify. When one feels something it must be that the person is thinking about something unconsciously and has no idea what it is, usually.

So the difference between emotions, feelings and thoughts is that the person knows what thoughts are about, but he does not have as good an idea of what emotions and feelings are, because the latter are more obscure and harder to identify.

Thus it may be stated that if a person knows what is causing the emotion, it is no longer an emotion, but it is a thought.

The above would mean that all emotions have their roots in real things, and these real things can be explained with thoughts. So when we identify an emotion, it is a thought because thoughts can generate emotions, so if the emotion is still there after we identified it we would say that it falls under the category of thought, because the thought is making it.

To give an example, when we see a beautiful golden sword, we may exclaim, “Ah that gold sword is pretty”. This is an emotion, but to the conscious mind it would have no idea that we like the sword because it is pretty. All that you would know is that we like the sword and it is making us emotional about it.

Therefore, emotional things are really feelings that cause unconscious or conscious thought. Feeling is also another word for unconscious thought. By circular argument we can say that thought can be emotional.

While a person can only express a few thoughts a minute, the person’s emotions can contain endless numbers of thoughts per minute. They are however not as exact and hence do not make as much sense as thoughts do.

So thought is just a lot of attention on one little thing. And emotion is attention on lots of individual things, or possibly one thing. So things that are emotional are things that cause the person to think, consciously or unconsciously, thereby feel consciously or unconsciously.

4.5.1 Emotions are Complex

Emotions are very complex experiences and, to express them, we use a great variety of terms, besides gestures and attitudes. In fact we could use all the words of a dictionary to express different emotions. Emotion would better be described as unconscious feeling. One definition of emotion can be “any strong feeling”. Basic or primary emotions can be made up of secondary emotions such as for instance love can contain feelings or emotions of lust, love and longing.

Feelings can be described in more detail than emotions because one can have a specific feeling for anything, and each feeling is unique and might not have a name. The feeling may also be an emotion, say anger. Cold is also just a feeling. There is a large overlap between how feelings feel and how emotions feel, so there are only a few defined emotions, while there are an infinite number of ways of feeling things.

Emotion goes on and off for everyone. That is, there are degrees to which someone can be focused on and feel thought, and feel feeling. Some things in life can identifiably be more emotional than other things.

4.5.2 Emotions can Direct and Control Thoughts

Thought is concrete and real in the world, and emotion is something that you feel but can not visualize. Here we use intelligence. Intelligence is just the ability to do things which are real, versus feeling something, which is not as “real” as thoughts are.

The difference between emotion, feeling, thought, logic, and intelligence is that each of them requires a lot of attention. Even when one is feeling something the person’s attention is directed toward it. The answer is that everything in life eventually results in a feeling. Even emotion results in a feeling. Emotion is unconscious thoughts about things. Thought results in feelings, so unconscious thought (emotion) is also going to result in feelings.

Therefore emotion, thought and feeling are really just periods of focus on certain things. With thought you just recognise what it is that you are focusing on. With emotions you feel deeply about what you are focusing on, and with feelings you are focusing on it less.

All facts and information are going to be about things that cause feeling, however, since all things that happen cause feelings and all facts and information are about things that happen, so facts and information are just feelings organised in a logical manner. Intellect and thought also generate feelings when those thoughts are processed in the mind. This is why we say that emotions can direct and control thought. In fact when we are focusing on emotions, we cannot think properly and many times our perceptions become distorted due to our emotions. Once the emotional state is removed we are able to think more clearly as we are also able to perceive objectively and factually.

4.5.3 Emotions and Feelings are Broad Thoughts

Any emotion or feeling can be broken down into the sensations and real events that caused it. And you can think about any of those things (with thoughts).

A thought is thinking about something specific. You can have a thought about an entire paragraph, but it is going to be just a thought, it is going to be about one thing, and that one thing might be a summary of the paragraph, but it is still a thought.

Thoughts are in general talked about as being verbal, people rarely think of emotions and feelings as thoughts. But emotions and feelings are thoughts if you think about that emotion and feeling. The short period of time in which you think about the emotion or feeling is a thought. So thoughts can be about emotions and feelings. They are just harder to identify because they are not verbal.

Emotions, feelings and thoughts are made up of real experiences. A sound in your head is just like a sound in reality, you are mimicking the emotion that the sound in reality is causing in your head by yourself, without having the real sound be there. Just try it and think about any sound, it produces the same emotions as when the sound itself occurred outside your head.

Thus any emotion or feeling can be broken down into the sensations and real events that caused it. And you can think about any of those things (with thoughts). You can also think about those things as individual thoughts.

Emotions and feelings are so intense, that it is like you are trying to focus your attention on them. So emotions, feelings, and thoughts are all periods of focused attention. A thought is just more focused attention than a feeling or emotion. So

emotions, feelings, and thoughts are all related, they are all things that you pay more attention to. And since emotion and feelings are made up of stuff which occurs in the real world, one could label each one of those things which occurs in the real world a thought, and say that emotions are made up of thoughts, or are broad thoughts. That is, you pay attention to your thoughts, and you pay attention to your emotions, so you could say that emotions are just a bunch of individual thoughts squeezed into one thing.

4.5.4 Emotion is a Combination of Feelings and Thoughts

Emotion is such a strong feeling that it must be the combination of thoughts and feelings. If you think about it, if you combine positive thoughts and positive feelings, you're going to have a general overall greater experience. If, for instance the thoughts and feelings are on the same idea or the same thing, the person will be able to have a greater positive single emotion about that idea or thing.

Since thoughts are conscious and unconscious, emotion could be redefined as the combination of feeling and thought. There is evidence for this from the facts that you can only experience one strong emotion at a time, and you can also only think about one strong emotion at a time. That shows how emotions are pulled up by thoughts, or controlled and generated by them. It might be that this only applies to strong emotions, but it depends on each individual's definition of emotion.

Is a thought sensory input? No it isn't, you can think about sensory input, and that would give rise to a feeling of the sensation itself, but a thought is much faster in the brain. A thought is like a fast firing of neurons while a feeling or a sensation is an experience that actually takes some amount of time longer than it takes for a neuron to fire, which is the length of a short thought.

Feelings and thoughts work together; you have your present experience of the sensation, and your mental direction of thinking about that sensation. The latter part you can turn on if you want to make that natural, environmental feeling a strong one. It is hard to experience a strong feeling just by bringing the feeling up in your head, to have a strong feeling you need to have some type of direct sensory input and be thinking about that sensory input at the same time.

Emotion always precedes thought. Thought is always just going to be an explanation of emotion. Everything in the end turns out to be an emotion in your system, so therefore everything is really an emotion. When you say "I want to leave" the feeling of you wanting to leave is always going to precede the thought.

Actually first you understand what it is that you are feeling when you realise what it is you are feeling as an unconscious thought process. Then you have a more regular feeling about it, and then you are able to verbalize that feeling into a thought.

Unless something is said to you instead of you thinking it, in which case the process is reversed. First it is a thought because it is expressed that way, then it is a feeling, and then it is a quick unconscious thought process to think about what was said.

When the thing is said or thought of verbally it is most clear what the meaning is. In this way words assist understanding. This is probably because the combination of adding the stimulation of sound to the stimulation of the visual sense of the object/idea enhances understanding and forces you to think deeper about it because sound is an enhancing mechanism for thought.

Feelings are fast, you don't pause and think about them. Emotion you could say, since it is deeper, that you almost "think" about it.

Thought is also powered by feeling in other ways, as when you are nervous that you didn't understand something, your feelings then cause you to think nervous things like "do I know that too?, does he think I care that he knows that?" Those thoughts are a function of intelligence, because they are causing you to think about real things, which is what intelligence is.

Feelings are more direct than emotions and thought because they are more sensory – when you touch something you get a feeling. That shows further how emotions are really about things in the real world, only it more like you are thinking about them instead of feeling them in real time.

Things that come from memory are going to be emotions and/or thoughts, not feelings because feelings are things which are more tangible, those memories might result in new feelings, but the memories themselves are not feelings because they are just thoughts.

That shows how you can feel some things more than others, that thought and feeling are indeed separate and intelligence is sometimes driven by feelings and emotions, and sometimes it is not.

A person is always experiencing some emotion at any time, since when the present emotion fades away so another emotion will take its place and be felt by him / her. No single emotional response can be permanent. When any emotion, such as anger, is experienced the person can stay angry only for some time, eventually the anger will fade away and a fresh emotion will arise.

When emotions become intense they neutralise intellectual concerns. In fact, common negatively valued emotions such as self pity, fear, anxiety, as well as moods like depression, actually tend to inhibit rationality. To cite an example, intense anxiety seems to produce a mental fog in one's mind, making it impossible to study.

Some people might take offence if they were thought to be emotional, whereas it is acceptable for them to show feelings.

There are a multitude of emotions, but only there are three feelings, viz.,

- i) the pleasant one,
- ii) the unpleasant one, and
- iii) the neutral one.

The importance of feelings is that they help give rise to emotions, that is, the bases of all emotions are the three feelings.

The peculiarity of any particular emotion is that, whilst it is just an emotion, it is nevertheless intimately associated with specific mental attitudes and ideas that have become characteristic of that emotion

Understanding the nature of emotions has profound implications for psycho therapy.

4.5.5 Emotions are Derived from Feelings

Emotions are partly derived from feelings. To explain how this derivation occurs I use a model of consciousness that is a traditional one:

Consciousness has three modes; these are:

- will (or will power),
- mind, and
- feeling.

Past variations on this model substituted action for will, and emotion or sensibility for feelings.

In this model, I distinguish between consciousness and mind.

Consciousness is the totality of the person, whilst mind is only one feature of it. The three modes are separate, but they interlock by the production of desires and emotions.

In this model, mind has two aspects: intelligence and intellect. Intelligence links to will and to feeling, and intellect is the source of abstraction.

- Intelligence expresses the activity of the mind.
- The intellect is an indication of the degree of maturity of the mind.

Mind is the key to consciousness. Mind, in fact, is the ‘cement’ that keeps all aspects of consciousness together. Now the mind, in its aspect of intelligence, helps to produce desires and emotions. In this aspect of mind we use ideas or concepts.

Will is a pure striving, an undirected effort. When will is united with mind, it generates desire.

Desire is the activity of will directed into a mental concept.

The concept governs the use of will. The concept directs the will.

For example, will plus the concept ‘social status’ gives rise to the desire to achieve social status. Will plus the concept ‘fame’ gives rise to the desire for fame. Without the presence of desire it is very difficult to sustain the use of will; if a person tries to renounce desire then he /she is quite likely to become lethargic.

4.5.6 Feeling Unites with Mind to Generate Emotions

Emotion is the activity of feeling directed into a mental concept. The feeling energises a conceptual response to a stimulus. Feelings are primarily either pleasant or unpleasant and rarely are they neutral. Hence there are two possible conceptual responses to any stimulus, which in turn leads to two possible emotional responses.

For example, feeling plus the concept ‘domination’ gives rise to the emotions of anger and fear. Anger arises because the pleasant feeling makes domination of others acceptable to me, whereas the unpleasant feeling makes fear arise when I become subject to domination by others.

Another example, feeling plus the concept ‘identity’ gives rise to the emotions of love and hate. Here the pleasant feeling makes a social identity acceptable to me, since I am the same as everyone else. Identity produces love. The unpleasant feeling makes me reject a social identity. I prefer to be different and have an individual identity. Difference produces hate.

The mental concept that is associated with an emotion actually creates the boundaries of that emotion. If the mental concept changes, the emotion does not change and

instead, it fades away and a different emotion arises, that is the one that fits the current mental concept. The mental concepts of emotions are not normally a part of our awareness. Emotions are not unique to any particular individual, so the mental concepts that underlie them come from the unconscious mind. Since the mental concepts are unconscious they are extremely difficult to identify.

An emotion is not unique to any particular individual, so the mental concept that underlies it comes from the unconscious mind.

Now an unconscious idea has two values : it is good or it is bad. The good value generates the pleasant feeling, the bad value the unpleasant feeling. This division leads to two choices. One choice gives rise to one emotion, the other choice to its complement.

Self Assessment Questions

1) Discuss emotions and thought.

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2) How are emotions complex? Describe.

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3) Can emotions direct and control thoughts? Explain.

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4) Discuss emotions and feelings as broad thoughts.

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5) How do we visualize emotions a combination of feelings and thought?

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6) How do feelings generate emotions?

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4.6 INFLUENCE OF VALUE

No feeling is permanent. There is a constant oscillation between the positive and negative feelings. Emotions too are constantly changing, in part because feelings change, and in part due to the constant stream of ideas that flow in the unconscious mind. At the conscious and subconscious levels of mind we can focus on an unconscious idea and use it to pursue a trend or theme about something that interests us at that moment. Hence we can make an emotion last whilst we follow that trend.

We put a value on emotional experience. By either liking or disliking things, relationships, situations, etc. we put a value on them. At any particular moment we may either like or dislike something ; but this liking and disliking can take many forms.

In general then, if we are free wheeling in our thoughts, we can let our emotions be positive or negative according to whether the feeling is positive or negative. Otherwise, by placing value on our experience, we can generate positive or negative emotions as we choose. However, the generation of a positive emotion is often difficult if the feeling that is current is the negative one, and vice versa.

4.7 LET US SUM UP

Emotions, feelings and affection were handled in this unit. We gave definitions of emotions,. Feelings and affection and their typical characteristics. We discussed the relationship between emotions and feelings, emotions and thoughts, emotions and affection and delineated the important features in each of these relationships.

It was pointed out in this unit that feeling has upwards of twenty different meanings, and for our purposes, feeling can either refer to something experience as a result of outside stimuli reacting with one of your five senses or someone's sensibilities, attitude, or emotional perception.

Emotion is technically a state of consciousness in which various internal sensations are experienced. Emotion can be produced by a thought, memory, or external motivator and can often change our physical state.

Because of this, you could say that the biggest difference between feelings and emotions is that feelings have to be triggered by an external motivating factor whereas emotions can be completely internalised.

Feelings are thought to be experienced for short periods of time, as for instance someone jumps at you from around a corner and you will feel startled, but this feeling last only for sometime. Emotions are long term states. If you are in love, that emotion will usually last years.

Thus emotions and feelings are both sensations experienced by humans.

Feelings are triggered by external stimuli whereas emotions come from your mind and soul.

Feelings can include physical sensations as well as mental states, but emotions always come from the mind.

Feelings are often temporary and subside once the stimulus is no longer present, whereas emotions will stay with you for years because they are seated in your mind.

In review, both feelings and emotions are composed of unconscious thoughts, but feelings are easier to identify than emotions. Feelings are faster than emotions in terms of response and it takes someone less time to recognise feelings because they are faster. Feelings are closer to sensory stimulation, if you touch something, you feel it and that is a fast reaction. You care about the feeling so you can separate it out in your head from the other feelings. "You care" in that sentence could be translated into, the feeling is intense, so you feel it and can identify it easily. That is different from consciously understanding why you are depressed or sad. You can consciously understand why you are depressed or sad, but that might or might not affect the intensity of that sadness.

If you care about a feeling then it becomes easier to identify it, that is it shows how your feelings can help you to identify other feelings, so your emotions contribute to your emotional intelligence.

If a certain emotion is larger than others then to your intellect it is going to be easier to recognise, and easier to think about

4.8 UNIT END QUESTIONS

- 1) Define and describe the characteristic features of emotions and feelings.
- 2) Differentiate between emotions and feelings
- 3) Define affection and bring out its characteristic features.
- 4) How is affection considered to reduce stress and help survival of human species?
- 5) Discuss how thought and emotions are inter related?
- 6) Discuss influence of value in regard to feelings, emotions and affection.

4.9 SUGGESTED READINGS

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UNIT 1 THEORIES OF MOTIVATION

(Need theories, goal setting theory, attribution theory, drive theory and socio-cultural perspective on motivation)

Structure

- 1.0 Introduction
- 1.1 Objectives
- 1.2 Definition and Introduction to Theories of Motivation
- 1.3 Theories of Motivation
 - 1.3.1 Need Theories
 - 1.3.2 Goal Setting Theories
 - 1.3.3 Attribution Theory
 - 1.3.4 Drive Theory
- 1.4 Let Us Sum Up
- 1.5 Unit End Questions
- 1.6 Suggested Readings

1.0 INTRODUCTION

This unit deals with theories of motivation. It discusses the need theories under which theories of Maslow, Alderfer's ERG theory, Herzberg's Motivation theory and McClelland's Need for achievement, power and affiliation theories are discussed. This is followed by Goal setting theories in which the characteristics of goal setting are discussed, and the goals should be so that the individuals are motivated to reach the goal etc. Following this is the attribution theory and Hull's Drive theory.

1.1 OBJECTIVES

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

- Define motivation;
- Describe need theories;
- Explain the goal setting theories and the related factors;
- Elucidate attribution theory and indicate the importance of it; and
- Describe drive theory of Hull and the characteristic features of the same.

1.2 DEFINITION AND INTRODUCTION TO THEORIES OF MOTIVATION

The word motivation is coined from the Latin word "movere" which means to move. Motivation is defined as an internal drive that activates behaviour and gives it direction. Motivation can be broadly defined as the forces acting on or within a person that cause the arousal, direction and persistence of goal-directed, voluntary effort. The term motivation theory is concerned with the processes that describe why and how human behaviour is activated and directed. It is regarded as one of the most important areas of

study in the field of organisational behaviour. There are two different categories of motivational theories such as content theories, and process theories. Motivation theory is thus concerned with the processes that explain why and how human behaviour is activated.

The content theory of motivation, also known as need theory mainly focuses on the internal factors that energise and direct human behaviour. Maslow's hierarchy of needs, Alderfer's ERG theory, Herzberg's motivator-hygiene theory (Herzberg's dual factors theory), and McClelland's learned needs or three-needs theory are some of the major content theories.

Of the different types of content theories, the most famous content theory is Abraham Maslow's hierarchy of human needs. Maslow introduced five levels of basic needs through his theory. Basic needs are categorised as physiological needs, safety and security needs, needs of love, needs for self esteem and need for self actualisation.

Just like Maslow's hierarchy of needs, ERG theory explains existence, relatedness and growth needs. Through dual factors theory, Herzberg describes certain factors in the workplace which result in job satisfaction. McClelland's learned needs or three-need theory uses projective techniques called Thematic Aptitude Test (TAT) so as to evaluate people based on three needs: power, achievement and affiliation. People with high need of power take action in a way that influences the other's behaviour.

Another type of motivation theory is process theory. Process theories of motivation provide an opportunity to understand the thought processes that influence behaviour. The major process theories of motivation include Adam's Equity theory, Vroom's expectation theory, goal setting theory and reinforcement theory. Expectancy, instrumentality and valence are the key concepts explained in the expectancy theory. Goal setting theory suggests that the individuals are motivated to reach set goals. It also requires that the set goals should be specific. Reinforcement theory is concerned with controlling behaviour by manipulating its consequences.

1.3 THEORIES OF MOTIVATION

1.3.1 Need Theories

Content (need) theories of motivation focus on factors internal to the individual that energise and direct behaviour. In general, such theories regard motivation as the product of internal drives that compel an individual to act or move (hence, "motivate") toward the satisfaction of individual needs. The content theories of motivation are based in large part on early theories of motivation that traced the paths of action backward to their perceived origin in internal drives. Major content theories of motivation are Maslow's hierarchy of needs, Alderfer's ERG theory, Herzberg's motivator-hygiene theory, and McClelland's learned needs or three-need theory.

Needs are deficiencies that energise or trigger behaviours to satisfy those needs. At some point in your life, you might have a strong need for food and shelter. At other times, your social needs may be unfulfilled. Unfulfilled needs create a tension that makes you want to find ways to reduce or satisfy those needs. The stronger your needs, the more motivated you are to satisfy them. Conversely, a satisfied need does not motivate. In this section, we will look at the four content theories of motivation that dominate organisational thinking today.

A) Maslow's hierarchy of needs theory

Abraham Maslow developed the theory of hierarchy of needs, which suggests that individual needs exist in a hierarchy consisting of physiological needs, security needs, belongingness needs, esteem needs, and self-actualisation needs. Physiological needs are the most basic needs for food, water, and other factors necessary for survival. Security needs include needs for safety in one's physical environment, stability, and freedom from emotional distress. Belongingness needs relate to desires for friendship, love, and acceptance within a given community of individuals. Esteem needs are those associated with obtaining the respect of one's self and others. Finally, self-actualisation needs are those corresponding to the achievement one's own potential, the exercising and testing of one's creative capacities, and, in general, to becoming the best person one can possibly be. Unsatisfied needs motivate behaviour; thus, lower-level needs such as the physiological and security needs must be met before upper-level needs such as belongingness, esteem, and self-actualisation can be motivational.

This theory condenses the numerous needs that scholars have identified into a hierarchy of five basic categories. At the bottom are *physiological needs*, which include the need to satisfy biological requirements for food, air, water, and shelter. Next come *safety needs* – the need for a secure and stable environment and the absence of pain, threat, or illness. *Belongingness* includes the need for love, affection, and interaction with other people. *Esteem* includes self-esteem through personal achievement as well as social esteem through recognition and respect from others. At the top of the hierarchy is *self-actualisation*, which represents the need for self-fulfillment – a sense that the person's potential has been realised.

Maslow recognised that an employee's behaviour is motivated simultaneously by several need levels, but behaviour is motivated mostly by the lowest unsatisfied need at the time. As the person satisfies a lower-level need, the next higher need in the hierarchy becomes the primary motivator. This concept is known as the satisfaction-progression process. Even if a person is unable to satisfy a higher need, he or she will be motivated by it until it is eventually satisfied. Physiological needs are initially the most important, and people are motivated to satisfy them first. As they become gratified, safety needs emerge as the strongest motivator. As safety needs are satisfied, belongingness needs become most important, and so forth. The exception to the satisfaction-progression process is self-actualisation; as people experience self-actualisation, they desire more rather than less of this need.

Although Maslow's needs hierarchy is one of the best-known organisational behaviour theories, the model is much too rigid to explain the dynamic and unstable characteristics of employee needs. Researchers have found that individual needs do not cluster neatly around the five categories described in the model. Moreover, gratification of one need level does not necessarily lead to increased motivation to satisfy the next higher need level. Although Maslow's model may not predict employee needs as well as scholars initially expected, it provides an important introduction to employee needs and has laid the foundation for Alderfer's ERG theory, which has better research support.

Applications of the hierarchy of needs to management and the workplace are obvious. According to the implications of the hierarchy, individuals must have their lower level needs met by, for example, safe working conditions, adequate pay to take care of one's self and one's family, and job security before they will be motivated by increased job responsibilities, status, and challenging work assignments. Despite the ease of application of this theory to a work setting, this theory has received little research support and therefore is not very useful in practice.

Maslow's hierarchy of needs is most often displayed as a pyramid. The lowest levels of the pyramid are made up of the most basic needs, while the more complex needs are located at the top of the pyramid. Needs at the bottom of the pyramid are basic physical requirements including the need for food, water, sleep and warmth. Once these lower-level needs have been met, people can move on to the next level of needs, which are for safety and security.

As people progress up the pyramid, needs become increasingly psychological and social. Soon, the need for love, friendship and intimacy become important. Further up the pyramid, the need for personal esteem and feelings of accomplishment take priority. Like Carl Rogers, Maslow emphasised the importance of self-actualisation, which is a process of growing and developing as a person to achieve individual potential.

Types of Needs

Maslow believed that these needs are similar to instincts and play a major role in motivating behaviour. Physiological, security, social, and esteem needs are deficiency needs (also known as *D-needs*), meaning that these needs arise due to deprivation. Satisfying these lower-level needs is important in order to avoid unpleasant feelings or consequences.

Maslow termed the highest-level of the pyramid as growth needs (also known as *being needs* or *B-needs*). Growth needs do not stem from a lack of something, but rather from a desire to grow as a person.

Five Levels of the Hierarchy of Needs

There are five different levels in Maslow's hierarchy of needs:

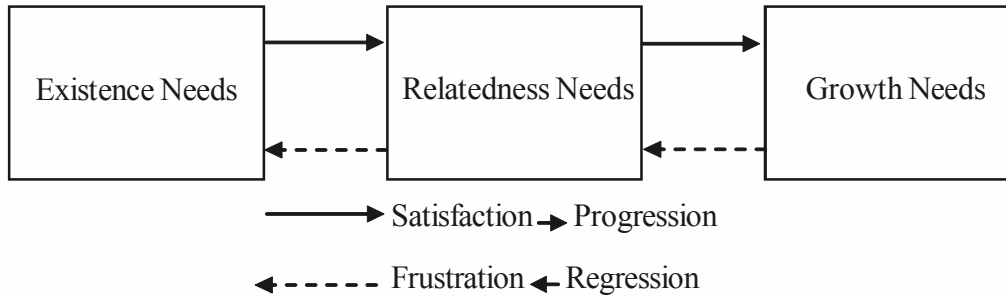
- i) **Physiological Needs:** These include the most basic needs that are vital to survival, such as the need for water, air, food and sleep. Maslow believed that these needs are the most basic and instinctive needs in the hierarchy because all needs become secondary until these physiological needs are met.
- ii) **Security Needs:** These include needs for safety and security. Security needs are important for survival, but they are not as demanding as the physiological needs. Examples of security needs include a desire for steady employment, health insurance, safe neighbourhoods and shelter from the environment.
- iii) **Social Needs:** These include needs for belonging, love and affection. Maslow considered these needs to be less basic than physiological and security needs. Relationships such as friendships, romantic attachments and families help fulfill this need for companionship and acceptance, as does involvement in social, community or religious groups.
- iv) **Esteem Needs:** After the first three needs have been satisfied, esteem needs becomes increasingly important. These include the need for things that reflect on self-esteem, personal worth, social recognition and accomplishment.
- v) **Self-actualising Needs:** This is the highest level of Maslow's hierarchy of needs. Self-actualising people are self-aware, concerned with personal growth, less concerned with the opinions of others and interested fulfilling their potential.

B) Alderfer's ERG needs theory

In 1969, Clayton Alderfer's revision of Abraham Maslow's Hierarchy of Needs, called the **ERG Theory**. Alderfer's contribution to organisational behaviour was dubbed the

ERG theory (Existence, Relatedness, and Growth), and was created to align Maslow's motivation theory more closely with empirical research.

Clayton Alderfer's ERG Theory



ERG Theory is similar to the famous Maslow's Hierarchy of Needs. Existence, or physiological, needs are at the base. These include the needs for things such as food, drink, shelter, and safety. Next come relatedness needs, the need to feel connected to other individuals or a group. These needs are fulfilled by establishing and maintaining relationships.

Similarities include reducing Maslow to three needs since some overlap. Thus ERG is the three.

The differences include allowing different levels of needs to be pursued simultaneously. Also, it allows for the order to be different for different people. The theory acknowledges that if higher levels remain unfulfilled, there may be a regression to lower level needs in what is known as frustration-regression principle.

At the top of the hierarchy are Growth needs, the needs for personal achievement and self-actualisation. If a person is continually frustrated in trying to satisfy growth needs, relatedness needs will remerge. This phenomenon is known as the frustration-regression process.

The ERG categories of human needs are:

Existence Needs: physiological and safety needs (such as hunger, thirst and sex).

Relatedness Needs: social and external esteem (involvement with family, friends, co-workers and employers).

Growth Needs: internal esteem and self actualisation (the desire to be creative, productive and to complete meaningful tasks).

- The ERG theory allows for different levels of needs to be pursued simultaneously.
- The ERG theory allows the order of the needs be different for different people.
- The ERG theory acknowledges that if a higher level need remains unfulfilled, the person may regress to lower level needs that appear easier to satisfy. This is known as the frustration-regression principle.

Thus, while the ERG theory presents a model of progressive needs, the hierarchical aspect is not rigid. This flexibility allows the ERG theory to account for a wider range of observed behaviours. For example, it can explain the "starving artist" who may place growth needs above existence ones.

Implications of ERG Theory for Management

If the ERG theory holds, then, managers must recognise that an employee has multiple needs to satisfy simultaneously. Furthermore, if growth opportunities are not provided

to employees, they may regress to relatedness needs. If the manager is able to recognise this situation, then steps can be taken to concentrate on relatedness needs until the subordinate is able to pursue growth again.

C) Herzberg's Motivator-Hygiene Theory

Herzberg felt that job satisfaction and dissatisfaction do not exist on the same continuum, but on dual scales. In other words, certain things, which Herzberg called hygiene factors, could cause a person to become unhappy with their job. These things, including pay, job security, and physical work environment, could never bring about job satisfaction.

Motivating factors, on the other hand, can increase job satisfaction. Giving employees things such as a sense of recognition, responsibility, or achievement can bring satisfaction about.

Frederick Herzberg explored the question "What do people want from their jobs". He did this through asking various people about situations and events at work, when they felt exceptionally good or bad about their jobs.

Herzberg's collection of information revealed that intrinsic factors are related to job satisfaction, whilst extrinsic factors created job dissatisfaction. In other words when people felt satisfied and happy at work the conditions present were directly affecting their inner feelings and self esteem. Yet dissatisfaction was created by the job environment people worked in and the interactions within that environment. This distinction is clearly illustrated in the table below.

Motivation creating job satisfaction	Hygiene factors creating job dissatisfaction
Achievement	Supervision
Recognition	Company policy
Work itself	Relationship with supervisor
Responsibility	Working conditions
Advancement	Salary
Growth	Relationship with peers
	Relationship with subordinates
	Status
	Security

As job satisfaction and job dissatisfaction are controlled by different factors Herzberg concluded that job satisfaction was not the opposite of job dissatisfaction. In contrast to the accepted theories at the time, Herzberg believed that job satisfaction was a distinct and separate entity from job dissatisfaction.

In other words the complete removal of job dissatisfaction will not cause an employee to feel job satisfaction. Similarly job satisfaction does not necessarily eradicate all elements of job dissatisfaction. Herzberg therefore decided that the opposite of job dissatisfaction was simply a work environment containing "no dissatisfaction" and the opposite of job satisfaction was an employee feeling "no satisfaction".

As extrinsic factors do not motivate employees Herzberg referred to these as Hygiene factors and intrinsic factors were called motivators for obvious reasons. From the 1960s to the 1980's Herzberg's theory of motivators and hygiene factors was widely popular.

After that other studies labelled it as simplistic but its principles can still be found within other motivation theories.

D) Mc Clelland's Theory of Need

David McClelland proposed that an individual's specific needs are acquired over time and are shaped by one's life experiences. Most of these needs can be classed as achievement, *affiliation*, or *power*. A person's motivation and effectiveness in certain job functions are influenced by these three needs. McClelland's theory sometimes is referred to as the *three need theory* or as the *learned needs theory*.

McClelland used projective technique called the Thematic Aptitude Test (TAT) to measure people in three dimensions: the need for power, achievement, and affiliation. Individuals with a high need for power take actions that affect other peoples' behaviour and arouse strong emotions in them. The need for power can be revealed in socially acceptable ways (demonstrating a socialised power orientation) or in selfish, inconsiderate ways (a personalised power orientation.)

Those with strong need for achievement enjoy competition against some standard and unique accomplishment. High achievers like tasks that are neither simple (which anyone could do) or extremely difficult (where the chance of success has more to do with luck than ability), but that challenge them to do their best.

People with a strong need for affiliation are particularly concerned with being liked and accepted. These individuals tend to establish, maintain, and restore closer personal relationships with others.

Need for Achievement

People with a high need for achievement (nAch) seek to excel and thus tend to avoid both low-risk and high-risk situations. Achievers avoid low-risk situations because the easily attained success is not a genuine achievement. In high-risk projects, achievers see the outcome as one of chance rather than one's own effort. High nAch individuals prefer work that has a moderate probability of success, ideally a 50% chance. Achievers need regular feedback in order to monitor the progress of their achievements. They prefer either to work alone or with other high achievers.

Need for Affiliation

Those with a high need for affiliation (nAff) need harmonious relationships with other people and need to feel accepted by other people. They tend to conform to the norms of their work group. High nAff individuals prefer work that provides significant personal interaction. They perform well in customer service and client interaction situations.

Need for Power

A person's need for power (nPow) can be one of two types - personal and institutional. Those who need personal power want to direct others, and this need often is perceived as undesirable. Persons who need institutional power (also known as social power) want to organise the efforts of others to further the goals of the organisation. Managers with a high need for institutional power tend to be more effective than those with a high need for personal power.

Assessment of Needs: Thematic Apperception Test

McClelland used the Thematic Apperception Test (TAT) as a tool to measure the individual needs of different people. The TAT is a test of imagination that presents the subject with a series of ambiguous pictures, and the subject is asked to develop a

spontaneous story for each picture. The assumption is that the subject will project his or her own needs into the story.

Psychologists have developed fairly reliable scoring techniques for the Thematic Apperception Test. The test determines the individual's score for each of the needs of achievement, affiliation, and power. This score can be used to suggest the types of jobs for which the person might be well suited.

Implications for Management

People with different needs are motivated differently.

High need for achievement – High achievers should be given challenging projects with reachable goals. They should be provided frequent feedback. While money is not an important motivator, it is an effective form of feedback.

High need for affiliation – Employees with a high affiliation need perform best in a cooperative environment.

High need for power – Management should provide power seekers the opportunity to manage others.

Self Assessment Questions

1) Fill in the blanks:

- a) _____ needs include the need to satisfy biological requirement.
- b) The need for a secure and stable environment is called _____ needs.
- c) The need for self fulfillment was called _____.
- d) The ERG theory allows the order of the _____ be different for different people.
- e) Giving employees things such as sense of recognition, responsibility or achievement can bring _____ about.

2) Answer the following statements with True (T) or False (F):

- a) The ERG theory allows for different levels of needs to be pursued simultaneously.
- b) Herzberg felt that job satisfaction and dissatisfaction exist on the same continuum.
- c) McClelland used projective test, TAT.
- d) Social needs include the need for safety.
- e) People with a strong need for affiliation are particularly concerned with being liked and accepted.

1.3.2 Goal Setting Theories

Goal setting theory of motivation is a theory which states that there is an inseparable link between goal setting and task performance. It states that specific, measurable and attainable goals motivate an employee to achieve the goal, while lousy vague targets suck off enthusiasm.

Principles of Goal Setting

To prepare a delicious meal, you need to put in the right ingredients. In the same way, setting the right goals, there needs to be the right combination of certain factors. Let's have a look at these important factors of goal setting theory in management.

Clarity

Vague, unambiguous goal spun in thin air will only build a house on the sand. Such random goals leaves lots of room for misconceptions and will never give desired results. When the manager says, 'Do how much you can', the employee gets a vague idea of what is expected of him and does not strive to perform better. The result is at the time of evaluation, there is a lot of confusion. The manager is not happy with the employees low performance, while the employee cannot understand why the manager is pouting. Crisp, clear, measurable, specific goals have to be set and communicated to the employee in the simplest way possible. No room for assumptions in goal setting.

Challenging goals

Besides being clear and specific, the goal set should be challenging. Easy to achieve goals fail to keep the employee excited, however, since people are often motivated by the feeling of achievement, setting challenging goals helps motivate the employee to do his best. Another factor that has to be noted here is the fact of recognition. When an employee knows his efforts will not go unnoticed, he will want to stretch himself. Financial or any other kind of remunerations will help motivate the employee to reach his goal. As the intensity of rewards increase with the difficulty of the task, employees are willing to take up more challenging tasks to achieve that high compensation.

Achievable goals

We just saw how important it is for an employee to know what his manager expects out of him to perform better. However, if the goal by his manager is something really steep, it will do more damage instead of good. Blowing a balloon to its fullest capacity brings about beauty, however, blowing a little more bursts the balloon. There is only a hairline difference between the fullest capacity and the amount that can burst it. Same is the case with an employee. Easy goals don't seem to challenge an employee, however, in the eagerness to set challenging goals, if the goal is tad on the unattainable side, the employee can get demotivated, instead of motivated. The idea is to challenge the employee to give his best performance without frustrating him.

Commitment to goals

If goals are to see fruition, they need to be comprehended and agreed upon by both the management and the employees. The theory of participative management rests on the basis of allowing employees to have a role in setting goals and making decisions. If employees feel they were part of creating the goal, they are more likely to try their level best to achieve the goal. Simply barging into the meeting room and dictating the set of goals the employee has to attain, without considering whether he can or cannot attain it, will not lead to frustration and suffocation at work.

1.3.3 Attribution Theory

Attribution theory is probably the most influential contemporary theory with implications for academic motivation. It incorporates behaviour modification in the sense that it emphasises the idea that learners are strongly motivated by the pleasant outcome of being able to feel good about themselves. It incorporates cognitive theory and self-

efficacy theory in the sense that it emphasises that learners' current self-perceptions will strongly influence the ways in which they will interpret the success or failure of their current efforts and hence their future tendency to perform these same behaviours.

According to attribution theory, the *explanations* that people tend to make to explain success or failure can be analysed in terms of three sets of characteristics:

First, the cause of the success or failure may be *internal* or *external*. That is, we may succeed or fail because of factors that we believe have their origin within us or because of factors that originate in our environment.

Second, the cause of the success or failure may be either *stable* or *unstable*. If the we believe cause is stable, and then the outcome is likely to be the same if we perform the same behaviour on another occasion. If it is unstable, the outcome is likely to be different on another occasion.

Third, the cause of the success or failure may be either *controllable* or *uncontrollable*. A controllable factor is one which we believe we ourselves can alter if we wish to do so. An uncontrollable factor is one that we do not believe we can easily alter.

An important assumption of attribution theory is that people will interpret their environment in such a way as to maintain a positive self-image. That is, they will *attribute* their successes or failures to factors that will enable them to feel as good as possible about themselves. In general, this means that when learners succeed at an academic task, they are likely to want to attribute this success to their own efforts or abilities; but when they fail, they will want to attribute their failure to factors over which they have no control, such as bad teaching or bad luck.

The basic principle of attribution theory as it applies to motivation is that a person's own perceptions or attributions for success or failure determine the amount of effort the person will expend on that activity in the future.

There are four factors related to attribution theory that influence motivation in education: ability, task difficulty, effort, and luck. In terms of the characteristics discussed previously, these four factors can be analysed in the following way:

Ability is a relatively *internal* and *stable* factor over which the learner *does not exercise much direct control*.

Task difficulty is an *external* and *stable* factor that is *largely beyond the learner's control*.

Effort is an *internal* and *unstable* factor over which the learner *can exercise a great deal of control*.

Luck is an *external* and *unstable* factor over which the learner exercises *very little control*.

Students will be most persistent at academic tasks under the following circumstances:

- 1) If they attribute their academic *successes* to either:
 - i) internal, unstable, factors over which they have control (e.g., effort) or
 - ii) internal, stable, factors over which they have little control but which may sometimes be disrupted by other factors (e.g., ability disrupted by occasional bad luck);

If they attribute their *failures* to internal, unstable factors over which they have control (e.g., effort).

The following guidelines can be derived from the preceding statement:

If we want students to persist at academic tasks, we should help them establish a sincere belief that they are competent and that occasional imperfections or failures are the result of some other factor (such as bad luck or a lack of sufficient effort) that need not be present on future occasions.

It is *not* beneficial for students to attribute their successes *entirely* to ability. If they think they already have all the ability they need, they may feel that additional effort is superfluous. The ideal attribution for success is, “I succeeded because I am a competent person and worked hard.”

When students fail, they are most likely to persist and eventually succeed if they attribute their failure to *a lack of appropriate effort*.

It is extremely hazardous to motivational health for students to fail repeatedly after making a serious effort at academic tasks. When this happens, they will either (a) stop believing they are competent, or (b) stop attributing their failure to lack of effort.

It is important to *define effort correctly* and for the learners to *internalise* an accurate concept of effort. In practical terms effort is most usefully defined as *devoting effective academic learning time to the task*. Just trying harder or spending more time doing ineffective activities does not constitute effort. It is extremely important to make this distinction. This will *reduce* motivation.

Excessively competitive grading and evaluation systems are likely to impair the learning of many students. Competition will encourage students to persist only to the extent that they believe additional effort will enable them to succeed within the competitive atmosphere.

It is useful to evaluate students at least partly (but not exclusively) on the basis of their effort. This does not mean that the weakest students in a class should receive the highest grades simply because they may spend more time trying to master the subject matter.

In general, it is best for students to believe that it is their own behaviour rather than external circumstances that leads to success or failure. Researchers refer to this as having an *internal locus of control*.

When students reject the value of effort, it is important to change their perception. This can be done by clarifying the meaning of effort and by seeing to it that effort does actually pay off.

Attribution theory is an evolving field, and it is likely that further research will lead to additional practical insights regarding motivation. It is important to note that this discussion of attribution theory has barely scratched the surface. The following are some additional concepts related to attribution theory:

Learning goals are set by individuals who seek to increase their competence. People who emphasise learning goals are likely to seek challenges, if they believe the challenges will lead to greater competence; and they tend to respond to failure by increasing their effort. It is good to encourage students to set and pursue learning goals rather than performance goals.

Performance goals, on the other hand, are set by individuals who seek to gain favourable

judgments or to avoid unfavourable judgments in the eyes of others. It is often undesirable to emphasise performance goals; but schools, parents, and society often overemphasise them to the detriment of learners.

Learned helplessness refers to the expectation, based on previous experience that one's actions cannot possibly lead to success. Performance goals are much more likely than learning goals to lead to ability rather than effort attributions and to result in feelings of learned helplessness.

Self-handicapping occurs when learners create impediments that make good performance less likely. Self-handicapping is likely to become prominent during adolescence. Since it occurs most often among persons with an overriding concern with their competence image, this problem can best be minimised by focusing on effort attributions and by helping learners develop secure feelings of self-efficacy.

Expectancy-valence models state that a person's motivation to achieve a goal depends on a combination of the value of that goal (its valence) and the person's estimation of the likelihood of success. The combination of expectancy and valence interacts with attribution theory in complex ways.

Self-worth theory Covington combines ideas related to self-efficacy, attribution theory, and learned helplessness. It focuses on the notion that people are largely motivated to do what it takes to enhance their reputation in various areas.

1.3.4 Drive Theory

Hull developed a version of behaviourism in which the stimulus (S) affects the organism (O) and the resulting response (R) depends upon characteristics of both O and S. In other words, Hull was interested in studying intervening variables that affected behaviour such as initial drive, incentives, inhibitors, and prior training (habit strength). Like other forms of behaviour theory, reinforcement is the primary factor that determines learning. However, in Hull's theory, drive reduction or need satisfaction plays a much more important role in behaviour than in other frameworks (i.e., Thorndike, Skinner).

Hull's theoretical framework consisted of many postulates stated in mathematical form; They include: (1) organisms possess a hierarchy of needs which are aroused under conditions of stimulation and drive, (2) habit strength increases with activities that are associated with primary or secondary reinforcement, (3) habit strength aroused by a stimulus other than the one originally conditioned depends upon the closeness of the second stimulus in terms of discrimination thresholds, (4) stimuli associated with the cessation of a response become conditioned inhibitors, (5) the more the effective reaction potential exceeds the reaction threshold, the shorter the latency of response. As these postulates indicate, Hull proposed many types of variables that accounted for generalisation, motivation, and variability (oscillation) in learning.

One of the most important concepts in Hull's theory was the habit strength hierarchy: for a given stimulus, an organism can respond in a number of ways. The likelihood of a specific response has a probability which can be changed by reward and is affected by various other variables (e.g. inhibition). In some respects, habit strength hierarchies resemble components of cognitive theories such as schema and production systems.

Principles

- 1) Drive is essential in order for responses to occur (i.e., the student must want to learn).

- 2) Stimuli and responses must be detected by the organism in order for conditioning to occur (i.e., the student must be attentive).
- 3) Response must be made in order for conditioning to occur (i.e., the student must be active).
- 4) Conditioning only occurs if the reinforcement satisfied a need (i.e., the learning must satisfy the learner's wants).

Self Assessment Questions

1) Define the following terms:

a) Goal setting

.....

b) Ability

.....

c) Effort

.....

d) Luck

.....

e) Selfhandicapping

.....

1.4 LET US SUM UP

COMPARISON OF CONTENT THEORIES OF MOTIVATION

Maslow

Self-Actualisation

- Highest need level.
- Involves an individual's desire to realise full potential.
- Can be satisfied without this level.

Esteem

Self-esteem

- Need for personal sense of accomplishment, mastery.

Social-esteem

- Need for respect, recognition, attention, and appreciation of others
- Social
- Need for love, affection, sense of belonging in one's relationship
- Dealings with friends, family, and colleagues falls in here.
- Safety and Security

Relationships

- need for security in relationships

Physical

- need for security, protection from future threats, and stability.

Physiological

- Basic needs: food, water, etc.

ERG

Growth

- Desire for continued personal growth and development

Relatedness

- Desire to satisfy interpersonal relationships

Existence

- Desire for physiological and material well-being

Herzberg

Motivation Factors

- Improving factors leads to satisfaction, effort, and performance.
- Related to job content; what employees actually do.
- Factors:
 - 1) achievement
 - 2) recognition
 - 3) work itself
 - 4) responsibility
 - 5) advancement
 - 6) growth

Hygiene Factors

- Improving factors prevents dissatisfaction.
- Related to job environment more than nature of work itself
- Factors:
 - 1) policies and procedures
 - 2) supervision
 - 3) relations with supervisor
 - 4) work conditions
 - 5) salary
 - 6) relations with peers
 - 7) personal life
 - 8) relations with subordinates
 - 9) status
 - 10) security

McClelland

Need for Achievement

- a drive to pursue and attain goals
- accomplishment is important for its own sake

Need for Competence

- a desire to do quality work
- want to develop skills

Need for Power

- desire to influence others
- desire recognition of others

Need for Affiliation

- a drive to relate to people effectively
- desire for close relationships

Attribution theory is probably the most influential contemporary theory with implications for academic motivation. It incorporates behaviour modification in the sense that it emphasises the idea that learners are strongly motivated by the pleasant outcome of being able to feel good about themselves. It incorporates cognitive theory and self-efficacy theory in the sense that it emphasises that learners' current self-perceptions will strongly influence the ways in which they will interpret the success or failure of their current efforts and hence their future tendency to perform these same behaviours.

Hull's theoretical framework consisted of many postulates stated in mathematical form; They include:

- 1) organisms possess a hierarchy of needs which are aroused under conditions of stimulation and drive,
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- 3) habit strength aroused by a stimulus other than the one originally conditioned depends upon the closeness of the second stimulus in terms of discrimination thresholds,

- 4) stimuli associated with the cessation of a response become conditioned inhibitors,
- 5) the more the effective reaction potential exceeds the reaction threshold, the shorter the latency of response. As these postulates indicate, Hull proposed many types of variables that accounted for generalisation, motivation, and variability (oscillation) in learning.

Goal setting theory of motivation is a theory which states that there is an inseparable link between goal setting and task performance. It states that specific, measurable and attainable goals motivate an employee to achieve the goal, while lousy vague targets suck off enthusiasm.

1.5 UNIT END QUESTIONS

- 1) Discuss content or need theory?
- 2) Explain and highlight the differences between Maslows and Alderfer's theories.
- 3) Discuss goal setting theory.
- 4) Explain the principles of Attribution theory.
- 5) Discuss Herzeberg's and McClellands theory.

1.6 SUGGESTED READINGS

Morgan, C.T. and King, R.A. (2010).(11th edition) *Introduction to Psychology*. McGraw Hill, New Delhi

Baron, R.A. (2010). *Introduction to Psychology*, Wadsworth publishing Co., NJ

O'Neil, Harold F. (ed) (1994). *Motivation Theory and Research*, Lawrence Elbaum Associates Publishers, Hillsdale, NJ

Morgan, C.T. and King, R.A. (2010).(11th edition) *Introduction to Psychology*, McGraw Hill, New Delhi

Baron, R.A. (2010). *Introduction to Psychology*, Wadsworth publishing Co., NJ

UNIT 2 THE COMPONENT FACTORS OF MOTIVATION

Structure

- 2.0 Introduction
- 2.1 Objectives
- 2.2 Concept and Description of Motivation
- 2.3 Intrinsic Motivation
 - 2.3.1 Challenge
 - 2.3.2 Curiosity
 - 2.3.3 Control
 - 2.3.4 Fantasy
- 2.4 Interpersonal Motivation
- 2.5 Factors in Motivation
- 2.6 Factors Affecting Motivation
- 2.7 Let Us Sum Up
- 2.8 Unit End Questions
- 2.9 Suggested Readings

2.0 INTRODUCTION

In this unit we are dealing with the component factors of motivation. We start with concept and description of motivation in which we define motivation and state its origin and describe what motivation is all about. Then we move on to intrinsic motivation and differentiate it from extrinsic motivation. We then indicate how intrinsic motivation is influenced and affected by challenging situations, curiosity, control and fantasy. This was followed by Interpersonal motivation which has the contents that include competition, cooperation and recognition. The next section will be on factors in motivation which include group size, group goals, competence, leadership, meetings, publicity and social interactions. In the section that follow we deal with factors affecting motivation which include reward system, corporate culture, job titles and relationship with leaders.

2.1 OBJECTIVES

After completing this unit, you will be able to:

- Define and conceptualise motivation;
- Explain intrinsic motivation;
- Elucidate the factors of intrinsic motivation;
- Describe the interpersonal motivation;
- Elucidate the factors in motivation; and
- Explain the factors that affect motivation.

2.2 CONCEPT AND DESCRIPTION OF MOTIVATION

The derivation of the word motivation tells us that motivation refers to getting someone *moving*. When we motivate ourselves or someone else, we develop incentives. We set up conditions that start or stop the concerned. In education motivation deals with the problem of setting up conditions so that learners will perform to the best of their abilities in academic settings. We often motivate learners by helping them develop an expectancy that a benefit will occur as a result of their participation in an instructional experience. In short, motivation is concerned with the factors that stimulate or inhibit the desire to engage in a behaviour.

A common sense approach incorporating the group motivational factors is probably the most effective method to stimulate the group member's participation in an organisation. There are two types of motivation that is intrinsic and extrinsic motivation.

Malone and Lepper (1987) have defined intrinsic motivation more simply in terms of what people will do without external inducement. Intrinsically motivating activities are those in which people will engage for no reward other than the interest and enjoyment that accompanies them. Malone and Lepper have integrated a large amount of research on motivational theory into a synthesis of ways to design environments that are intrinsically motivating.

There is a subdivision of factors that enhance motivation into individual factors and interpersonal factors. Individual factors are individual in the sense that they operate even when a student is working alone. Interpersonal factors, on the other hand, play a role only when someone else interacts with the learner.

Curiosity is stimulated when something in the physical environment attracts our attention or when there is an optimal level of discrepancy between present knowledge or skills and what these could be if the learner engaged in some activity. *Novelty* and *interest* are good synonyms for the motivational use of curiosity.

The feeling of loss of control is one of the most powerful *anti-motivating* factors in education. When students feel their teachers are using controlling techniques (rather than those that promote autonomous choice), they are likely to show reduced intrinsic motivation, and this has been shown to result in lower academic performance as well as substantial deterioration in other important characteristics.

In any group or organisation there will be a tremendous diversity of interest and motivation for belonging. As a leader, it is important that you understand your own motives as well as those of your group members. In addition to the personal factors involved, leaders must also be cognisant of certain factors about the group itself that affect their ability to motivate the group as a whole.

Many business managers today are not aware of the effects that motivation can (and does) have on their business, and it is therefore important they learn and understand the factors that determine positive motivation in the workplace. The size of your business is irrelevant: whether you are trying to get the best out of fifty of your staff or just one, everyone needs some form of motivation. Motivation is something that is approached differently by different businesses and the responsibility of its integration lies with all immediate supervisors of staff. However, it is the business owner who must initiate motivation as a strategy to attain corporate goals.

Motivation is the force that makes us do things: this is a result of our individual needs

being satisfied (or met) so that we have inspiration to complete the task. These needs vary from person to person as everybody has their individual needs to motivate themselves. Depending on how motivated we are, it may further determine the effort we put into our work and therefore increase the standard of the output.

When we suggest factors (or needs) that determine the motivation of employees in the workplace, almost everyone would immediately think of a high salary. This answer is correct for the reason that some employees will be motivated by money, but mostly wrong for the reason that it does not satisfy others (to a lasting degree). This supports the statement that human motivation is a personal characteristic, and not a one fits all option.

The derivation of the word tells us that *motivation* refers to getting someone *moving*. When we motivate ourselves or someone else, we develop incentives – we set up conditions that start or stop behaviour. In education motivation deals with the problem of setting up conditions so that learners will perform to the best of their abilities in academic settings. We often motivate learners by helping them develop an expectancy that a benefit will occur as a result of their participation in an instructional experience. In short, motivation is concerned with the factors that stimulate or inhibit the desire to engage in a behaviour.

When we look for ways to motivate students, we often look at people who have motivated us ourselves or who are famous for motivating other people. This is often a mistake: the people who have gained fame as motivators have often worked with special audiences who are not at all typical of the students who show up in our classrooms.

While what these motivators do is effective with their selective audiences, it is possible that we ourselves deal with people who require entirely different motivational techniques. It is not even remotely reasonable to assume that the tactics that will make a group of football players eager to “win one for the Gipper” or a brigade of soldiers willing to march into the valley of death will have a similar impact on uninterested non-readers in the third grade.

Motivation is an extremely important but sometimes mundane topic. Motivation influences learners in complex ways. For example, in a single situation there may be numerous factors motivating learners to engage in a behaviour and an even greater number of factors motivating them to avoid that behaviour. A thorough understanding of the principles of motivation will enable you to get students moving – to want to participate and do their share in the instructional process.

It is an axiom of most motivational theories that motivation is strongest when the urge to engage in a behaviour arises from within the learner rather than from outside pressures. Bruner (1966) has stated the relationship between motivation and learning in the following way:

According to Bruner, the will to learn is an intrinsic motive, one that finds both its source and its reward in its own exercise. The will to learn becomes a “problem” only under specialised circumstances like those of a school, where a curriculum is set, students are confined, and a path fixed. The problems exist not so much in learning itself, but in the fact that what the school imposes often fails to enlist the natural energies that sustain spontaneous learning.

2.3 INTRINSIC MOTIVATION

Some theorists maintain that there is only a single kind of intrinsic motivation, which can

be described as a motivation to engage in activities that enhance or maintain a person's self-concept. Most theorists define the term more broadly.

For example, most people use a knife and a fork in a certain way or follow conventions in a restaurant not because they find knife and fork use to be intrinsically motivating, but because the correct use of these utensils leads to such intrinsic benefits as a good meal or the respect of people we care about. This is not a serious problem, unless the person feels coerced or in some other way alienated by having to use the utensils.

Therefore, it is essential that extrinsic motivators be backed up by intrinsic motivators or that the extrinsic motivation becomes internalised through processes described later in this chapter. If this does not happen, the result is likely to be a *reduction* in the very behaviour we want to promote.

One of the most frequent failures in education is that students rarely say that they find studying to be intrinsically rewarding. This is a critical problem. One of the most straightforward conclusions of research from the past two decades is that extrinsic motivation alone is likely to have precisely the opposite impact that we want it to have on student achievement.

Malone and Lepper (1987) have defined intrinsic motivation more simply in terms of *what people will do without external inducement*. Intrinsically motivating activities are those in which people will engage for no reward other than the interest and enjoyment that accompanies them. Malone and Lepper have integrated a large amount of research on motivational theory into a synthesis of ways to design environments that are intrinsically motivating.

There is a subdivision of factors that enhance motivation into *individual* factors and *interpersonal* factors. Individual factors are individual in the sense that they operate even when a student is working alone. Interpersonal factors, on the other hand, play a role only when someone else interacts with the learner.

2.3.1 Challenge

One of the most powerful individual factors influencing intrinsic motivation is *challenge*. {This is an *individual* factor because a person can be challenged without involving other people. Of course a challenge could involve other people, as when a person makes it a challenge to win a *competition*.} People pursue tasks that are challenging.

Learners are challenged when they direct their activities toward personally meaningful goals in such a way that attainment of the goals is uncertain – when neither success nor failure is guaranteed. The belief that they are making acceptable progress toward a goal, along with the expected satisfaction of goal attainment, enhances self-efficacy and sustains motivation.

As students work toward these goals, they are motivated to the extent that they receive feedback and feel that their eventual success will enhance their self-esteem.

The following four factors influence the contribution of challenge to motivation.

Goals can be either supplied by the teacher or developed by the learners themselves. Goals can be short-term or long-term. While short-term goals may be more immediately compelling, long-range goals are often more important.

An ideal motivational system involves short-term goals that lead to long-term goals.

The most important characteristic of goals is that they must be personally meaningful.

Personal relevance can be increased by (1) making clear the links between an activity and competencies or outcomes valued by the learner, (2) relating material to a fantasy or imaginary context that the learner finds emotionally appealing, or (3) eliciting interpersonal motivations such as cooperation, competition, or recognition that appeal to the learner. Note that what this paragraph really says is that we can make goals more meaningful by relating them to other motivational factors, including fantasy, control, competition, and recognition.

Even when goals are supplied by the teacher, it is important that the learners “buy into” or internalise these goals. Although it seems obvious that it is best that students develop their own goals (and this would also contribute to *control*, which is another factor that contributes to intrinsic motivation), a serious problem is that students themselves may set goals that are too easy or too difficult to attain or difficult to define. A major step in promoting *self-motivation* is to help learners develop strategies for setting goals.

Examples of ways to make a challenge more effective by focusing on goals:

“Here is what we plan to accomplish today (or this semester)....”

“This is important to study because it will help you. . .”

“Our ultimate goal is to In today’s session we are going to”

“It is important to understand this because. . . .”

Level of certainty is an important factor in determining the degree to which a challenge will actually motivate a learner. An intermediate degree of certainty is usually best – when neither success nor failure is guaranteed.

Examples of ways to make a challenge more effective by focusing on level of certainty:

“I know it’s difficult, but I am certain that if we work at it together, you can learn to do this.” {Said to a person who is certain he/she will fail.

“You know, this isn’t really quite as easy as you think it is.” {Said to a person who is overconfident of success?}

Give the learner tasks that easy at first and gradually build to more difficult tasks. {If the person is certain he/she will fail. }

Give the learner a really difficult task at first and then back off and be helpful once he/she has acknowledged that maybe some effort will be required. {If the person is overconfident of success. }

The level of certainty can also be manipulated by introducing game like elements such as randomness or various scorekeeping systems into the learning environment.

Performance feedback reminds learners of their status with regard to the challenge posed by the goals. It is most effective when it is clear, frequent, constructive, and encouraging.

Examples of ways to make a challenge more effective by focusing on performance feedback:

“Your test score isn’t perfect, but it’s ten points higher than the last one.”

Self-esteem is related to motivation because learners consider themselves to be good or competent to the extent that they succeed at challenges that they consider to be important.

Examples of ways to make a challenge more effective by focusing on self-esteem:

“By meeting this goal, you’ll be able to . . .”

“By meeting this goal, you’ll overcome your problem of . . .”

The completely incompetent teacher violates all the guidelines by challenging his/her students in this way: “Ninety percent of you will fail this course, because you’re too stupid to understand it.” This teacher refrains from demonstrating to the students reasons why the information is worth knowing and does not give them opportunities to verify their degree of progress toward mastering the course objectives.

Note that the various components of the challenge aspect of motivation may sometimes conflict with one another. For example, when performance feedback is extremely clear but negative, it may threaten the learner’s self-esteem more than would vague feedback or no feedback. Also note that the way a teacher should manipulate challenge will vary considerably from one situation to another.

It is not necessary that a learner be motivated by challenge or by any other specific factor of intrinsic motivation or that teachers deliberately apply all of the guidelines accompanying each factor. In some cases a learner is already motivated or a guideline has already been applied. For example, the optimal degree of interest and level of certainty with regard to a topic may already exist (for example, a learner may wish to learn to express her thoughts more clearly and may think she can do this if she works hard). In these instances it is not useful for the instructor to add additional uncertainty (for example, by making a game of writing). The task is already perceived as adequately challenging, and the teacher’s task is to help the learner meet this challenge.

In other instances, the degree of uncertainty that would best pose a challenge may be missing (for example, a learner may think he is already competent enough at using decimals without expending any real effort). In such cases it is important for the teacher to introduce uncertainty (for example, by presenting the lesson as a game) in order to pose a challenge and stimulate activity.

By focusing on and clarifying these factors as necessary, teachers can make learning activities sufficiently challenging to stimulating learning.

2.3.2 Curiosity

A second factor influencing individual motivation is *curiosity*. {This is an *individual* factor because a person’s curiosity can be aroused without involving other people.} Curiosity is stimulated when something in the physical environment attracts our attention or when there is an optimal level of discrepancy between present knowledge or skills and what these could be if the learner engaged in some activity. *Novelty* and *interest* are good synonyms for the motivational use of curiosity.

There are two types of curiosity that can stimulate intrinsic motivation: (i) Sensory curiosity and (ii) Cognitive curiosity and (iii) Optimum level of discrepancy. Let us see what these are.

Sensory curiosity

Occurs when physical factors such as changes in tone of voice, light, or sound attract the attention of learners. Examples of ways to stimulate sensory curiosity

Computer programs zoom in on information, emit sounds, or use animation to attract attention.

A teacher speaks in a low tense voice to catch the attention of her students.

Cognitive curiosity

This on the other hand, is evoked when learners believe that it may be useful to modify existing cognitive structures. Examples of ways to stimulate cognitive curiosity:

Young cricketer enthusiasts may be motivated to learn more about fast bowling if they become convinced that skills in fast bowling would help them better to compute bowling averages.

A history textbook is written in such a way as to make students wonder what it would be like to be a freedom fighter before the Independence of India. {Then the book would satisfy this curiosity.}

A teacher presents information in such a way that students consider it to be just plain interesting.

If a physics teacher who would do an eye catching magic trick at the beginning of a unit of instruction that would explain how physical laws explain the apparent magic, this teacher would be appealing to both sensory and cognitive curiosity.

Optimal discrepancy

The concept of optimal discrepancy suggests that curiosity is strongest when new information does not match what we currently know but is not so different as to appear to be completely strange, irrelevant, or impossible to attain. Learners are motivated most strongly by curiosity when learning tasks present them with knowledge or problems at an optimal level of discrepancy.

2.3.3 Control

A third factor influencing individual motivation is control, which refers to the basic human tendency to seek to control one's environment.

There are three elements that influence the contribution of control to intrinsic motivation. These are (i) cause effect relationship (ii) Powerful effects (iii) Free choice. These aspects are discussed in detail below.

- i) **Cause-and-effect relationships:** Learners perceive themselves to be in control when they see clear cause-and-effect relationship between their own actions and obtaining desired benefits. This means that a good way to enable learners to feel in control (even if they are studying something "because they have to,") is to let them see the cause-and-effect relationship between something they really care about (and would freely choose) and the topic they are studying in class.

Examples of ways to focus on cause-and-effect relationships to stimulate feelings of control:

"You'd like to be able to.... But you can't. If you learn what I'm going to teach you, you'll be able to do it."

"When I was your age I couldn't.... Then I learned what I am going to teach you right now, and then I could...."

"Remember that man in the movie you saw on TV last night who had a completely lousy life? As you could see, that was because he couldn't.... I'm going to teach you how to...."

- ii) **Powerful effects:** Learners perceive themselves to be in control when they perceive the outcome of what they are studying to be truly worthwhile rather than something trivial. An educational objective could meet the preceding guideline (showing a cause-and-effect relationship), but still not be worth caring about. But if a person can say, “Because I learn this, I’ll be able to do something I really care about!” that person feels in control.

Examples of ways to focus on powerful effects to stimulate feelings of control:

“You may think that you can use computers to do all your math for you, but if you learn what I’m going to teach you, you can easily estimate whether the computer’s results are accurate. That can save you a lot of trouble and money. For example. . . .”

“Being misunderstood can cause serious problems. If you learn what I am going to teach you, you can avoid those kind of misunderstandings.” {Said to a person who is upset because his girlfriend misunderstood something he tried to communicate to her.

- iii) **Free choice:** If students perceive themselves as doing something because they want to instead of because they are being forced to do it against their will, they will feel in control of their learning.

Examples of ways to focus on free choice to stimulate feelings of control:

“The curriculum calls for us to study *Romeo and Juliet*. Here are three ways that we’ve done this in the past. What do you think would be the best way for us to proceed?”

“You can write your term paper on any topic you want within these guidelines. . . .”

Every day include at least one block of time during which students can decide individually what to do.

The feeling of loss of control is one of the most powerful anti-motivating factors in education. When students feel their teachers are using controlling techniques (rather than those that promote autonomous choice), they are likely to show reduced intrinsic motivation, and this has been shown to result in lower academic performance as well as substantial deterioration in other important characteristics. This is a major factor behind the need for using *natural* rather than *artificial* reinforcement whenever possible.

In the ideal learning situation, learners will be most strongly motivated when they freely choose what they want to learn. Because of legitimate concerns about covering specified objectives and coordinating the activities of groups of students, teachers often resist giving complete control to learners. Nevertheless, the fact remains that learners are often most strongly motivated to learn when they themselves decide what to learn and how to learn it. At the very least, teachers can be aware of what students would like to learn and match units of instruction to these learner choices whenever possible. The teacher could explain why subject matter is worth learning and then let the students choose *how* the subject matter will be studied.

To implement these strategies, teachers may often find it useful to spend some time discussing with students the reasons for studying a topic. This may superficially seem like a waste of academic learning time. However, by allocating some time to increasing student motivation, it is possible to increase the amount of time the students will actually spend productively engaged in studying the topic. In addition, even when it is necessary for the teacher to pursue a prescribed objective, it may be possible to allow the students to choose the manner in which they will study it.

2.3.4 Fantasy

A fourth factor influencing individual motivation is *fantasy*, which plays a role when learners use mental images of situations that are not actually present to stimulate their behaviour. {Fantasy is an *individual* factor because a person can use imagination to motivate learning without involving other people. Of course a fantasy could involve other people, as when a person imagines using skills learned in a particular class to win a *competition*.}

By engaging in activities related to learning, learners may use their imaginations to meet challenges, satisfy curiosity, exercise control, or experience interpersonal motivations without directly participating in the imagined activities themselves.

There are three factors that influence the degree to which fantasy influences intrinsic motivation and these are (i) emotional elements (ii) Cognitive elements and (iii) Endogenous fantasies.

Emotional elements

This can make learners more willing to engage in an activity by making it fun or exciting to participate. This usually involves building a game around the learning activity.

Examples of ways to use emotional elements of fantasy to stimulate intrinsic motivation:

English students may imagine themselves as cricket players while they study vocabulary words in a computer game with a sports motif that rewards rights answers with single run, fours and sixers etc.

History students could play a Jeopardy-style game based on the information they are required to study.

Young math students could play Number Munchers, a computer game in which a little creature races around a board and gobbles up correct answers.

Cognitive elements

This can make learners more willing to engage in an activity by enabling learners to imagine themselves actually using the specified skills in real life.

Examples of ways to use cognitive fantasies to stimulate intrinsic motivation:

A young man reading *Romeo and Juliet* could imagine himself using a similar approach to gain the affections of the love of his life.

Mathematics students may imagine themselves using math skills in their future careers as adults.

Young math students could play Market Place, a computer simulation in which children run simulated lemonade stands. {This game also includes emotional elements of fantasy (because it makes learning a game), but the emphasis is on using skills in an imaginary “real-life” setting.}

Endogenous fantasies

These are more likely than *exogenous fantasies* to draw learners into a learning activity. Exogenous fantasies are those in which there is little or no intrinsic connection between the learning and the fantasy. Endogenous fantasies are those in which there is an intrinsic connection.

Examples of ways to use endogenous fantasies to stimulate intrinsic motivation:

“The curriculum calls for us to study *Romeo and Juliet*. Here are three ways that we’ve done this in the past. What do you think would be the best way for us to proceed?”
{But remember: The students who will be most motivated to study *Romeo and Juliet* will be those who beg the teacher to be allowed to study that play.}

Social studies students may imagine themselves succeeding as pioneers while traveling from one city to a nother in a computer simulation.

The Number Munchers game (cited above under *emotional aspects*) is an example of an exogenous fantasy. There is little obvious connection between the munching and the math.

The Vocabulary cricket game (cited above under *emotional aspects*) is an example of an exogenous fantasy. There is little obvious connection between the knowing the vocabulary words and playing baseball.

Self Assessment Questions

Fill in the blanks:

- a) The word motivation refers to getting someone _____.
- b) _____ reminds learners of their status with regard to the challenge posed by the goals.
- c) _____ and interest are good synonymous for the motivational use of curiosity.
- d) _____ fantasies are those in which there is little or no intrinsic connection between the learning and the fantasy.
- e) _____ fantasies are those in which there is an intrinsic connection.

2.4 INTERPERSONAL MOTIVATION

In addition to individual factors in motivation, there are other factors that arise from interactions with other people.

Competition is one of these *interpersonal* factors.

Competition motivates behaviour because people can enhance their own self-esteem when they are able to make comparisons of their own performance to that of others.

While all learners appear to be motivated to some extent by competition, the importance of competition is greater for some learners than for others. These differences are often related to the person’s previous experience or to the importance that cultures or subcultures place on competition versus cooperation.

Examples of ways to use competition to stimulate intrinsic motivation:

“Yours was one of the best papers in this class.”

A student graduates with a high enough class rank to get into the college of his choice.

A student wins the Jeopardy-style game based on the information her class was required to study.

The competition doesn't have to be a *formal* competition. All that is required is that the person compare his/her performance to that of others.

Not all competitions are examples of intrinsic motivation. If students are required to compete over things that they don't care about, this would be an example of a very extrinsic form of motivation.

A second interpersonal factor in motivation is *cooperation*, in which learners derive satisfaction from working toward group goals. As was the case with competition, the motivating force of cooperation is stronger for some persons than others, and these differences are often related to the person's previous experience or to the importance that cultures or subcultures place on cooperation.

Examples of ways to use cooperation to stimulate intrinsic motivation:

"Because each of us contributed, our group project received a high grade."

"If we all do our part, we'll make lots of money."

A team of student wins a College-Bowl-style game. The teacher assigned all the members of the class to groups of five students. In order for the team to succeed, each individual had to do well. Therefore, all the team members helped the others on the team. {This is an example of a combination of competition and cooperation. It may also involve a challenge.}

The cooperation doesn't have to be based on formal cooperative learning. All that is required is that the person derive satisfaction from contributing to the success of others.

A third interpersonal factor in motivation is *recognition*. Most people enjoy having their efforts and accomplishments recognised and appreciated by others. In order to obtain recognition, the activity of the learner must be visible to others. There are three ways to achieve visibility:

- 1) the process of performing an activity may be visible,
- 2) the product of the activity may be visible, or
- 3) some other result of the activity may be visible (for example, an article may appear in the newspaper listing the names of people who participated in a science fair).

Examples of ways to use recognition to stimulate intrinsic motivation:

"Son, that's a really good paper." {The same comment could be directed to Mary, Bubba, or anyone else.}

"The following students did outstanding work...."

"Because of your contribution, our group project received a high grade." {This is a combination of recognition and cooperation.}

"Here's an award for finishing first in your class." {This is a combination of recognition and competition.}

The differences between recognition and competition are that

- 1) recognition does not require a comparison to someone else's performance and
- 2) competition does not require the approval of an outsider.

2.5 FACTORS IN MOTIVATION

In any group or organisation there will be a tremendous diversity of interest and motivation for belonging. As a leader, it is important that you understand your own motives as well as those of your group members. In addition to the personal factors involved, leaders must also be cognisant of certain factors about the group itself that affect their ability to motivate the group as a whole. There are seven basic factors that affect our ability to motivate the group, organisation or committee:

Group Size: A group should neither be too large (impersonal) nor too small (overworked).

Group Goals: Even if the purpose of the group is predetermined, it is important that group members be a part of the organisational goal setting process and help establish the group's direction.

Competencies of Members: Leaders must attempt to match individual skills or interests with group tasks. Members should also be provided with the proper resources and information to do those tasks.

Leadership: Participatory and empowering leadership motivates best. A leader should know his/her leadership style and let his/her group members know it also. Leaders must also be cognisant of the stages of group/team development (i.e., forming, storming, norming, performing, and adjourning). Public and private praise, rewards, and/or recognition must be given to group members at appropriate times.

Meeting Time and Length: The meeting time and length should be conducive to the group members attendance. Meetings should be productive, and when necessary, ice breakers should be used to promote team building within the group. If there is nothing to cover — then don't meet.

Publicity: The group's activities and its respective membership should be visible to everyone on campus. Improper publicity, or lack thereof, will diminish the significance or importance of the group's contributions to the campus.

Social Interaction/Fun: Groups should be as informal as possible with plenty of opportunities for relaxed interaction among group members. It is important for individual members to develop a sense of belonging and acceptance with the other group members and group goals.

2.6 FACTORS AFFECTING MOTIVATION

Before a leader can effectively stimulate motivation within his/her group and/or individual members, s/he must be aware of the factors that affect motivation. Students get involved in organisations in order to fulfill certain feelings, values, interests, or needs; such as recognition, approval, security issues, acceptance, seeking new experiences, meeting new people, or building their self-esteem, etc. If we do not allow our group members to address their needs then they will not stay motivated enough to maintain the high levels of performance needed within the group.

Although a common method of motivating employees is by providing financial rewards, there are other factors besides money that affect an employee's motivation. Depending on the individual, there are different needs that must be fulfilled in order for employees to put more effort into their work.

Reward System

Not only should a reward system be in place, but employees should believe that the rewards are attainable, understand how to qualify for the rewards and be confident that the rewards are fairly distributed. For instance, if the reward system is based on performance evaluations, then employees must be confident in the way evaluations are conducted and managed.

Corporate Culture

The corporate culture has a direct impact on the employee's motivation in the office. If the corporate culture is based on collaboration, teamwork and encouragement, then employees will be more likely to be motivated. For instance, employees should cheer each other on or offer support when there is a challenge, or offer congratulations when one accomplishes a goal. While employees look to their leaders for direction and support, they often also rely on their coworkers or teammates.

Job Titles

An employee's job title can affect their performance if they believe that the role is not considered valuable or contributes to the company's success. By letting employees know how their role is important to the organisation and provide them with a pathway to move to a more prestigious role, it can increase their motivation to do better.

Relationship with Leaders

The actions of the company's leaders can significantly impact the motivation of employees, especially those that are negative, unfair or do not provide clear instructions or explanations. When employees lose faith in the management, they lose the desire to work harder or feel that their accomplishments will not be recognised. The company's leaders should have open communication with employees so that employees understand why they are being asked to do things a certain way or why changes are being made, plus they should be positive and treat all employees fairly.

A common sense approach incorporating the group motivational factors is probably the most effective method to stimulate your group member's participation in your organisation.

Self Assessment Questions

- 1) Answer the following statement with True (T) or False (F):
 - a) Competition is one of these interpersonal factors.
 - b) Leaders must attempt to match individual skills or interests with group tasks.
 - c) Participatory and empowering leadership tends to give complex within the group members.
 - d) Competition should always be a formal competition.
 - e) Recognition does not require a comparison to someone else's performance.

2.7 LET US SUM UP

Motivation is an extremely important but sometimes mundane topic. Motivation influences learners in complex ways. For example, in a single situation there may be numerous factors motivating learners to engage in a behaviour and an even greater number of factors motivating them to avoid that behaviour. A thorough understanding of the principles of motivation will enable you to get students moving - to want to participate and do their share in the instructional process.

People pursue tasks that are challenging. Learners are challenged when they direct their activities toward personally meaningful goals in such a way that attainment of the goals is uncertain – when neither success nor failure is guaranteed. The belief that they are making acceptable progress toward a goal, along with the expected satisfaction of goal attainment, enhances self-efficacy and sustains motivation. The most important characteristic of goals is that they must be personally meaningful. Personal relevance can be increased by (1) making clear the links between an activity and competencies or outcomes valued by the learner, (2) relating material to a fantasy or imaginary context that the learner finds emotionally appealing, or (3) eliciting interpersonal motivations such as cooperation, competition, or recognition that appeal to the learner.

The degree of uncertainty that would best pose a challenge may be missing (for example, a learner may think he is already competent enough at using decimals without expending any real effort). In such cases it is important for the teacher to introduce uncertainty (for example, by presenting the lesson as a game) in order to pose a challenge and stimulate activity.

The feeling of loss of control is one of the most powerful anti-motivating factors in education. When students feel their teachers are using controlling techniques (rather than those that promote autonomous choice), they are likely to show reduced intrinsic motivation, and this has been shown to result in lower academic performance as well as substantial deterioration in other important characteristics. This is a major factor behind the need for using natural rather than artificial reinforcement whenever possible.

In any group or organisation there will be a tremendous diversity of interest and motivation for belonging. As a leader, it is important that you understand your own motives as well as those of your group members. In addition to the personal factors involved, leaders must also be cognisant of certain factors about the group itself that affect their ability to motivate the group as a whole.

Before a leader can effectively stimulate motivation within his/her group and/or individual members, s/he must be aware of the factors that affect motivation. Students get involved in organisations in order to fulfill certain feelings, values, interests, or needs; such as recognition, approval, security issues, acceptance, seeking new experiences, meeting new people, or building their self-esteem, etc. If we do not allow our group members to address their needs then they will not stay motivated enough to maintain the high levels of performance needed within the group.

2.8 UNIT END QUESTIONS

- 1) Discuss the factors of intrinsic motivation with examples.
- 2) Explain the factors of interpersonal motivation with the help of day to day examples.
- 3) Discuss the factors that affect motivation in employees.

2.9 SUGGESTED READINGS

Morgan, C.T. and King, R.A. (2010). (11th edition) *Introduction to Psychology*. McGraw Hill, New Delhi

Baron, R.A. (2010). *Introduction to Psychology*. Wadsworth publishing Co., NJ

O’Neil, Harold F. (ed) (1994). *Motivation Theory and Research*. Lawrence Elbaum Associates Publishers, Hillsdale, NJ

UNIT 3 TYPES OF MOTIVATION

Structure

- 3.0 Introduction
- 3.1 Objectives
- 3.2 Definition and Description of Motivation
 - 3.2.1 Primary or Basic Motivation
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 - 3.4.1 Difference between Motivation, Satisfaction, Inspiration and Manipulation
- 3.5 Let Us Sum Up
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3.0 INTRODUCTION

In this unit we will be dealing with types of motivation. Under this heading we will start with definition and description of motivation. Under this we will be discussing primary or basic motivation, secondary motivation, extrinsic and intrinsic motivation and the various methods to increase the intrinsic motivation etc. This will be followed by the topic on other types of motivation which includes achievement motivation, self enhancement motivation, competence motivation, affiliation motivation, power motivation, fear motivation, aggression motivation etc. Then we will discuss how to motivate different people in different ways and present the differences between motivation, satisfaction, inspiration and manipulation.

3.1 OBJECTIVES

After completing this unit, you will be able to:

- Define motivation and describe the characteristic features of motivation;
- Explain what is primary and secondary motivation;

- Describe intrinsic and extrinsic motivation with examples;
- Differentiate between intrinsic and extrinsic motivation;
- Elucidate the types of motivation;
- Explain the different types of motivation and their features; and
- Analyse the methods to motivate people differently.

3.2 DEFINITION AND DESCRIPTION OF MOTIVATION

Motivation is a general term applied to the entire class of drives, desires, needs, wishes and similar forces. To say that managers motivate their subordinates is to say that they do those things which they hope will satisfy these drives and desires and induce the subordinates to act in a desired manner.

Many people know motivation as the driving force behind an action. This is probably the simplest explanation about motivation. Motivation can be considered the state of having encouragement to do something.

Motivation is said to be intrinsic or extrinsic. Intrinsic motivation is internal. It occurs when people are compelled to do something out of pleasure, importance, or desire. Extrinsic motivation occurs when external factors compel the person to do something.

Primary Motivation pertains to motives involved with our need for self-preservation. This includes needs such as hunger and thirst, warmth, sex, avoidance of pain and other primary motives which influence a person's behaviour at a very basic level.

Many of the behaviour derived from secondary motivation are conscious ones. That is, a person consciously desires a particular goal or result, and behaves in a way that brings them closer to that particular goal. What drives them to do something or to act in a particular way is the longing for something which they currently do not have or possess.

Motivation involves the basic psychological reasons for a person's actions and behaviour. These are the forces or factors that cause a person to act in a certain way or to behave in the manner that they do.

There are various types of motivations that can influence a person. These include achievement, affiliation, self-enhancement, socialisation, competence, power, change, attitude, incentive, fear and aggression motivation.

The inner and external rewards too, are good reinforcing mechanisms. For many people, this is really the means towards success. By choosing goals that you desire both in its intrinsic and extrinsic rewards you can harmonize your own actions and devote your energies to your goals.

Motivation refers to the drive and efforts to satisfy a want or goal, whereas satisfaction refers to the contentment experienced when a want is satisfied. In contrast, inspiration is bringing about a change in the thinking pattern. On the other hand Manipulation is getting the things done from others in a predetermined manner.

To motivate others is the most important of management tasks. It comprises the abilities to communicate, to set an example, to challenge, to encourage, to obtain feedback, to involve, to delegate, to develop and train, to inform, to brief and to provide a just reward.

Many people know motivation as the driving force behind an action. This is probably the simplest explanation about motivation. Motivation can be considered the state of having encouragement to do something.

Why do people do what they do? Why do we go on everyday, living our lives and trying to find justification for our existence? Some people think that they can find purpose in the things that motivate them. Others just see the motivation and react automatically. There is no one thing that motivates people to perform certain actions. People are different, so it follows that their motivations have to be different.

Motivation is said to be intrinsic or extrinsic. Intrinsic motivation is internal. It occurs when people are compelled to do something out of pleasure, importance, or desire. Extrinsic motivation occurs when external factors compel the person to do something. However, many theories show reward motivation. For example: "I will give you a chocolate if you clean your room."

A common place where we see the need to apply motivation is in the work place. In the work place, we can see motivation play a key role, for example in leadership success. A person unable to grasp motivation or apply it in the work situation, will not become a leader or stay as a leader for much time.

Salary, benefits, working conditions, supervision, policy, safety, security, affiliation, and relationships are all externally motivated needs. Achievement, advancement, recognition, growth, responsibility, and job nature are internal motivators. They occur when the person motivates themselves after external motivation needs are met.

Another place motivation plays a key role is in education. A teacher who implements motivational techniques will see an increased participation, effort, and higher grades. Part of the teacher's job is to provide an environment that is motivationally charged. This environment accounts for students who lack their own internal motivation. One of the first places people begin to set goals for themselves is in school. School is where we are most likely to learn the correlation between goals, and the definition of motivation. That relationship between these factors leads to success.

3.2.1 Primary or Basic Motivation

This mainly pertains to motives involved with our need for self preservation. This includes needs such as hunger and thirst, warmth, sex, avoidance of pain and other primary motives which influence a person's behaviour at a very basic level.

3.2.2 Secondary Motivation

More known in psychology as "learned" motivation, this type of "drives" differs from one person to another. In many ways they involve a person's own sense of values and priorities in life.

Many of the behaviours derived from secondary motivation are conscious ones. That is, a person consciously desires a particular goal or result, and behaves in a way that brings them closer to that particular goal. What drives them to do something or to act in a particular way is the longing for something which they currently do not have or possess.

This kind of motivation generally falls into two basic types: intrinsic and extrinsic motivation.

3.2.3 Extrinsic Motivation

Extrinsic motivation refers to motivation that comes from outside an individual. The

motivating factors are external, or outside, rewards such as money or grades. These rewards provide satisfaction and pleasure that the task itself may not provide.

An extrinsically motivated person will work on a task even when they have little interest in it because of the anticipated satisfaction they will get from some reward. The rewards can be something as minor as a smiley face to something major like fame or fortune. For example, an extrinsically motivated person who dislikes math may work hard on a math equation because he wants the reward for completing it. In the case of a student, the reward would be a good grade on an assignment or in the class.

Extrinsic motivation does not mean, however, that a person will not get any pleasure from working on or completing a task. It just means that the pleasure they anticipate from some external reward will continue to be a motivator even when the task to be done holds little or no interest. An extrinsically motivated student, for example, may dislike an assignment, may find it boring, or may have no interest in the subject, but the possibility of a good grade will be enough to keep the student motivated in order for him or her to put forth the effort to do well on a task.

Extrinsic motivation is likely to involve the concept of rewarded behaviour. Thus, by engaging in a particular type of activity or behaving in a particular manner, you are “rewarded” by a desired end result.

For instance, you are motivated to save money for a vacation. Hence, you resist the urge to make impulsive purchases and in general become more discriminating in how you spend your money. After a time you find that you have a steadily growing amount of savings which you set aside. When you find that you have saved enough for that trip, you utilise your savings for the intended purpose and go on vacation. The external motivation is the vacation, which is also the reward for your act of saving for it.

3.2.4 Intrinsic Motivation

Intrinsic motivation refers to motivation that comes from inside an individual rather than from any external or outside rewards, such as money or grades.

The motivation comes from the pleasure one gets from the task itself or from the sense of satisfaction in completing or even working on a task.

An intrinsically motivated person will work on a math equation, for example, because it is enjoyable. Or an intrinsically motivated person will work on a solution to a problem because the challenge of finding a solution provides a sense of pleasure. In neither case does the person work on the task because there is some reward involved, such as a prize, a payment, or in the case of students, a grade.

Intrinsic motivation does not mean, however, that a person will not seek rewards. It just means that such external rewards are not enough to keep a person motivated. An intrinsically motivated student, for example, may want to get a good grade on an assignment, but if the assignment does not interest that student, the possibility of a good grade is not enough to maintain that student’s motivation to put any effort into the project.

Intrinsic motivation is the opposite of extrinsic motivation. That latter type of motivation comes from outside of you. But intrinsic motivation comes from within the individual.

So to understand the examples of intrinsic motivation, it helps to think of it as inspiration. But we could say that extrinsic motivation is almost equal to “instigation” instead.

You see, when you are extrinsically motivated, you are doing something that you may

very well not want to do, or not be all that interested in. What you're doing is like a chore. But examples of intrinsic motivation will always be labours of love.

Perhaps you are studying something in college that you really find boring or just do not care about, but you do want to get good grades. Or, perhaps you take a job in sales because there is potential for some very high commissions, but you actually hate sales. These are instances of extrinsic motivation.

Sometimes, most of us must admit, we also do not do things that we would like to do, because doing so would mean we broke the law and we could be penalised for that. For instance, not driving our car as fast as we may like is a good example of this. This avoidance would be extrinsic motivation as well.

So, examples of intrinsic motivation would be quite different from these. Some of these are given below:

- i) Studying something on your own because you desire to know that subject matter. You may not be doing this for any class or for any grade.
- ii) Starting your own online business because you love the particular products that are in your target market. Even though you are hoping to make money this way, you are motivated by your desire to build a business that you can be proud of and immerse yourself in.
- iii) Competing "against yourself" in a sport just because you want to get better at it. You may not be doing it to win any trophies, or trying to become a professional athlete.
- iv) Writing poetry to express your innermost thoughts and feelings, even though you may not be attempting to sell a book or publish for money.
- v) Doing something just because you think it is the right thing to do, and not because you hope to get a reward or avoid punishment.

Now as the above examples of intrinsic motivation show, you might be doing something in the hope of winning awards, earning money, or getting a good grade in a class. However, unlike with extrinsic motivation, earning money etc is not the primary motivation.

Intrinsic motivation always involves a person to do something that the person desires to do for his own self. The person would do it even if he or she were not going to be paid, get an award, or get a grade for it.

Understanding intrinsic motivation can help the person escape a life or career of drudgery and misery, as the person seeks out ways of earning money that he or she also enjoys doing. A person may not take that sales job that he hates but for the fact that he needs money and he can earn the money by taking up that sales job.

If a person is a teacher, he or she can find ways of keeping the subject very vibrant, active and and interesting for the students, thereby getting them more immersed in learning instead of just memorising things to pass a test and then forgetting them later. As is well know it has been seen that motivational speakers use plenty of inspirational quotes about life to help bring out this intrinsic motivation from within the persons to whom they are lecturing.

Intrinsic motivation is basically "what people will do without external inducement". In simple terms, it is motivation devoid of any external or outside rewards, such as money

or grades. If a person has intrinsic motivation, he would do a task simply for the pleasure or satisfaction in doing and completing that task. However, it does not mean that an individual will not seek rewards if he has intrinsic motivation. An intrinsically motivated person acknowledges the perk of rewards, but these rewards are not enough to keep that person motivated. In other words, with or without the reward, the person will continue to do the task, for as long as he has interest or believes in it.

If you can make someone align his values to yours, thus giving him an internal desire for the idea or value, you can set a very powerful motivation in the area. That is the power of intrinsic motivation. Plus, unlike extrinsic motivation, intrinsic motivation lasts longer because desires take time to be extinguished.

3.2.5 Methods to Increase Intrinsic Motivation

There are few things when considered can help us increase intrinsic motivation:

Set challenges: A challenge is one type of stimulating intrinsic motivation. A challenge not only defines a person's interest, it also turns a flame of desire to a burning passion. Competence is a psychological need satisfied by setting challenges. In the 1970's, Akio Morita challenged his chief engineers to make a hi-fi device no larger than a block of wood. This pumped up the imagination of the engineers, and with all their efforts put in they were able to devise the walkman which is highly popular even today.

Boredom: This is one of the main factors for intrinsic motivation. Once an idea or task becomes monotonous and familiar, pleasure in doing the task will surely go down to an all time low. The task should such that it should be challenging and make the person want to do it entirely for doing sake and getting the task accomplished. .

Interest: This is another factor that produces of intrinsic motivation. Work becomes more pleasurable when the person is interested in it. The person might find it pleasurable to design a website. But he will get all the more interested in creating the web site if the website is of his favourite band which he is trying to design.

Purpose: This also increases intrinsic motivation. When there is a clearly defined purpose then the person is motivated to do the task to realise that purpose. When persons are achieving something essential, they tend to stay on the process longer than when they do not feel that what they are doing has a purpose.

3.2.6 The Difference between Intrinsic and Extrinsic Motivation

Motivation provides insight into why we may behave the way we do. Motivation is an internal process that reflects the desire to achieve certain goals. As discussed earlier, motivation can be divided into two basic types: intrinsic motivation and extrinsic motivation

Intrinsic motivation reflects the desire to do something because it is enjoyable. If we are intrinsically motivated, we would *not* be worried about external rewards such as praise or awards. If we are intrinsically motivated, the enjoyment we experience would be sufficient for us to want to perform the activity in the future.

Extrinsic motivation on the other hand reflects the desire to do something because of external rewards such as awards, money, and praise. People who are extrinsically motivated may not enjoy certain activities. They may only wish to engage in certain activities because they wish to receive some external reward.

The Possible Benefits of Intrinsic Motivation: Teachers may be very interested in fostering intrinsic motivation. If students are only interested in receiving grades or praise, and do not enjoy learning, then teaching may be very difficult. Students may not wish to think or apply their knowledge. They may only be concerned with what will be on the tests. In contrast, students who are intrinsically motivated may enjoy challenging work, and may think in greater depth about ideas. Teachers may be able to foster intrinsic motivation by having students work on projects that allow them to see how the information is relevant to their lives.

Supervisors may also be interested in ways to increase intrinsic motivation. The ideal employee may be one who is self motivated and does not require constant supervision. Intrinsically motivated employees may be *less* likely to be late. They also may be more likely to excel at their jobs. It is possible that supervisors may increase intrinsic motivation by allowing employees to have greater autonomy, making the workplace fun, or encouraging creativity.

Self Assessment Questions

- 1) Answer the following statement with True (T) or False (F):
 - a) Extrinsic motivation occurs when internal factors compel the person to do something.
 - b) Motivation plays a key role in leadership success.
 - c) The motivating factors for extrinsic are rewards such as money or grades.
 - d) Intrinsic motivation is same as extrinsic motivation.
 - e) Intrinsic motivation comes from within.
 - f) Extrinsic motivation can be called as instigation.
 - g) Intrinsic motivation reflects the desire to do something because of the rewards.
 - h) Extrinsic motivation reflects the desire to do something because it is enjoyable.
 - i) Purpose increases intrinsic motivation.
 - j) Motivation is considered as the state of encouragement to do something.

3.3 OTHER TYPES OF MOTIVATION

Motivation involves the basic psychological reasons for a person's actions and behaviour. These are the forces or factors that cause a person to act a certain way or to behave in the manner that they do.

There are various types of motivations that can influence a person. These include the following:

3.3.1 Achievement Motivation

This is the motivation of a person to attain goals. The longing for achievement is inherent in every man, but not all persons look to achievement as their motivation. They are motivated by a goal. In order to attain that goal, they are willing to go as far as possible. The complexity of the goal is determined by a person's perception.

To us, the terms "simple" and "complex" are purely relative. What one person thinks is an easy goal to accomplish may seem to be impossible to another person. However, if

your motivation is achievement, you will find that your goals will grow increasingly complex as time goes by.

It is the drive to pursue and attain goals. An individual with achievement motivation wishes to achieve objectives and advance up on the ladder of success. Here, accomplishment is important for its own sake and not for the rewards that accompany it.

Hunger, sex, aggression—these are motives we share with many other forms of life. There are some motives, however, that appear to be unique to our own species. Achievement motivation (often termed as need for motivation) is the desire to accomplish difficult tasks and to excel. Individuals differ greatly in the desire for achievement is obvious. For some persons, accomplishing difficult tasks and meeting high standards of excellence are extremely important; whereas for others, just getting by is quite enough.

Persons high in achievement differ from persons low in this motive in other respects too. Persons high in achievement motivation tend to prefer tasks that are moderately difficult and challenging. The reason why they tend to avoid very easy tasks is that such tasks don't pose enough challenge to the persons with high in achievement motivation. These persons prefer difficult tasks because chance of failing on extremely difficult tasks is too high, and such persons want success above everything else.

Another characteristics of persons high in achievement motivation is that they have a stronger-than-average desire for feedback on their performance. They want to know how well they are doing so they can adjust their goals to make these challenging – but not impossible. Because of this desire for feedback, persons high in achievement motivation tend to prefer jobs in which rewards are closely related to individual performance – *merit based pay system*.

3.3.2 Successful Motivated Behaviour

Good and effective actions or behaviour usually involves the harmonizing of these two types of motivation. If one is driven by both intrinsic and extrinsic motivations, then inner conflict is reduced and a person is more likely to devote uninterrupted and harmonious actions towards a particular task.

The inner and external rewards too, are good reinforcing mechanisms. For many people, this is really the means towards success. By choosing goals that you desire – both in its intrinsic and extrinsic rewards - you can harmonize your own actions and devote your energies to your goals. In such instances, the chances of achievement increases greatly.

3.3.3 Self Enhancement Motivation

If you believe the task at hand will increase your character, advent or monetary condition and these self-improvements are vastly desirable to you, you will encounter significant motivation to perform even unpleasant parts of the process necessary to reach the goal. How desirable the end improvements are to you will determine the level of motivation you will encounter.

3.3.4 Affiliation Motivation

It is a drive to relate to people on a social basis. Persons with affiliation motivation perform work better when they are complimented for their favourable attitudes and co-operation.

3.3.5 Socialisation

Some people consider socialisation to be their main motivation for actions. This is especially evident in the situation of peer pressure. Some people are willing to do anything to be treated as an equal within a group structure. The idea of being accepted among a group of people is their motivation for doing certain things.

3.3.6 Competence Motivation

It is the drive to be good at something, allowing the individual to perform high quality work. Competence motivated people seek job mastery, take pride in developing and using their problem-solving skills and strive to be creative when confronted with obstacles. They learn from their experience.

3.3.7 Power Motivation

It is the drive to influence people and change situations. Power motivated people wish to create an impact on their organisation and are willing to take risks to do so.

3.3.8 Attitude Motivation

Attitude motivation is how people think and feel. It is their self confidence, their belief in themselves, their attitude to life. It is how they feel about the future and how they react to the past.

3.3.9 Change Motivation

Sometimes people do things just to bring about changes within their immediate environment. Change motivation is often the cause of true progress. People just become tired of how things are and thus, think of ways to improve it.

3.3.10 Incentive Motivation

This motivation involves rewards. People who believe that they will receive rewards for doing something are motivated to do everything they can to reach a certain goal. While achievement motivation is focused on the goal itself, incentive motivation is driven by the fact that the goal will give people benefits. Incentive motivation is used in companies through bonuses and other types of compensation for additional work.

By offering incentives, companies hope to raise productivity and motivate their employees to work harder.

It is where a person or a team reaps a reward from an activity. It is “You do this and you get that”, attitude. It is the types of awards and prizes that drive people to work a little harder.

3.3.11 Fear Motivation

When incentives do not work, people often turn to fear and punishment as the next tools. Fear motivation involves pointing out various consequences if someone does not follow a set of prescribed behaviour. This is often seen in companies as working hand-in-hand with incentive motivation. Workers are often faced with a reward and punishment system, wherein they are given incentives if they accomplish a certain goal, but they are given punishments when they disobey certain policies.

Fear motivation coerces a person to act against will. It is instantaneous and gets the job done quickly. It is helpful in the short run.

3.3.12 Aggressive Motivation

Aggressive motivation or the desires to inflict harm on others, play an all too common role in human behaviour. While human beings don't always express aggressive motivation overtly (often they simply fantasize about such behaviour), they often do engage in various forms of aggression against others—effort to harm them in some manner.

Most psychologists believe that aggression is elicited by a wide range of external events and stimuli. In other words, it is often “pulled” from without rather than “pushed” or driven from within by irresistible, perhaps inherited tendencies. The incidence of aggression suggest that such behaviour is strongly influenced by social and cultural factors, and that even it stems in part from innate tendencies, these are less important than social conditions and other factors. This is not to imply that biological or genetic factors play no role in human aggression, but most experts agree that aggression is influenced more strongly by a wide range of situational factors that evoke its occurrence and shape its form and targets than by inherited tendencies or mechanisms.

Social Factor

The chances are good that your aggressive motivation stemmed from the actions of another person. For instance, the other person may have done something that blocked or thwarted you from reaching your goals, in other words, this person may have frustrated you. Frustration can be viewed as the major cause of aggression. Frustration is the blocking of ongoing and goal directed behaviour. Frustration does not always produce aggression. Aggression does not always stem from frustration, often, individual aggress against others because it is part of their role or job, not because they are feeling frustrated (for example, treatment of a police officer towards the thief).

Another social factor that often plays an important role in aggression is direct provocation from another person. Verbal insult or physical actions interpreted as aggressive in nature often lead the party on the receiving end to reciprocate, with the result that a powerful spiral of aggression-counter aggression can develop. Exposure to violence in media-television, movies, and so on, has been found to increase aggression on the part of viewers.

Self Assessment Questions

1) Discuss other types of motivation.

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2) Describe achievement motivation and self enhancement motivation.

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3) What is affiliation motivation and socialisation?
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4) Describe competence motivation and power motivation.
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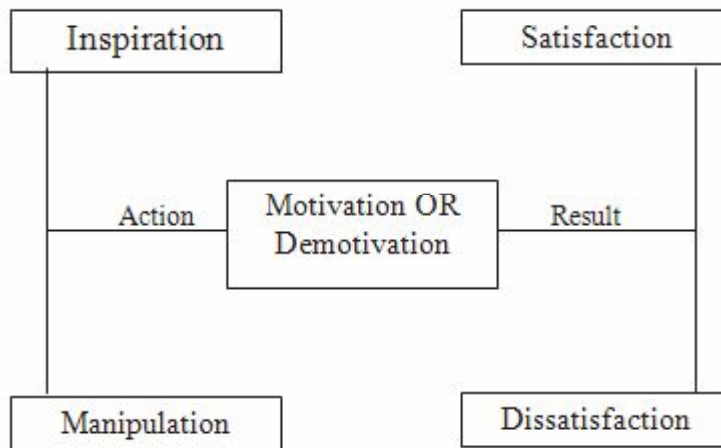
5) What are fear and aggressive motivation? Explain.
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3.4 MOTIVATING DIFFERENT PEOPLE IN DIFFERENT WAYS

Motivation is not only in a single direction i.e. downwards. In the present scenario, where the workforce is more informed, more aware, more educated and more goal oriented, the role of motivation has left the boundaries of the hierarchy of management. Apart from superior motivating a subordinate, encouragement and support to colleague as well as helpful suggestions on the right time, even to the superior, brings about a rapport at various work levels. Besides, where workforce is self motivated, just the acknowledgement of the same makes people feel important and wanted.

3.4.1 Difference between Motivation, Satisfaction, Inspiration and Manipulation

Motivation refers to the drive and efforts to satisfy a want or goal, whereas satisfaction refers to the contentment experienced when a want is satisfied. In contrast, inspiration is bringing about a change in the thinking pattern. On the other hand Manipulation is getting the things done from others in a predetermined manner.



Hence, manipulation or external stimulus as well as inspiration or internal stimulus acts as carriers of either demotivation or motivation which in turn either results into dissatisfaction or satisfaction depending upon.

Self Assessment Questions

1) Fill in the blanks:

- a) _____ motivation is the drive to pursue and attain goals.
- b) The inner and _____ are good reinforcing mechanism
- c) Persons with _____ perform work better when they are complimented for their favourable attitudes and co-operation----- _____ motivation is the drive to be good at something, allowing the individual to perform high quality work.
- d) The drive to influence people and change situation is called _____ motivation.
- e) _____ motivation is how people think and feel.
- f) _____ is often the cause of true progress.
- g) _____ motivation involves reward.
- h) _____ is the blocking of ongoing and goal directed behaviour.
- i) _____ refers to the contentment experienced when a want is satisfied.

3.5 LET US SUM UP

Motivation can be defined as the driving force behind all the actions of an individual. The influence of an individual's needs and desires both have a strong impact on the direction of their behaviour. Motivation is based on your emotions and achievement-related goals. Motivation is the basic drive for all of our actions. Motivation refers to the dynamics of our behaviour, which involves our needs, desires, drives, motives and ambitions in life. Achievement motivation is based on reaching success and achieving all of our aspirations in life.

A need is something that is necessary for organisms to live a healthy life. Needs are distinguished from wants because a deficiency would cause a clear negative outcome, such as dysfunction or death. Needs can be objective and physical, such as food and water, or they can be subjective and psychological, such as the need for self-esteem. A Drive is an internal state of tension that motivates an organism to engage in activities that should (hopefully) reduce this tension. Motives are based on needs: States of tension within a person, and as need is satisfied, tension is reduced. It propels people to perceive, think, and act in ways that serve to satisfy a need.

Needs are created or come into existence whenever there is a physiological or psychological imbalance. A need exists when cells in the body are experiencing a shortage of food or water. A drive is a deficiency with a direction. Drives denote actions and intention to act by individuals and they are exhibited to alleviate needs.

Extrinsic motivation refers to motivation that comes from outside an individual. The motivating factors are external, or outside, rewards such as money or grades. These rewards provide satisfaction and pleasure that the task itself may not provide.

An extrinsically motivated person will work on a task even when they have little interest in it because of the anticipated satisfaction they will get from some reward. The rewards can be something as minor as a smiley face to something major like fame or fortune. For example, an extrinsically motivated person who dislikes math may work hard on a math equation because want the reward for completing it. In the case of a student, the reward would be a good grade on an assignment or in the class.

Intrinsic motivation refers to motivation that comes from inside an individual rather than from any external or outside rewards, such as money or grades.

The motivation comes from the pleasure one gets from the task itself or from the sense of satisfaction in completing or even working on a task.

An intrinsically motivated person will work on a math equation, for example, because it is enjoyable. Or an intrinsically motivated person will work on a solution to a problem because the challenge of finding a solution is provides a sense of pleasure. In neither case does the person work on the task because there is some reward involved, such as a prize, a payment, or in the case of students, a grade.

Intrinsic motivation does not mean, however, that a person will not seek rewards. It just means that such external rewards are not enough to keep a person motivated. An intrinsically motivated student, for example, may want to get a good grade on an assignment, but if the assignment does not interest that student, the possibility of a good grade is not enough to maintain that student's motivation to put any effort into the project.

Motivation is not only in a single direction i.e. downwards. In the present scenario, where the workforce is more informed, more aware, more educated and more goal oriented, the role of motivation has left the boundaries of the hierarchy of management. Apart from superior motivating a subordinate, encouragement and support to colleague as well as helpful suggestions on the right time, even to the superior, brings about a rapport at various work levels.

3.6 UNIT END QUESTIONS

- 1) Differentiate between intrinsic and extrinsic motivation.
- 2) How is primary motivation different from the secondary motivation.

- 3) Discuss the other types of motivation mentioned in unit with day to day examples.
- 4) How do we motivate different people in different ways?
- 5) What are the other types of motivation? How do they motivate behaviour?

3.7 SUGGESTED READINGS

Baron, R.A. (2010). *Introduction to Psychology*. Wadsworth Publishing Co., NJ

Harold F. Oneil ad Michael Drillings (Eds).(1994). *Motivation: Theory and Research*. Laurence ErlbaumAssociates, New Jersey

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UNIT 4 MOTIVATION: CURIOSITY AND EXPLORATORY BEHAVIOUR

Structure

- 4.0 Introduction
- 4.1 Objectives
- 4.2 Motivation
 - 4.2.1 Challenge
 - 4.2.2 Curiosity
 - 4.2.3 Control
- 4.3 Curiosity Definition and Description
 - 4.3.1 Curiosity and Exploration
 - 4.3.2 Historical Overview of Curiosity and Exploration
 - 4.3.3 Kinds of Curiosity
 - 4.3.4 Theoretical Concepts of Curiosity and Exploration
 - 4.3.5 Drive Theories
 - 4.3.6 Curiosity and Culture
- 4.4 Issues Related to Curiosity
 - 4.4.1 The Biological Component of Curiosity and Exploratory Behaviour
 - 4.4.2 The Learned / Cognitive Component of Curiosity and Exploratory Behaviour
 - 4.4.3 Self-Determination Theory
- 4.5 Let Us Sum Up
- 4.6 Unit End Questions
- 4.7 Suggested Readings

4.0 INTRODUCTION

This unit deals with motivation, curiosity and exploratory behaviour. We start with motivation, the definition, the characteristic features of motivation the various factors that influence or affect motivation such as challenge, goals, control etc. This is followed by curiosity, the definition and description of curiosity and exploratory behaviour. The various factors that contribute to these behaviours are considered. Curiosity and exploratory behaviours and their biological and cognitive components are described. The drive theories and self-determination theory of curiosity and exploratory behaviour are taken up and discussed in detail.

4.1 OBJECTIVES

After completing this unit, you will be able to:

- Define motivation and various factors and approaches of motivation;
- Describe the factors contributing to motivation;
- Define curiosity and exploratory behaviours;
- Describe the characteristic features of curiosity and exploratory behaviours;

- Explain the factors that contribute to these behaviours;
- Elucidate the drive theories;
- Explain the self-determination theory of curiosity; and
- Analyse the relationship between drive theories and self-determination theories of curiosity in regard to motivation.

4.2 MOTIVATION

The derivation of the word tells us that *motivation* refers to getting someone *moving*. When we motivate ourselves or someone else, we develop incentives - we set up conditions that start or stop behaviour. In education motivation deals with the problem of setting up conditions so that learners will perform to the best of their abilities in academic settings. We often motivate learners by helping them develop an expectancy that a benefit will occur as a result of their participation in an instructional experience. In short, motivation is concerned with the factors that stimulate or inhibit the desire to engage in a behaviour.

Motivation is defined as the arousal, direction and persistence of behaviour an internal state or condition that activates behaviour and gives it direction; desire or want, that energises and directs goal-oriented behaviour. The influence of needs and desires on the intensity and direction of behaviour is part of motivation. Drive is defined as a basic or instinctive need. It is a vigorous effort toward a goal and it causes and guides the movement.

Motivation is defined as the arousal, direction and persistence of behaviour, an internal state or condition that activates behaviour and gives it direction; desire or want, that energises and directs goal-oriented behaviour; the influence of needs and desires on the intensity and direction of behaviour. Drive is defined as a basic or instinctive need; a vigorous effort toward a goal; to cause and guide the movement.

Motivation is an extremely important but sometimes mundane topic. Motivation influences learners in complex ways. For example, in a single situation there may be numerous factors motivating learners to engage in a behaviour and an even greater number of factors motivating them to avoid that behaviour. A thorough understanding of the principles of motivation will enable you to get students moving – to want to participate and do their share in the instructional process.

There are several approaches to the motivation, such as:

4.2.1 Challenge

One of the most powerful individual factors influencing intrinsic motivation is *challenge*. This is an *individual* factor because a person can be challenged without involving other people. Of course a challenge could involve other people, as when a person makes it a challenge to win a *competition*. People pursue tasks that are challenging. Learners are challenged when they direct their activities toward personally meaningful goals in such a way that attainment of the goals is uncertain – when neither success nor failure is guaranteed. The belief that they are making acceptable progress toward a goal, along with the expected satisfaction of goal attainment, enhances self-efficacy and sustains motivation. As students work toward these goals, they are motivated to the extent that they receive feedback and feel that their eventual success will enhance their self-esteem.

The following four factors influence the contribution of challenge to motivation.

i) **Goals**

Goals can be either supplied by the teacher or developed by the learners themselves. Goals can be short-term or long-term. While short-term goals may be more immediately compelling, long-range goals are often more important. An ideal motivational system involves short-term goals that lead to long-term goals.

The most important characteristic of goals is that they must be personally meaningful. Personal relevance can be increased by

- 1) making clear the links between an activity and competencies or outcomes valued by the learner,
- 2) relating material to a fantasy or imaginary context that the learner finds emotionally appealing, or
- 3) eliciting interpersonal motivations such as cooperation, competition, or recognition that appeal to the learner. Note that what this paragraph really says is that we can make goals more meaningful by relating them to other motivational factors, including fantasy, control, competition, and recognition.

Even when goals are supplied by the teacher, it is important that the learners “buy into” or internalise these goals. Although it seems obvious that it is best that students develop their own goals (and this would also contribute to *control*, which is another factor that contributes to intrinsic motivation), a serious problem is that students themselves may set goals that are too easy or too difficult to attain or difficult to define. A major step in promoting *self-motivation* is to help learners develop strategies for setting goals.

ii) **Level of certainty**

This is an important factor in determining the degree to which a challenge will actually motivate a learner. An intermediate degree of certainty is usually best - when neither success nor failure is guaranteed.

The level of certainty can also be manipulated by introducing game like elements such as randomness or various scorekeeping systems into the learning environment.

iii) **Performance feedback** reminds learners of their status with regard to the challenge posed by the goals. It is most effective when it is clear, frequent, constructive, and encouraging.

Note that the various components of the challenge aspect of motivation may sometimes conflict with one another. For example, when performance feedback is extremely clear but negative, it may threaten the learner’s self-esteem more than would vague feedback or no feedback. Also note that the way a teacher should manipulate challenge will vary considerably from one situation to another.

It is not necessary that a learner be motivated by challenge or by any other specific factor of intrinsic motivation or that teachers deliberately apply all of the guidelines accompanying each factor. In some cases a learner is already motivated or a guideline has already been applied. For example, the optimal degree of interest and level of certainty with regard to a topic may already exist (for example, a learner may wish to learn to express her thoughts more clearly and may think she can do this if she works hard). In these instances it is not useful for the instructor to add additional uncertainty. The task is already perceived as adequately challenging, and the teacher’s task is to help the learner meet this challenge.

In other instances, the degree of uncertainty that would best pose a challenge may be missing. In such cases it is important for the teacher to introduce uncertainty (for example, by presenting the lesson as a game) in order to pose a challenge and stimulate activity.

By focusing on and clarifying these factors as necessary, teachers can make learning activities sufficiently challenging to stimulating learning.

4.2.2 Curiosity

A second factor influencing individual motivation is *curiosity*. This is an *individual* factor because a person's curiosity can be aroused without involving other people. Curiosity is stimulated when something in the physical environment attracts our attention or when there is an optimal level of discrepancy between present knowledge or skills and what these could be if the learner engaged in some activity. *Novelty* and *interest* are good synonyms for the motivational use of curiosity.

There are two types of curiosity that can stimulate intrinsic motivation:

- i) *Sensory curiosity* occurs when physical factors such as changes in tone of voice, light, or sound attract the attention of learners.
- ii) *Cognitive curiosity*, on the other hand, is evoked when learners believe that it may be useful to modify existing cognitive structures.

4.2.3 Control

A third factor influencing individual motivation is *control*, which refers to the basic human tendency to seek to control one's environment. This is an *individual* factor because a person can feel in control without involving other people. Of course interpersonal factors such as winning a *competition* or gaining *recognition* could contribute to the feeling of control.

There are three elements that influence the contribution of control to intrinsic motivation.

- i) **Cause-and-effect relationships:** Learners perceive themselves to be in control when they see clear cause and effect relationship between their own actions and obtaining desired benefits. This means that a good way to enable learners to feel in control is to let them see the cause and effect relationship between something they really care about and the topic they are studying in class.
- ii) **Powerful effects:** Learners perceive themselves to be in control when they perceive the outcome of what they are studying to be truly worthwhile rather than something trivial. An educational objective could meet the preceding guideline but still not be worth caring about.

But if a person can say, "Because I learn this, I'll be able to do something I really care about!" that person feels in control.

- iii) **Free choice:** If students perceive themselves as doing something because they want to instead of because they are being forced to do it against their will, they will feel in control of their learning

Loss of Control

The feeling of *loss of control* is one of the most powerful *anti-motivating* factors in education. When students feel their teachers are using controlling techniques (rather than those that promote autonomous choice), they are likely to show reduced intrinsic

motivation, and this has been shown to result in lower academic performance as well as substantial deterioration in other important characteristics. This is a major factor behind the need for using *natural* rather than *artificial* reinforcement whenever possible.

In the ideal learning situation, learners will be most strongly motivated when they freely choose what they want to learn. Because of legitimate concerns about covering specified objectives and coordinating the activities of groups of students, teachers often resist giving complete control to learners. Nevertheless, the fact remains that learners are often most strongly motivated to learn when they themselves decide what to learn and how to learn it. At the very least, teachers can be aware of what students would like to learn and match units of instruction to these learner choices whenever possible.

Self Assessment Questions

1) Define motivation.

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2) Describe the characteristic features of motivation.

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3) What are the component factors of motivation?

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4) Describe Challenge, curiosity and control in regard to motivation.

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4.3 CURIOSITY DEFINITION AND DESCRIPTION

Curiosity is defined as a need, thirst or desire for knowledge. The concept of curiosity is central to motivation. The term can be used as both a description of a specific behaviour as well as a hypothetical construct to explain the same behaviour. It is believed that curiosity is a motivational prerequisite for exploratory behaviour. The term curiosity is used both as a description of a specific behaviour as well as a hypothetical construct to explain the same behaviour. Exploration refers to all activities concerned with gathering information about the environment. This leads to the conflict and question of whether

exploratory behaviour should be defined in terms of the movements that an animal or human performs while exploring or in terms of the goal or purpose of the behaviour observed.

Curiosity is stimulated when something in the physical environment attracts our attention or when there is an optimal level of discrepancy between present knowledge or skills and what these could be if the learner engaged in some activity. *Novelty* and *interest* are good synonyms for the motivational use of curiosity.

The feeling of *loss of control* is one of the most powerful *anti-motivating* factors in education. Drive theories differ on whether they view curiosity as a primary or secondary drive. Some research has shown that unsatisfied curiosity tends to intensify over some interval as do other drives such as hunger and thirst.

What makes people curious? Why do individuals explore the unknown? The research in these areas is inconclusive and often contradictory. Are curiosity and exploration motivations or drives? Can curiosity and exploration be operationally defined independent of one another? A clear distinction between these two may not always be possible.

4.3.1 Curiosity and Exploration

What exactly are curiosity and exploration? Loewenstein (1994) points out four central issues of curiosity:

- definition and dimensionality,
- cause,
- voluntary exposure to curiosity, and
- situational determinants.

He adds a fifth issue of superficiality and intensity since he states that curiosity can arise, change focus or end abruptly.

Loewenstein believed that despite its transience, curiosity can be a powerful motivational force. Langevin (1971) conducted research in the area of curiosity and classified measures of curiosity into two categories.

- i) Curiosity is viewed as a motivational state and measured with behavioural indices.
- ii) Curiosity is viewed as a personality trait that is assessed by personality measures.

It has been suggested that curiosity is not a unitary construct. At the conceptual level there are numerous definitions of curiosity which tend to encompass a broad range of characteristics. Fowler (1965) stated that boredom is generally a prerequisite for curiosity (exploration).

Curiosity and exploration are difficult to define independently when looking at them from a psychological perspective. This is so because when ever we consider exploration and curiosity, the concepts of motivation and drive come into play and become intertwined.

4.3.2 Historical Overview of Curiosity and Exploration

The earliest discussions of curiosity were conducted by philosophers and religious thinkers and centered on the question of curiosity's moral status rather than on its psychological underpinnings. Cicero referred to curiosity as a "passion for learning"

Several forms of curiosity related behaviour such as search behaviour, movement toward an unknown object and asking questions are included in the area of motivational psychology. However, curiosity does not fit well into the conceptual framework developed along the traditional pathways of behavioural sciences.

- i) The conception of an intrinsically motivated behavioural system, which cannot be linked to a reducible drive raises serious questions about motivational psychology since the 1950's.
- ii) The idea of curiosity was rediscovered when laboratory researchers wondered about the maze activities of the lab rat when none of the drive states such as thirst or hunger were aroused.
- iii) The curiosity phenomena cannot be investigated without reference to the natural environment of an individual.

Before 1950 curiosity was seen in the light of its social function as for example, the eagerness or greed to get to know something new for the sake of newness, and in early psychological literature the term curiosity had a negative connotation. The scientific term "curiosity" is more neutral.

The most basic problem that has occupied curiosity researchers and theorists is the underlying cause of curiosity. Is curiosity a primary or secondary drive? A primary drive is inborn or innate whereas a secondary drive is learned or acquired. The results are inconclusive.

If secondary, from what more basic drive or motive does it derive? The defining feature is that curiosity produces an unpleasant sensation (usually labeled arousal) that is reduced by exploratory behaviour.

4.3.3 Kinds of Curiosity

William James (1890) pointed out to two kinds of curiosity.

- i) He emphasised the biological function of curiosity as a mechanism of instinct driven behaviour that serves in approaching new objects. Approach and exploration are described as being characteristic forms of behaviour.
- ii) The second kind of curiosity pointed out by James is "scientific curiosity" and "metaphysical wonder" with which "the practical instinctive root has probably nothing to do" rather "the philosophical brain responds to an inconsistency or a gap in its knowledge".

In the psychoanalytical literature Freud views curiosity as a derivative of the sex drive. The partial impulse of looking motivates the child's great interest in all things and all events that have to do with sexuality. Whereas the looking impulse and curiosity are primarily sexual in origin, the child's exploratory interest and desire for knowledge can be considered to be a by product of cognitive development. Due to social pressure, sexual exploration is later abandoned.

Blarer proposed curiosity to be intrinsic to the individuals perceptions and world experiences and thus Blarer's view is the basis for the intrinsic motivation viewpoint in curiosity theory.

4.3.4 Theoretical Concepts of Curiosity and Exploration

The postulation of an independent exploratory drive is based on the observation of the exploratory activities of animals in situations where there were no external stimuli to

satisfy homeostatic drives (water or food). Nissen (1930) experimented with rats and defines exploratory behaviour in two ways: 1) as an inborn exploratory drive, 2) that curiosity is a secondary or learned drive acquired through classical conditioning.

Originally, Berlyne (1954a, 1960) thought that the aversive and drive reducing effect of deviations of the arousal potential from the individual's optimum level as the underlying mechanism of curiosity. Since then, Berlyne has come to believe that curiosity is externally stimulated, and that the curiosity drive is aroused by external stimuli specifically stimulus conflict.

This encompasses complexity, novelty and surprise. Berlyne believed that in the short term, stimulus change and novelty is accompanied by physiological change. However, over longer periods of time, investigating behaviours are not accompanied by readily identifiable physiological changes. Berlyne also holds that exploratory behaviour serves to maintain or attain a medium to optimal activation level for the organism. In all cases where exploration takes place, arousal or desire is reduced.

Fiske and Maddi (1961) hold a medium arousal level model and differentiate between the terms arousal and activation. They define arousal as "diverse manifestations of activation, such as muscle tone, heart rate, and increased sensitivity for stimuli". Their definition of activation is "the state of a catalytic and energising mechanism in the central nervous system".

McReynolds based his theories of exploratory behaviour on animal experiments. Motivational aspects of exploratory behaviour, as for example, a living being is active in order to receive new perceptual information from its environment. As for adaptive aspects we can give example such as a living being is in a situation of stimuli that it must regulate and adapt to.

Fowler's (1965) boredom perspective interprets curiosity as a homeostatic drive (internally stimulated) and according to him, the curiosity drive is both evoked and satisfied by the same stimuli. Fowler observed animals producing the exploration initiating response before, rather than after, exposure to the stimulus.

According to Hunt (1963) curiosity refers to a motivation inherent in information processing. This means that curiosity is a mixture of cognition and motivation. The main principle, is the establishment and maintenance of an optimal amount of incongruence, as incongruence determines the strength, direction and affective qualities of behaviour.

4.3.5 Drive Theories

Drive theories differ on whether they view curiosity as a primary or secondary drive. Some research has shown that unsatisfied curiosity tends to intensify over some interval as do other drives such as hunger and thirst.

Curiosity has a motivated force that is stimulated internally (boredom) or by external stimuli. However, Hebb (1955) believes that curiosity seeking behaviour poses a paradox for drive based accounts of curiosity. Drive is not simply a state, the decrease of which is rewarding. At high levels the reduction of drive is rewarding, but at low levels, an increase may be rewarding.

What is the role of homeostatic drives to curiosity? Harlow states that exploration is an example of human motivation that is independent from homeostatic drives. Harlow's non homeostatic intrinsic drive theory has been attacked by drive and learning theorists.

Kreitler and Kreitler (1976) have changed positions from the basic assumption of drive theory to a more cognitive process in the development of exploratory behaviour.

Drive theories differ on whether they view curiosity as a primary or secondary drive. Some research has shown that unsatisfied curiosity tends to intensify over some interval as do other drives such as hunger and thirst.

A drive is a motivational force that energises goal-directed behaviour. The concept of force is more general than the specific sequence of behaviours involved in instinct. A drive is hypothesized to motivate not a single specific behaviour but an entire class of behaviours, all connected to the same basic need. Thus one's hunger drive could account for eating many different things in varied circumstances, as well as accounting for related non-eating behaviour, such as restlessness before mealtimes.

A need is a physiological requirement of an organism, for a resource, for example, or for balance among bodily processes. The experience of a need was hypothesized to be unpleasant. The drive produced by this need would act as a signal for behaviour to gratify the need. Thus drive theory explains behaviour in terms of a motivation for drive-reduction. An animal that needs food will experience the hunger drive, and this will motivate eating behaviour until the drive is reduced.

Curiosity has a motivated force that is stimulated internally (boredom) or by external stimuli. However, it is believed that curiosity seeking behaviour poses a paradox for drive based accounts of curiosity. "Drive is not simply a state the decrease of which is rewarding. At high levels the reduction of drive is rewarding, but at low levels, an increase may be rewarding".

Harlow states that exploration is an example of human motivation that is independent from homeostatic drives. Harlow's nonhomeostatic intrinsic drive theory has been attacked by drive and learning theorists.

4.3.6 Curiosity and Culture

There is evidence for cross-cultural similarities in exploratory behaviour (Dragun, 1981). However, cultures generally vary both in attitudes towards exploration and information seeking as well as in the range of situations allowing the expression of the various manifestations of exploration and curiosity, this is especially true for the sensation-seeking motive. Zuckerman (1994) defines sensation seeking as "the seeking of varied, novel, complex and intense sensations and experiences, and the willingness to take physical, social, legal, and financial risks for the sake of such experiences."

Berlyne also conducted research on cross cultural comparisons in the area of curiosity. His findings showed that there is a high similarity of demand characteristics of stimuli in two cultures of widely differing historical antecedents and technological development.

Also, different cultures from various geographical regions show evidence for cross-cultural similarities in exploratory behaviour. More research is needed to study curiosity behaviour in its own cultural context to gain a better understanding of the functional relationships between various environmental and social facilitators and inhibitors of curiosity in a given society.

Children like to explore their environments without much encouragement from parents. The organisms are motivated to interact with new or novel objects and learn in the process.

We must remember that interest in novel things diminishes with repeated exposure.

Humans show a preference for complexity. Human exploratory behaviour is highly systematic with each individual becoming accustomed /habituated to a certain level of complexity he/she is motivated to explore stimuli that are slightly more complex.

Interacting with stimuli in the environment increases competence or the ability to process information. We all are aware that animals explore to help ensure their survival and motivation is to know everything that might affect one's survival.

Having new skills or competence, we discover new or different aspects of that object. Level of arousal is basic mechanism underlying exploratory and play behaviours. Person experiencing low arousal will seek to increase arousal, whereas persons experiencing high arousal will seek to lower arousal. New information is governed by the ability of the new stimulus to elicit arousal. If there is greater discrepancy, there is also greater arousal and thus we can state that

Greater discrepancy = Greater arousal

Exploration is a person environment interaction in which the environment provides a challenge to the individual. The individual develops wide range of competencies.

Exploration decreases or stops altogether when the individual is anxious. Emotional animals explore less but show that when they have been tamed, their tendency to explore increases.

Securely attached infants explore more and early attachment has been shown to reduce anxiety and increase achievement/mastery behaviour.

Self Assessment Questions

1) Define curiosity and exploratory behaviours.

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2) Give a historical overview of curiosity and exploratory behaviours.

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3) What are the types of curiosity and how do they differ from each other?

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4) Delineate the theoretical concepts related to curiosity and exploratory behaviours.

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5) How do drive theories explain curiosity and exploratory behaviours?
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6) Discuss the relationship between curiosity and culture.
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4.4 ISSUES RELATED TO CURIOSITY

4.4.1 The Biological Component of Curiosity and Exploratory Behaviour

Children vary in tendencies to approach novel stimuli. It has been found that children with stable temperaments are more receptive to new situations and thus one finds more exploratory and curiosity oriented behaviour in such children. .

Inhibited and uninhibited temperaments are inherited and thus the inclination to approach novel objects vary from one person to another and from one child to another.

Curiosity and exploratory behaviours are related to extraversion. Extraversion on the other hand is inherited and has been linked to tendency to select variety, novelty, complexity of stimuli. Children and adults with extraversive traits are more explorative and curious and innovative.

Curiosity and exploratory behaviours are affected and influenced by the state of anxiety or state of arousal one has. The higher the anxiety the poorer is the curiosity oriented behaviour and exploratory behaviour. Anxiety appears to almost paralyse the person from doing any exploration. Generally high anxiety or arousal focuses on survival cues, because there is tension and it appears as if the person has to somehow return to homeostasis from a state of imbalance caused by anxiety. This state of imbalance threatens the very survival of the individual and thus the anxiety has to be reduced and thus the individuals are motivated to explore while being cautious.

4.4.2 The Learned/Cognitive Component of Curiosity and Exploratory Behaviour

In this, experience and competence play central role in tendency to respond to variety, novelty, and complexity. Organisms become familiar with something by abstracting information. We tend to develop more complex cognitive structures as the result of processing information. Individuals will lose interest in repeatedly exposed stimulus.

Intrinsic motivation is a tendency to seek out novelty and challenge, to extend and exercise one's capacities, to explore and learn.

4.4.3 Self Determination Theory

Humans have three innate needs; competence, relatedness, and autonomy. Innately inclined to systematically respond to novelty and challenge and to develop competence.

Can self-regulate, that is set goals, find paths to goals, and activate mental capacities to meet challenges. Feelings of competence are important motivators for exploring/responding to challenge. Relatedness grows out of feelings of being connected or belonging; people internalise rules for cooperative behaviour; motivation for internalising values.

Sensation seeking

Trait defined by the need for varied, novel, and complex sensations/experiences and the willingness to take physical and social risks for the sake of such experiences.

These are based on four factors:

- 1) Thrill and adventure seeking.
- 2) Experience seeking.
- 3) Disinhibition.
- 4) Boredom susceptibility.

Biological component of sensation seeking

This includes the following that is Mono Amin Oxidase Inhibitors and their levels, as for example, norepinephrine, dopamine, and serotonin are negatively correlated with MAO levels, which are important in regulation of pleasure/reward when they take drugs.

People who are likely to use drugs are those who are

High sensation seekers are likely to experience greater pleasure.

Sensation seeking is also related to testosterone levels in men.

The learned cognitive component of sensation seeking

Thrill seekers learn to use fear as a means of increasing arousal level in order to experience a psychological high.

Because they have good coping skills, they do not experience much fear.

They experience self satisfaction associated with exercising highly developed coping skill in face of uncertainty. They value variety.

People come to control their fears and anxiety through mastery training and thus exploratory and curiosity continue within them.

People go for exploration and wet their curiosity driven by the need for new experiences. They are more willing to break previous commitments.

They develop better cognitive skills, higher IQs, superior scholastic/reading ability, and better social skills/intimacy.

Curiosity may lead to creativity (or delinquency); view things in new ways. Adept at working in environments where change is a way of life. Cannot be committed to any one activity in case something new or more interesting comes along. Inclined to self-disclose; not inclined to commit to long-term relationships.

Self Assessment Questions

1) Discuss the biological components of curiosity and exploratory behaviour.

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2) What are the learned and cognitive components of curiosity and exploratory behaviours?

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3) Elucidate the self determination theory of curiosity.

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4.5 LET US SUM UP

Motivation is an extremely important topic. Motivation influences learners in complex ways. For example, in a single situation there may be numerous factors motivating learners to engage in a behaviour and an even greater number of factors motivating them to avoid that behaviour. A thorough understanding of the principles of motivation will enable you to get students moving – to want to participate and do their share in the instructional process.

People pursue tasks that are challenging. Learners are challenged when they direct their activities toward personally meaningful goals in such a way that attainment of the goals is uncertain – when neither success nor failure is guaranteed. The belief that they are making acceptable progress toward a goal, along with the expected satisfaction of goal attainment, enhances self-efficacy and sustains motivation.

The most important characteristic of goals is that they must be personally meaningful. Personal relevance can be increased by (1) making clear the links between an activity and competencies or outcomes valued by the learner, (2) relating material to a fantasy or imaginary context that the learner finds emotionally appealing, or (3) eliciting interpersonal motivations such as cooperation, competition, or recognition that appeal to the learner.

The degree of uncertainty that would best pose a challenge may be missing (for example, a learner may think he is already competent enough at using decimals without expending any real effort). In such cases it is important for the teacher to introduce uncertainty (for example, by presenting the lesson as a game) in order to pose a challenge and stimulate activity.

Curiosity is stimulated when something in the physical environment attracts our attention or when there is an optimal level of discrepancy between present knowledge or skills

and what these could be if the learner engaged in some activity. Novelty and interest are good synonyms for the motivational use of curiosity.

The feeling of loss of control is one of the most powerful anti-motivating factors in education. When students feel their teachers are using controlling techniques (rather than those that promote autonomous choice), they are likely to show reduced intrinsic motivation, and this has been shown to result in lower academic performance as well as substantial deterioration in other important characteristics. This is a major factor behind the need for using natural rather than artificial reinforcement whenever possible.

Curiosity is defined as a need, thirst or desire for knowledge. The concept of curiosity is central to motivation. The term can be used as both a description of a specific behaviour as well as a hypothetical construct to explain the same behaviour.

Cultures generally vary both in attitudes towards exploration and information seeking as well as in the range of situations allowing the expression of the various manifestations of exploration and curiosity, this is especially true for the sensation-seeking motive.

Drive theories differ on whether they view curiosity as a primary or secondary drive. Some research has shown that unsatisfied curiosity tends to intensify over some interval as do other drives such as hunger and thirst.

A drive is a motivational force that energises goal-directed behaviour. The concept of force is more general than the specific sequence of behaviours involved in instinct. A drive is hypothesized to motivate not a single specific behaviour but an entire class of behaviours, all connected to the same basic need. Thus one's hunger drive could account for eating many different things in varied circumstances, as well as accounting for related non-eating behaviour, such as restlessness before mealtimes.

4.6 UNIT END QUESTIONS

- 1) Discuss the following:
 - a) Challenge
 - b) Curiosity
 - c) Control
 - d) Competence and Exploration
 - e) Curiosity and Culture
- 2) Discuss the historical and theoretical conception of curiosity and exploratory behaviour.
- 3) How is drive theory related to the curiosity and exploratory behaviour of motivation.
- 4) What are the various issues related to curiosity and exploratory behaviours?
- 5) How does self-determination theory explain curiosity and exploratory behaviours?

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UNIT 1 CONCEPT OF ANXIETY, AROUSAL AND STRESS

Structure

- 1.0 Introduction
- 1.1 Objectives
- 1.2 Definition of Anxiety
 - 1.2.1 Types of Anxiety
 - 1.2.2 Physical Symptoms of Anxiety
 - 1.2.3 Psychological Symptoms of Anxiety
 - 1.2.4 Behavioural Symptoms of Anxiety
 - 1.2.5 The Causes of Physical Symptoms
 - 1.2.6 The Causes of Psychological Symptoms
- 1.3 Definition of Arousal
 - 1.3.1 Characteristics of Arousal
 - 1.3.2 Arousal and Performance
 - 1.3.3 Anxiety and Arousal Theories
 - 1.3.4 Reactions to Arousal and Anxiety
- 1.4 Definition of Stress
 - 1.4.1 Physical Responses to Stress
 - 1.4.2 Psychological Responses to Stress
 - 1.4.3 Description and Types of Stress
 - 1.4.4 Stressors
 - 1.4.5 Stages of Stress
 - 1.4.6 Sources of Stress
- 1.5 Arousal, Stress and Anxiety
 - 1.5.1 Signs of Arousal and Anxiety
 - 1.5.2 Implication for Practice
 - 1.5.3 Measurement of Anxiety and Stress
 - 1.5.4 Depression, Anxiety, Stress Scale
- 1.6 Treatment and Prevention of Stress and Anxiety
- 1.7 Prevention of Anxiety and Stress
- 1.8 Let Us Sum Up
- 1.9 Unit End Questions
- 1.10 Suggested Readings

1.0 INTRODUCTION

This unit deals with the concept of anxiety, arousal and stress. It starts with the definition of stress, followed by types of anxiety and classification of anxiety etc. Then we discuss the physical, psychological and behavioural symptoms of anxiety and the causes thereof. Then we take the concept of arousal and define arousal, put forward the characteristics of arousal. Then we discuss the arousal and its effects on performance. Then we discuss the relationship between anxiety, arousal and stress

and the reaction to arousal and anxiety. This is followed by definition of the concept of stress, and discuss the physical responses to stress and psychological responses to stress. Then we describe stress and present the types of stress. A discussion on stressor follows with stages of stress and sources of stress. The next section deals with arousal, stress and anxiety in which we present the signs of arousal and anxiety and its implication for practice. Then we present the measurement of stress and anxiety and describe a scale which measures anxiety stress and depression. Finally we present the treatment and prevention of stress and anxiety.

1.1 OBJECTIVES

On completing this unit, you will be able to:

- Define anxiety;
- Present the different types of anxiety;
- Explain the physiological and psychological symptoms of anxiety;
- Define arousal;
- Describe the characteristic features of arousal;
- Define stress;
- Explain the physical and psychological reactions to stress;
- Describe stressors and stages of stress;
- Analyse the relationship between anxiety, arousal and stress; and
- Elucidate the treatment and prevention of stress and anxiety.

1.2 DEFINITION OF ANXIETY

We are all used to feeling anxious from time to time. When we are about to take exams, or facing a job interview, or awaiting results of some important medical tests, we feel worried about what might happen. We are tense and anxious about how we will be affected. But exactly what does anxiety mean?

Anxiety is a word we use to describe our feelings when we are frightened. So, if something frightens us we get anxious. For example, if you are walking down a street and suddenly a ferocious dog runs up to you, barking madly or snarling and baring its teeth, you will almost certainly feel anxious because you are frightened that the dog will attack you.

The negative emotional state with feelings of nervousness, worry and apprehension associated with activation or arousal of the body.

Of course, in this and many other similar situations you can easily see what has made you anxious and so normally you will tend not to worry about it after it is over. At times the very fact that we are under pressure will spur us on to do our best and rise to the occasion and meet with resounding success.

However, sometimes we tend to start worrying over this simple incident and start thinking that there is something wrong with us, and that's why the dog almost attacked us, although there were several other people in the street. Other times, we find ourselves getting anxious when there is nothing happening to us that should make us feel that way. Most people who seek help because of anxiety are like this. They experience such strong feelings of anxiety that they are unable to cope with their day to day life.

Anxiety and panic come in many different forms, and vary in intensity from person to person. Some, such as post traumatic stress have identifiable origins.

Anxiety and panic may be associated with genetics, changes in neurological or brain chemistry, or disruptive life events. Physical and emotional stress can also lead to anxiety which can eventually turn into disorders.

1.2.1 Types of Anxiety

Anxiety is a word used to denote a general state of nervousness, fear, apprehension, and worrying. As a matter of fact every one undergoes anxiety whenever he faces some challenge or some task that entails on ones worth and self esteem, in such circumstances anxiety is real and productive as it pushes the person toward accomplishment of that goal in reasonable timeframe. However, when one experiences bouts of anxiety without any real cause or when the intensity of anxiety is out of proportion with the magnitude of the problem real or imaginary, it takes the form of a disorder. When anxiety is pervasive and without specific reason it is known as free floating anxiety. These disorders affect how we feel and behave, can manifest real physical symptoms. Mild anxiety is vague and unsettling, while severe anxiety can be extremely debilitating and can seriously affect one's daily life.

Anxiety may be ALSO BE classified as:

- 1) **Reality Anxiety:** The most basic form, rooted in reality. Fear of a dog bite, fear arising from an impending accident. (Ego Based Anxiety)
- 2) **Moral Anxiety:** Anxiety which arises from an unconscious fear that the libidinal impulses of the ID will take control at an in opportune time. This type of anxiety is driven by a fear of punishment that will result from expressing the ID's desires without proper sublimation.
- 3) **Neurotic Anxiety:** Anxiety which arises from an unconscious fear that the libidinal impulses of the ID will take control at an in opportune time. This type of anxiety is driven by a fear of punishment that will result from expressing the ID's desires without proper sublimation.
- 4) **Generalised Anxiety:** This is defined as a period of uncontrolled worry, nervousness and anxiety. The anxiety may initially focus on a specific worry (relationships, career, or finances, for example), or may present as a vague anxiety about almost anything. In some cases it may be accompanied by irritability also. If this anxiety increases and becomes beyond the limit, physical symptoms may develop, including muscle pain, insomnia, trembling, and gastro intestinal problems and such an anxiety may turn into a disorder called Generalised Anxiety Disorder.

Other types include the following:

- 1) **Cognitive Anxiety:** The thought component – worry and apprehension
- 2) **Somatic Anxiety:** The degree of physical activation perceived
- 3) **State Anxiety:** The ever changing mood component
- 4) **Cognitive State Anxiety:** The degree to which one worries or has negative thoughts.
- 5) **Somatic State Anxiety:** Concerned with the moment to moment changes in perceived physiological activation.

- 6) **Trait Anxiety:** An acquired behavioural tendency of disposition that influences behaviour.

1.2.2 Physical Symptoms of Anxiety

- Heart racing or palpitations
- Dry mouth and difficulty swallowing (like a lump in the throat)
- Dizziness or light headedness
- Legs feeling weak, “like jelly”
- Stomach churning and feeling sick (like butterflies in the tummy)
- Increased shakiness, especially of hands and arms
- Tingling and numbing sensation
- Feeling hot, sweaty and flushed
- Muscle tension
- Rapid breathing, tight band across chest.

1.2.3 Psychological Symptoms of Anxiety

- Feeling frightened and panicky
- Thinking that you might be losing your mind
- That you might be having a heart attack
- Feeling that you are losing control
- Worrying that you may faint or vomit
- Worrying that there may be something seriously wrong with your brain
- Worrying that you might make a fool of yourself in front of other people by saying or doing something silly
- Wanting to escape and to get to a safe place (In Hindi, “*Dil bhaagna chahta hai*”)

1.2.4 Behavioural Symptoms of Anxiety

These are behaviours we resort to, in order to cope with some of the above symptoms.

For example,

- Making excuses to avoid doing something (like postponing sitting exams)
- Only shopping when it is quiet or in small shops to avoid crowds
- Rushing out of places or situations when feeling anxious
- Avoid going to parties or functions
- Avoid speaking when with other people
- Avoid going out alone, or insist on taking someone with you
- Using other props, like taking alcohol or taking a tablet

1.2.5 The Causes of the Physical Symptoms

Let's take another common example. Imagine you are crossing a busy road, when suddenly you hear a very loud car horn go off a few feet away from you and also hear sound of screeching brakes. What almost everyone does in this situation is to immediately jump or run, even before one has had a chance to think about what is happening. Having got out of the way of the car, you will then be left feeling a bit shaky, with your heart beating faster as well as some of the other symptoms in the list of physical symptoms.

What actually has happened is that a split second after the person heard that horn and screeching brakes, what we call the anxiety response in the person's brain is switched on. What the anxiety response does is that it prepares the body for immediate action in the face of danger. In practice, this means the following:

Heart rate shoots up: This is in order to pump extra blood to the muscles of your arms and legs much more quickly, because you will be using your arms and legs to get out of the danger.

To keep your heart beating at this fast rate, you need extra oxygen to give the heart energy – so

Breathe much more quickly to get the extra oxygen: Because of the extra energy being sent to the individual's arms and legs, the muscles are tenser, and are ready to spring into action.

Churning feeling in your stomach: For the above reason, blood is also directed away from the brain, hence the person feels light-headed and dizzy.

Perspire more: As the your heart is pumping blood more quickly around your body, especially to the muscles, the person's temperature increases to cool the body down, the person perspires more. Hence the person feels hot and sweaty.

1.2.6 The Causes of the Psychological Symptoms

Now we turn to look at what you think and feel when your body is producing the physical symptoms, i.e. your psychological responses to anxiety. You begin to feel that you are losing control. This happens because when you don't know what the physical symptoms mean; you cannot understand what is happening to you and your body. This is where nearly everyone will tend to think the worse, "Oh God! I am having a heart attack" or "I am going crazy". In turn these thoughts will make you more anxious and this leads to a vicious circle.

Self Assessment Questions

1) Define anxiety and bring out its characteristic features.

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2) What are the physical, psychological and behavioural symptoms of anxiety?

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3) Discuss the causes of physical and psychological symptoms of anxiety.

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1.3 DEFINITION OF AROUSAL

“If you ask someone on the street what arousal means, that person might have an intuitive concept of arousal in terms of sexual excitement, alertness or an emotional response such as fear,” says Pfaff, Professor and head of the Laboratory of Neurobiology and Behaviour at Rockefeller. “But, if you ask, ‘Exactly what does arousal mean scientifically,’ it’s been very hard for scientists to pin down.”

Scientists who study arousal historically were divided into two camps: those who consider arousal to be a single, “monolithic” physiological function, and those who believe that arousal does not exist as a whole, but is a collection of small specific abilities.

In humans, deficits in arousal contribute to such cognitive problems as attention deficit hyperactivity disorder, autism and Alzheimer’s disease. Erosion of arousal also may account for some of the mental difficulties that people face as they age. Understanding general arousal may help scientists develop pharmacological methods to enhance alertness during the day and sleep at night. Analysing the mechanisms of arousal may lead to a more precise anesthesiology.

The operational definition of arousal proposed by the Rockefeller researchers states that an aroused animal or human will be more sensitive to sensory stimuli, be physically more active; and react more emotionally. According to Pfaff, this definition allows for interaction among arousal states. In other words, changes in sexual arousal could dampen or increase response to pain, or vice versa.

“The overall state of arousal at any given moment is going to be a function both of the person’s global, or generalised, arousal state and any individual arousal states that might be present,” says Pfaff.

Thus, we can say that arousal is a state of the organism that in every day term means alertness, vigor, peppiness and activation. Arousal may be thought of as a conceptual dimension ranging from extreme drowsiness at one hand to extreme excitation at the other. Arousal level is the result of internal and external stimulation.

High levels of arousal are associated with high level of sensory input, low levels of arousal are associated with low levels of sensory input. The historical roots of the concept of activation and arousal lie in Canon’s concept of energy mobilisation during emotions.

The chief point in regard to arousal is that arousal is a continuum, from a low point

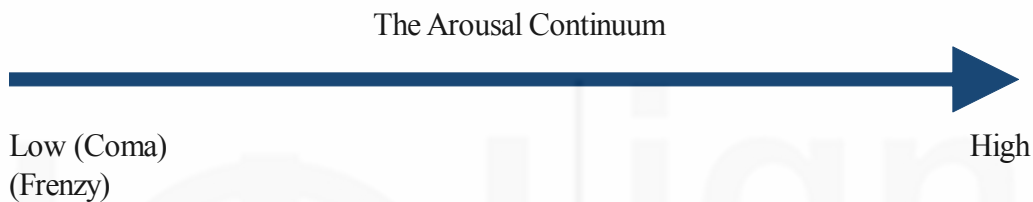
during deep sleep to a high point during extreme effort or great excitement with no distinguishable breaks for such conditions as sleep or emotions.

The factors which produce variations in the degree of arousal are various. They include apparently drugs, hormones, variations in what is commonly known as the degree of motivation.

It also appears that differences in the degree of arousal in different individuals may have a genetic or an environmental basis, or both. It appears also that under similar stimulation, individuals differ in the degree of their arousal and in the speed with which they return to their former level of functioning.

Different individuals appear to vary around different central tendencies i.e. to differ in responsiveness.

Arousal is a blend of Physiological and Psychological activity in a person, and it refers to the intensity dimensions of motivation at a particular moment. Arousal can be considered in a continuum as given in the figure below.



Neurally speaking arousal is often identified with activity in the ascending reticular activating system. In addition to the arousal which determines theta frequency there is also gating input from the cholinergic or serotonergic systems, which code the “arousal” in certain ways. The subcortical control of theta activity is that arousal is a necessary but not sufficient condition for the generation of anxiety. There are different types of arousal such as the hippocampus arousal. Different types of arousal fulfill different functions even in relation to anxiety.

1.3.1 Characteristics of Arousal

Arousal or activation has no steering function in the behaviour. It means that a person may be excited or in aroused state but this arousal may not guide him toward any particular action or goal i.e. the behaviour of the individual may not result oriented.

It is considerably broader than emotion.

Activation is not a state that can be inferred from knowledge of antecedent conditions alone, because it the product of interaction between internal and external cues.

Activation does not fit very well into S-R formula. It is a phenomenon of slow changes of drifts in level with a time order of minutes not of seconds or fractions thereof.

Activation is a quantifiable dimension and the evidence indicates that physiological measures show a sufficiently high intra individual concordance for quantifying this dimension.

The effect of any given degree of activation upon performance appears to vary however, with the number of factors including the task to be performed and certain characteristics of the individual – such as perhaps the ability to inhibit and coordinate responses under a high degree of excitation.

- Pleasant/excitement
- Unpleasant/anxiety
- Arousal interpreted as pleasant facilitates performance
- Arousal interpreted as unpleasant hurts performance
- Arousal is multifaceted
- Significance of All the Arousal Performance Views
- Arousal and state anxiety do not always have a negative effect on performance

It can be facilitative or debilitating, depending on the interpretation

1.3.2 Arousal and Performance

- Increased Muscle Tension and Coordination Difficulties
- Attention Changes
- Narrowing of Attention
- Shift to Dominant Style
- Attend to inappropriate cues
- There are many theories of anxiety and arousal which are stated below.

1.3.3 Anxiety and Arousal Theories

- 1) **Drive theory:** According to this theory, higher the arousal and anxiety a person feels, higher will be the performance.
- 2) **Inverted U hypothesis:** According to this theory, there is an optimum level of arousal and anxiety which causes one to perform higher. If the arousal and anxiety are too little or too high, the performance will be poorer.
- 3) **Individual zones of optimal functioning:** This theory states that different persons have different levels of anxiety and arousal that are unique in making them perform their best. Some perform their best with low anxiety, some with medium amount and some with a high amount of anxiety. That the performance of the individual depends on the individual characteristics.
- 4) **Multidimensional anxiety theory:** According to this theory, when one has anxious thoughts, he or she will have poorer performance. Anxiety felt by the body will have effect on performance almost like that of inverted U theory.
- 5) **Catastrophe model theory:** This theory states that as long as there are lower thoughts of anxiety, the performance will be best around the medium level of arousal. If there is high level of anxious thoughts (worry) performance will be better at a medium level of arousal but will suddenly drop off and become very poor. There is a breaking point when performance decreases dramatically.
- 6) **Reversal theory:** According to this theory, arousal affects performance depending on an individual's interpretation of their arousal. Arousal can be interpreted as pleasant and exciting and as unpleasant and anxious. Arousal that is thought to be pleasant helps performance and vice versa for bad arousal.

- 7) **Anxiety direction and intensity theory:** This theory states that how someone sees their own anxiety is important for understanding the relationship of their anxiety to their performance. Both the person's interpretation of the intensity, that is how much of anxiety and the direction of anxiety as to whether it is helping or hindering performance, have to be considered. Therefore viewing anxiety as helpful leads to better performance.

1.3.4 Reactions to Arousal and Anxiety

- Muscle Tension and Coordination Difficulties
- Attention and Concentration Changes

Implications for practice

- Identify Optimal Arousal-related Emotions
- Recognise Personal and Situational Factors
- Recognise Arousal and State Anxiety Signs such as Cold Clammy hand, need to urinate, weating, negative self talk, butterflies, feeling ill, headaches, cotton mouth, troubles sleeping.
- Tailor Coaching Strategies to Individuals
- Develop Performers' Confidence

Self Assessment Questions

1) Define arousal.

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2) What are the characteristics of arousal?

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3) How does arousal affect performance?

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4) Discuss the relationship amongst anxiety, arousal and stress.

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5) What are the reactions to arousal and anxiety?

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1.4 DEFINITION OF STRESS

Stress is a word that we use all the time and almost everyday. What is meant by stress? Is it physiological arousal? How does it differ from anxiety and anger?

Hans Selye first popularised the concept of “stress” in the 1950s. Selye theorised that all individuals respond to all types of threatening situations in the same manner, and he called this the General Adaptation Syndrome (GAS). He claimed that, in addition to Sensory Nervous System arousal, other bodily systems such as the adrenal cortex and pituitary gland may be involved in a response to threat. For example, chemicals such as epinephrine (adrenaline) may serve to focus the body’s attention just on immediate self-preservation by inhibiting such functions as digestion, reproduction, tissue repair, and immune responses. Ultimately, as the threat wanes, Selye suggested, body functions return to normal, allowing the body to focus on healing and growth again. But if the threat is prolonged and chronic, the Sensory Nervous System arousal never gets “turned off,” and health can be impaired. With a continuously suppressed immune system, for example, a person would be more vulnerable than usual to infection, which is one explanation of why some individuals get sick so often.

And, regardless of whether Selye was right or not, psychology, as well as medicine and popular culture, have accepted the concept of “stress” as an unpleasant fact of life.

Stress is actually caused by change. Change can be anything. Humans prefer status quo and a balanced state of physical and mental status. A change causes disturbance in this status and the individual concerned feels a state of imbalance as he has to adjust himself to the changed condition. Adaptation if successful brings the organism to a state of balance. If adaptation to change is not successful it causes imbalance. Life thus is a process of change. Therefore, anything that involves change contains within it the “demand” that we adapt to it, in one way or another. Graduating from school can be as demanding as starting school, and starting a new job can be as demanding as losing a job.

How we perceive the change really determines how we manage to adapt to it. If the perception is positive, we generally embrace the change with open arms and relief. If the perception is negative, that is, if the change challenges our stamina or resources, the body will automatically and dramatically respond to this perceived threat with a variety of physiological responses. Let us take the example of a person who has lost his job. He may react to the loss of job with anger. This anger may

be conscious or unconscious but as long as it persists, there is a physiological arousal.

In traditional terms it could be said that this person is under intense stress. In fact, because of Selye's influence, psychology and medicine have tended to regard "stress" as if it were some "thing" that could destroy our health and happiness even against our wills.

But it could just as well be said that the person in the example has simply failed to accept change in a healthy, adaptive manner.

So maybe "stress" isn't any "thing" at all. Maybe it is just a descriptive term that our culture uses to normalise unconscious anger, a fear of love, a lack of forgiveness, a desperate clinging to a vain identity, and an absence of a spiritual life. Maybe stress is just a convenient myth to shift responsibility for life away from ourselves and onto something so vague that everyone can love to hate it.

1.4.1 Physiological Responses to Stress

Early in the 20th century, Walter Cannon's research in biological psychology led him to describe the "fight or flight" response of the Sympathetic Nervous System (SNS) to perceived threats to physical or emotional security.

Cannon found that SNS arousal in response to perceived threats involves several elements which prepare the body physiologically either to take a stand and fight off an attacker or to flee from the danger:

- Heart rate and blood pressure increase
- Perspiration increases
- Hearing and vision become more acute
- Hands and feet get cold, because blood is directed away from the extremities to the large muscles in order to prepare for fighting or fleeing.

1.4.2 Psychological Responses to Stress

Psychological response is the uneasiness that comes from a perceived threat to our self esteem. Note the word perceived. One of the great re discoveries in modern psychology is that your perception (the intangible thoughts you choose to have) creates your mental and physical response to an objective situation. It is not the activity itself that causes stress, but how you choose to think about it. Anxiety is worry over a future uncertainty created by mental occupation with the outcome of the event. It is impossible to perform your best in a state of cognitive anxiety. Arousal is the level of activation or excitement you feel. There is an optimum level of arousal a person must be at to perform his best. His thoughts can absolutely change and control his autonomic nervous system and his level of arousal.

1.4.3 Description and Types of Stress

A substantial imbalance between demand and response capability, under conditions where failure to meet the demand has important consequences. In Sports Psychology, stress is often categorised in four interrelated stages.

The word stress is difficult to define because it means different things to different people. Some describe stress in terms of stressors – the variety of external and internal stimuli that evoke stress, such as short period of time to finish the work or

conflict with a friend or spouse. Often it is a combination of events or stimuli that causes stress.

Other experts believe that stress can be defined as the pattern of responses that an individual makes to events that disturb his or her equilibrium or exceed coping abilities i.e. when events disrupt our usual level of functioning and require us to put in some extra effort to reestablish balance that we experience stress.

Therefore, stress also involves nonspecific physiological reactions that occur in response to stressful events e.g. heightened activity of adrenal gland.

Some other experts emphasise the importance to how we perceive an event. The same situation may be extremely stressful for one person but may not have any significance for another person.

When defining stress we must differentiate between stress and distress since not all stress is bad.

When events have a harmful effect, stress is called **distress**.

Stress may also have a beneficial effect e.g. starting a new job or taking up an exciting sport may have a stimulating effect that results in personal growth. This type of stress is known as **eustress**.

Excessive stress is called **hyperstress** it usually occurs when events including positive ones pile up and stretch the limits of adaptability.

Hypostress or insufficient occurs when we lack stimulation e.g. doing a monotonous job is an example of **hypostress**. A person bored with his present situation may resort to sensation seeking behaviour such as mountain climbing or some other adventurous activity.

Stress has been categorised and conceptualised in other ways also. Negative life events, death of loved one or financial loss in stock market, are usually quite stressful. At the same time like beginning of career or getting married are also stressful.

Thus, the most important factor is the total impact of various life changes, both positive and negative, in combination with the amount of readjustment these events require. Studies reveal that change in life intensity is closely linked with the onset of various illnesses. The combined effect of life events has been found to correlate significantly with cardiac arrest, stroke diabetes and other chronic illnesses, depression and many other physical and psychological problems.

More recently attention has been directed to stress associated with everyday difficulties e.g. concerns about owing money or about being stuck in traffic. It has been found that daily hassles sometimes have a greater effect on our moods and health as compared to major misfortunes of life. However, people vary widely in terms of what bothers them. For example for college students, the most commonly reported hassles are anxiety over tests, grades, studying and finances etc.

Middle aged people are troubled by concerns about health and money. Professionals feel that they have too much to accomplish in too little a time. Daily hassles common to all groups are misplacing or losing things, worries over physical appearance, and too many things to do.

A final approach to the conceptualisation of stress has been the *self-perception of "global" stress* in our lives. Some psychologists call it *chronic stress* as opposed

to *acute stress*, which is stress that is momentary response to imminent danger and is relieved when the danger is over. Most experts opine that chronic stress is most harmful.

1.4.4 Stressors

A given stressor is more or less powerful depending upon how we perceive it. For example, some people take criticism of their work as a personal attack, become upset and waste a lot of energy defending themselves. While some other take criticism as a challenge to improve their work and experience less stress.

People afflicted with inner doubts, low self-esteem, and suspiciousness may misconstrue even the routine demands of everyday life as stressful. Besides personality traits also contribute to the experience of stress. For example, type “A” personality is more prone to develop stress-related illness due to personality traits.

People with type “A” personality syndrome tend to be competitive, argumentative, time-urgent, ambitious, and impatient as well as hostile. They judge themselves and others by rigorous standards.

Consequently, type “A” people are constantly under stress and are more likely to develop cardiac arrest. Age and gender also contribute to the perception of stress in that women and younger people are more likely to experience higher stress.

Another factor that adds to distress is how people react to us. Prejudice against us because we belong to a particular group is just an example. Many situational factors also contribute to our experience of stress. Most important is the combined effect of these various factors and greater the number of these stressful situations greater the amount of stress experienced. Some of the situational factors that contribute alone or in combination are:

- i) Physical stressors.
- ii) Lack of control over decisions and demands in our personal or work life.
- iii) Unpredictability of events.
- iv) Lack of social support from friends and family.
- v) Poor interpersonal relations with family, friends and colleagues.
- vi) Role Conflict.
- vii) Career concerns including anxiety about job, promotion etc.
- viii) Unpleasant or dangerous physical conditions.

1.4.5 Stages of Stress

Environmental Demand, What is being demanded, the task

Perception of Demand, What is the individual’s perception of the demand

Stress Response,

What is the person’s response to the demand?

- Arousal
- Anxiety

- Muscle tension
- Attention changes

Behavioural Consequences, What is the performance or outcome

1.4.6 Sources of Stress

- Event importance
- Uncertainty
- Self Esteem
- Trait Anxiety
- Social Anxiety

Self Assessment Questions

1) Define stress.

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2) Describe the characteristics of stress.

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3) What are the physical and psychological responses to stress?

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4) Describe the different stages of stress.

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1.5 AROUSAL, STRESS AND ANXIETY

Arousal is a general physiological and psychological activity whereas anxiety is a negative emotional state with feelings of worry, nervousness and apprehension that is associated with the activation of the body.

The third concept of stress refers to an imbalance between the demands a person feels and his capability to meet that demands. If he is unable to meet the demands through his own capabilities, stress results.

Arousal can affect performance in many ways. The theories that are related to arousal and performance are given below.

Arousal increases muscle tension and affects coordination. Too much tension can create difficulties. It also affects attention, which can become too narrow with too much arousal and can make a person pay attention to too much in their environment when there is too little arousal.

1.5.1 Signs of Arousal and Anxiety

- Cold clammy hands
- Constant need to urinate
- Profuse sweating
- Negative self talk
- Dazed look in eyes
- Ill feeling
- Headache
- Dry mouth
- Difficulties sleeping
- Butterflies in stomach
- Inability to concentrate
- Increased muscle tension

Psychologists can identify what is the best combination of emotions needed for good performance. Also one can recognise how personal things and things about one's situation can interact to influence anxiety and therefore performance. To take an example from the sports field, an athlete can recognise arousal and anxiety signs and the coaches can tailor their strategies to different individuals and understand that state anxiety must be reduced, increased or maintained at certain optimum level.

There are certain personality types that are associated with health concerns , that is for instance cardiovascular disease. One personality type is called Type A and is associated with anger and hostility.

Arousal is a major aspect of many learning theories and is closely related to other concepts such as anxiety, attention, agitation, stress, and motivation.

There has been quite a bit of research indicating the correlation suggested by Yerkes and Dodson, but a cause of the correlation has not yet been fully established. Although the Yerkes-Dodson law is quite old, it has held up in time through numerous studies. Just because something is old, does not make it invalid. In fact, because it has held up for so long it has gone from theory to law.

The arousal level can be thought of as how much capacity one has available to work with. One finding with respect to arousal is the *Yerkes-Dodson law* which predicts an inverted U-shaped function between arousal and performance.

A certain amount of arousal can be a motivator toward change, but too much or too little will work against the learner. Hence one may want some mid level point of arousal that provides the motivation to change. Too little arousal has an inert effect on the learner, while too much has a hyper effect.

There are optimal levels of arousal for each task to be learned:

- lower for more difficult or intellectual (cognitive) tasks
- higher for tasks requiring endurance and persistence

For example, the arousal level in a quality team training session must be quite high as it requires persistence and it is basically a low cognitive task. On the other side one may have a high cognitive task such as an advanced algebra class. The latter is extremely high on the cognitive level, so arousal must be kept low as one may need the learners' full attention on the subject matter. If the task involves or produces too much arousal, the learner will be overloaded.

1.5.2 Implication for Practice

Control environmental arousal factors such as the noise level, temperature, comfort, etc. This allows a person to put more arousal factors that are beneficial to learning without going into arousal overload.

When training tasks that are high on the cognitive scale or are highly complex, one must use less motivators and keep the stress level low. The brain tends to shut certain aspects out when it has too many inputs coming in at once, and the one input that one does not want is to shut out what one wants the learner to learn. Some trainers call this brain overload or brain cramps. This does not mean one cannot make the material interesting, just keep their arousal on an even keel.

Outdoor or physical team training activities require more arousal techniques. This is where the trainer has to become more of a college football type coach and less of a trainer. The effort to reach the peak arousal point where the most change (learning) takes place is higher on this scale than cognitive learning. To reach that peak arousal point you need to provide more stress and motivation.

Tests can be great motivators for getting students to learn. It shows that they mastered the task, they do not like to fail, they want that certificate, it's a challenge, etc. But test taking anxiety can push some learners' arousal level over the peak arousal point. You can reduce stress levels by supplying non-graded quizzes and performance activities that provide reassurance and feedback to the learners.

When the optimum arousal point goes too low then use activities that get the learners interacting with each other or moving. Provide inspirational speeches, challenging games, and puzzles.

When the optimum arousal point goes too high then take the cognitive focus off the goal (eliminate "what if" statements) and place it on the process. Take a break, watch a video, stretch. Play a fun, but interesting game.

Provide the who, what, when, where, why, and how questions about the learning to take place as it helps to eliminate fears. One's learning environment needs to control the stress factors, not the unknowns.

1.5.3 Measurement of Anxiety and Stress

How to measure anxiety and stress? (A scale DASS is given at the end of this unit. Try out on yourself and score to find out what is the measure of depression and anxiety in you)

Knowing how to measure arousal and anxiety stress can not only give the counsellor and client a clearer picture of the client's anxiety and how much it impacts their life, but it also provides clues for controlling it. The Depression Anxiety Stress Scales (DASS) is comprised of 42 questions that the patient completes within about 10 minutes. The questions, rated on the Likert scale to measure severity or frequency, indicate various negative symptoms that are primarily emotional or emotionally driven.

1.5.4 The Depression Anxiety Stress Scales (DASS)

1) Understanding the Depression Anxiety Stress Scales (DASS)

The DASS is made up of three scales: depression, anxiety and stress. These scales provide a more complete picture of the patient's condition. Each scale contains 14 questions that measure anxiety and stress. Each scale contains subscales that have anywhere from two and five questions. However, the items are not clustered within a scale. Instead, they are randomly scattered throughout the entire DASS. The primary purpose of the DASS is to measure arousal, anxiety stress and depression.

2) Understanding the Depression Scale

The Depression Scale measures the patient's level of depression. To measure depression, the scale makes a series of statements regarding the patient's outlook on life and on themselves. Patients who score high are self-disparaging and are convinced that their life has no value or meaning. Their outlook on the future is pessimistic and they do not have the ability to experience satisfaction or find enjoyment in anything. They have no initiative, are uninterested, and are unable to involve themselves socially. Overall, they were gloomy and dispirited.

3) Understanding the Anxiety Scale

Patients who score high on the Anxiety Scale exhibit trembling and shakiness. They feel panicky, apprehensive, worried about their performance and are afraid of losing control. Physically, they report breathing difficulties, sweaty palms, a pounding heart and a dry mouth.

4) Understanding the Stress Scale

Characteristics of patients who score high on the Stress Scale include symptoms of stress such as tension and the inability to relax. Over-arousal, easily startled and edgy or jumpy are other symptoms as well as irritability and nervousness. They are intolerant of delay, waiting or interruption.

5) Using the DASS as a Diagnostic Tool

Diagnosing and measuring anxiety and stress using the DASS is done on a dimensional conception of depression, anxiety or stress as opposed to a categorical conception of the disorder. While the DASS helps to distinguish between the different disorders, it also identifies the degree of the different disorder. It measures to what extent the patient experiences the symptoms. This scale is an effective way to measure anxiety and stress.

Self Assessment Questions

1) Discuss the relationship between arousal, stress and anxiety.

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2) What are the signs of arousal and anxiety?

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3) Discuss arousal and anxiety in terms of application.

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4) Discuss the Depression, Anxiety and stress Scale in detail.

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1.6 TREATMENT AND PREVENTION OF STRESS AND ANXIETY

Counselling

Counselling may be defined as “talking therapy”, which aims to ease a person’s discomfort, pain, distress or impaired performance.

Behaviour therapy

The most common form of behaviour therapy is exposure to the anxiety-provoking stimulus. People are repeatedly exposed to the stimulus until anxiety or panic subsides.

Cognitive therapy

This involves identifying the causes of anxious thinking (i.e. illogical ideas or automatic false notions) and the adoption of more logical (correct or accurate) ways of thinking. It is very effective but because it can be offered only by trained specialists, it may not be readily available.

Cognitive-behavioural therapy or CBT

This is a combination of two kinds of therapy – cognitive and behavioural. In behavioural therapy, as the name suggests, people learn how to change behaviour. Behaviour therapy helps you weaken the connections between troublesome situations and your habitual reactions to them, reactions such as fear, depression or rage, and self-defeating or self-damaging behaviour. It also teaches you how to calm your mind and body, so you can feel better, think more clearly, and make better decisions. You may have already heard of the most common behavioural techniques used in the treatment of anxiety disorders: desensitisation, relaxation and breathing exercises.

On the other hand, cognitive therapy focuses on thoughts, assumptions and beliefs. With cognitive therapy, people may learn to recognise and change faulty or maladaptive thinking patterns. Cognitive therapy is not about “positive thinking” in the sense that you must always think happy thoughts. It’s a way to gain control over racing, repetitive thoughts which often feed or trigger anxiety.

The two therapies often are used together because they are beneficial to each other. For example, in the midst of extreme anxiety, it may feel impossible to gain control over your thoughts and apply cognitive therapy techniques. Therefore, a behavioural technique such as deep breathing may help you calm down and focus on your thinking.

Relaxation techniques

Relaxation is the voluntary letting go of tension. This tension can be physical tension in the muscles, or it can be mental or psychological tension. When we relax physically, certain impulses are sent to brain, which in turn bring about a general feeling of calm, both physically and mentally. The purpose of muscle tension is to increase your alertness and readiness to respond. However, constant tension makes people oversensitive and they begin to respond to even smaller events as though they were threatening. By learning to relax, you can gain control over those feelings of anxiety. The three main components of relaxation therapy are:

- Learn to recognise tension
- Learn to relax your body in a general, total sense
- Learn to let tension go in specific muscle groups.

Deep Breathing

This is one of easiest stress management techniques to learn and the best thing about it is it can be done anywhere! When we become stressed, one of our body’s automatic reactions is shallow, rapid breathing which can increase our stress response. Taking deep, slow breaths is an antidote to stress and is one way we can “turn-off” our stress reaction and “turn-on” the relaxation response. Deep breathing is the foundation of many other relaxation exercises.

- Get into a comfortable position, either sitting or lying down.
- Put one hand on your stomach, just below your rib cage.
- Slowly breathe in through your nose. Your stomach should feel like rising and expanding outward.
- Exhale slowly through your mouth, emptying your lungs completely and letting your stomach fall.

- Repeat several times until you feel relaxed.
- Practice several times a day.

Progressive Muscle Relaxation

Our muscles respond to thoughts of perceived threats with tension, which is one of the most common stress symptoms. Too much tension can cause stiffness and may result in headaches, stiff necks and backaches. One way to relieve this tension is through Progressive Muscle Relaxation (PMR).

It involves tensing, then relaxing the body muscles from head to toe. Since PMR can increase blood pressure, people with hypertension should not use this technique.

Wear loose, comfortable clothing. Sit or lie down somewhere comfortable.

Begin with your facial muscles and frown hard for 5-10 seconds, then relax all your muscles.

Work other facial muscles by clenching your jaw, tightly closing your eyes, and raising your eyebrows for 5-10 seconds. Feel the tension in these muscles and then release.

Then move on to other muscle groups, raise your shoulders, tighten your arms, your chest, your back, legs, etc. – until you've tensed and relaxed your whole body.

Social skills training

Some people lack appropriate social skills that are required of them by the demands of the society. It is precisely the reason why some people become anxious among strangers or in strange situations. Social skills' training helps you to develop ways of:

- Meeting new people and establishing relationships
- Speaking effectively in public, whether formally or informally
- Holding up your end of a personal or group discussion
- Getting actively involved in group and leadership activities
- Establishing new romantic relationships on a realistic and enduring basis
- Ending relationships that aren't working out in a civil and appropriate fashion

Medications

The following are some of the groups of medication used in the treatment of generalised anxiety disorder:

Benzodiazepines

Most of them are effective in the short term. They are relatively fast acting drugs. But the main problem with this class of drugs is dependency (addiction). People taking such drugs may experience a return of their anxiety symptoms when they stop the medication. A gradual reduction of the dose with the help of your psychiatrists will prevent a relapse or withdrawal symptoms. Some of these are Diazepam (Calmpose), Alprazolam (Xanax), Temazepam etc.

Tricyclic antidepressants (TCAs)

These drugs are usually used in the treatment of depression. Some of them however

are also used in the treatment of anxiety disorders. Examples are Imipramine, Amitriptyline etc.

Selective serotonin reuptake inhibitors (SSRIs)

These were also used first for the treatment of depression, but are now being used, at times with good results, for the treatment of anxiety disorders. Examples are Fluoxetine (Prozac), Sertraline etc.

Beta blockers

Beta blockers are mainly used to reduce some of the physical symptoms of anxiety, like a pounding heartbeat, sweating and shaking, and to control anxiety in public situations. But these drugs also reduce blood pressure and slow the heartbeat. E.g. Propranolol

Buspirone

This has been shown to be useful in the treatment of GAD. It takes about 2-4 weeks to relieve symptoms of GAD. Importantly it is not habit forming (non-addictive), and does not have many side effects.

1.7 PREVENTION OF ANXIETY AND STRESS

Although anxiety disorders cannot be prevented, there are ways to reduce your risk and methods to control or lessen symptoms. Recommendations include:

- Reducing caffeine, tea, cola, and chocolate consumption.
- Checking with a doctor or pharmacist before using over-the-counter or herbal remedies to see if they contain chemicals that may contribute to anxiety.
- Exercising regularly.
- Eating healthy foods.
- Keeping a regular sleep pattern.
- Seeking counseling and support after a traumatic or disturbing experience.
- Avoiding alcohol, cannabis.

1.8 LET US SUM UP

In this unit we studied the concept of anxiety, arousal and stress along with different types of anxiety and the various symptoms of physical and psychological aspects of anxiety. Then we define arousal, bring out its characteristic features and discuss the theories of arousal. Then we studied causes of anxiety, symptoms of anxiety and treatment of anxiety. Thus, now we understand complexity of anxiety. This was followed by a discussion on arousal and stress and their relationship. We studied nature of stress and its different types. Then we also studied the treatment and prevention of anxiety and stress in individuals.

1.9 UNIT END QUESTIONS

- 1) What do you understand by the term anxiety? What are its different forms?
- 2) Explain different causes of anxiety and different approaches to its treatment.

- 3) What should a person do to prevent anxiety?
- 4) Define stress and its different forms.
- 5) Define Arousal and describe its characteristics.
- 6) How do we treat anxiety and stress?
- 7) How do we prevent anxiety and stress?

1.10 SUGGESTED READINGS

G. Andrews et. al. (1994). *Treatment of Anxiety Disorders*, UK: Cambridge University Press.

Johnstone, Freeman & Zealey (1998) (eds). *Companion to Psychiatric Studies*, Edinburgh: Churchill Livingstone.



UNIT 2 THE GENERAL ADAPTATION SYNDROME AND MOTIVATION

Structure

- 2.0 Introduction
- 2.1 Objectives
- 2.2 General Adaptation Syndrome
 - 2.2.1 Stage 1: Alarm Reaction
 - 2.2.2 Stage 2: Resistance
 - 2.2.3 Stage 3: Exhaustion
 - 2.2.4 Definition of GAS
 - 2.2.5 The Diseases of Adaptation
 - 2.2.6 The Concept of Adaptation Energy
 - 2.2.7 Measures to Ward off GAS Exhaustion Stage
- 2.3 Motivation
 - 2.3.1 Drive Reduction Theory
 - 2.3.2 Arousal Theory
 - 2.3.3 Incentive Theory
 - 2.3.4 Maslow's Hierarchy of Needs Theory
- 2.4 Psychological Reactions to Stress
 - 2.4.1 Defense Mechanisms
 - 2.4.2 Motivation to Cope with Stress
 - 2.4.3 Types of Motivation
- 2.5 Methods to Sustain Motivation
 - 2.5.1 Stress and Emotions
 - 2.5.2 Managing Stress
 - 2.5.3 Modifying Environment
 - 2.5.4 Altering Life Style
- 2.6 Let Us Sum Up
- 2.7 Unit End Questions
- 2.8 Suggested Readings

2.0 INTRODUCTION

This unit is on general adaptation syndrome and motivation. It starts with general adaptation syndrome (GAS) and discusses the three stages viz., alarm stage, resistance stage and the exhaustion stage. Then we give the definition of general adaptation syndrome and its characteristics. Then we discuss the concept of adaptation energy and measures to put off the general adaptation syndrome's negative effects and keep up the motivation. Then we define motivation and discuss the various explanations as to what motivates persons, such as the drive reduction theory etc. We also discuss other theories including the hierarchy of needs. Then we discuss psychological reaction related to GAS and stress. The various defense mechanisms used are discussed in terms of how the behaviour is motivated through defenses. Then we discuss types of motivation and methods to keep motivation sustained despite GAS.

2.1 OBJECTIVES

After completing this unit, you will be able to:

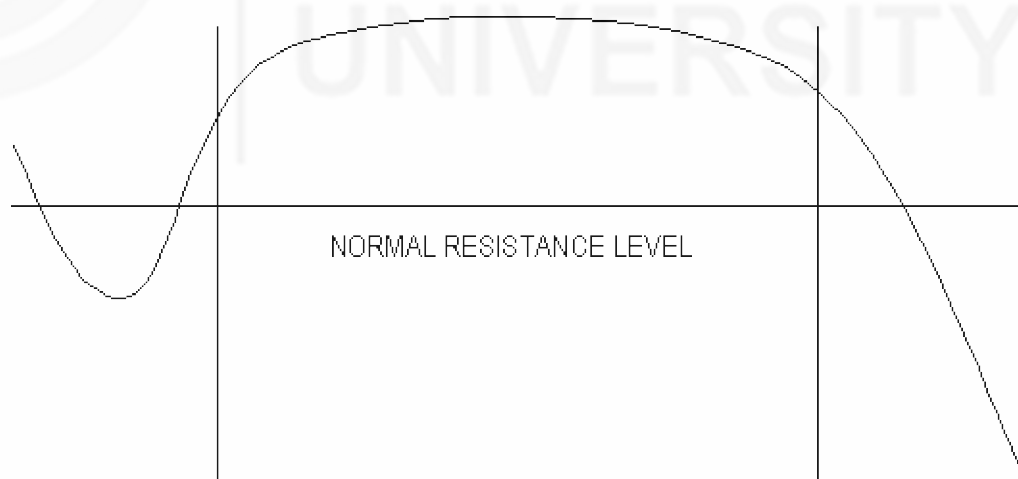
- Define and discuss the concept of General Adaptation Syndrome;
- Explain the stages of GAS;
- Describe motivation;
- Explain the theories of motivation and how the behaviour is motivated;
- Elucidate the psychological reactions to stress;
- Describe the different types of motivation; and
- Analyse the methods that would sustain the motivation.

2.2 GENERAL ADAPTATION SYNDROME

Man is by nature hedonistic in that we like to remain in a tensionless state therefore whenever an individual is in stress he makes some responses to bring back the organism to a state of normalcy. Stress responses by an individual may be categorised as:

- Physiological, in that the body makes changes in order to respond to the stress state;
- Behavioural, the individual may change behaviour in order to deal with the stress;
- Coping strategies which may or may not involve a change of overt behaviour.

(See graph below)



Alarm reaction

Stage of Resistance

Exhaustion

In 1926, a young medical student named Hans Selye noticed that patients in the early stages of infectious diseases exhibited similar symptoms, regardless of the type of disease they had.

He observed a set of three common responses that occurred whenever any organism was injected with a toxic substance:

- 1) the adrenal glands enlarged,
- 2) the lymph nodes and other white blood cell producing swelled at first then shrank, and
- 3) bleeding appeared in the stomach and intestines.

He called these three common responses the **General Adaptation Syndrome** and proposed that certain changes take place within the body during stress that disrupt normal physiologic mechanisms and trigger an array of diseases.

No matter what type of organism he looked at, he noticed that physical and emotional stress induced a pattern that, if left untreated, always lead to infection, illness, disease, and eventually death. The figure above illustrates what Hans Selye observed.

As shown in the diagram, there are three stages in Selye's General Adaptation Syndrome. Let's look at what happens during each stage that makes us more susceptible to disease.

2.2.1 Stage 1: Alarm Reaction

Any physical or mental trauma will trigger an immediate set of reactions that combat the stress. Because the immune system is initially depressed, normal levels of resistance are lowered, making us more susceptible to infection and disease. If the stress is not severe or long-lasting, we bounce back and recover rapidly.

2.2.2 Stage 2: Resistance

Eventually, sometimes rather quickly, we adapt to stress, and there's actually a tendency to become more resistant to illness and disease. Our immune system works overtime for us during this period, trying to keep up with the demands placed upon it. We become complacent about our situation and assume that we can resist the effects of stress indefinitely. Therein lies the danger. Believing that we are immune from the effects of stress, we typically fail to do anything about it.

2.2.3 Stage 3: Exhaustion

Because our body is not able to maintain homeostasis and as we do not have the long term resistance needed to combat stress, we invariably develop a sudden drop in our resistance level. No one experiences exactly the same resistance and tolerance to stress, but everyone's immunity at some point collapses following prolonged stress reactions. Life sustaining mechanisms slow down, organ systems begin to break down, and the reserves that we have for stress fighting also gives up and this is called by Selye as diseases of adaptation.

The General Adaptation Syndrome is thought to be the main reason why stress is such an abundant source of health problems. By changing the way our body normally functions, stress disrupts the natural balance, which is called the homeostasis and that which is very crucial for one's well being. It can also subtract years from our lives by speeding up the aging process.

2.2.4 Definition of GAS

Thus, the G.A.S. may be defined as the manifestation of stress in the whole body, as they develop in time. As we have seen, a fully-developed G.A.S. consists of three stages: the alarm reaction, the stage of resistance, and the stage of exhaustion. Yet

it is not necessary for all three stages to develop before we can speak of G.A.S. Only the most severe stress leads rapidly to the stage of exhaustion and death. Most of the physical or mental exertions, infections, and other stressors, which act upon us during a limited period, produce changes corresponding only to the first and second stages. At first they may upset and alarm us, but then we adapt to them.

Normally, in the course of our lives, we go through these first two stages many, many times. Otherwise we could never become adapted to all the activities and demands which are all part of an individual's life. Even the stage of exhaustion does not always need to be irreversible and complete, as long as it affects only parts of the body.

For instance, running produces a stress situation, mainly in our muscles and cardiovascular system. To cope with this, we first have to limber up and get these organs ready for the task at hand. Then, for a while we will be at the height of efficiency in running, but eventually exhaustion will set in. This could be compared with an alarm reaction, a stage of resistance, and a stage of exhaustion, all limited primarily to the muscular and cardiovascular system. But such exhaustion is reversible. After a good rest we will be back to normal.

Most human activities go through three stages analogous to those of the G.A.S.

2.2.5 The Diseases of Adaptation

Many maladies are due not so much to what happens to us as to our inability to adapt, and they have therefore been called diseases of adaptation. The most common of such diseases are peptic ulcers in the stomach and upper intestine, high blood pressure, heart accidents, and nervous disturbances.

Of course, any event makes demands upon us and, hence, causes some stress, but it is only people who cannot cope, either because of innate defects or lack of knowledge, who develop stress diseases.

Yet diseases of adaptation is a relative concept. No malady is just a disease of adaptation. Nor are there any disease producers which can be so perfectly handled by the organism that maladaptation plays no part in their effects upon the body.

2.2.6 The Concept of Adaptation Energy

The selective exhaustion of muscles, eyes, or inflamed tissue all represent final stages in local adaptation syndromes (L.A.S.) only. Several of these may develop simultaneously in various parts of the body; in proportion to their intensity and extent, they can activate the G.A.S. mechanism. It is when the whole organism is exhausted that we enter into the (fatal) stage of exhaustion of the G.A.S.

Apparently, we have hidden reserves of adaptability, or adaptation energy, in ourselves throughout the body. As soon as local stress consumes the most readily accessible local reserves, local exhaustion sets in and activity in the strained part must stop. This is an important protective mechanism because, during the period of rest thus enforced, more adaptation energy can be made available, either from less readily accessible local stores or from reserves in other parts of the body. Only when all of our adaptability is used up will irreversible, general exhaustion and death follow.

How to overcome stress and stay motivated to accomplish one's goals. When one is stressed it is difficult to keep the motivation going. Motivation is something that

differs with each person. There are some who benefit and work better with external motivators, and there are others who require internal motivators. Stress not only affects one's motivation levels, but it also affects the person's immune system and other health functions. Therefore, if one faces issues of stress, the person may be damaging his or her health as well as their motivation for success.

In order to overcome the issues of stress, and lack of motivation, the person will need to figure out what motivates him or her, as well as what one can do to limit the stress and deal with it.

2.2.7 Measures to Ward Off GAS Exhaustion Stage

Some of the things one may do include the following:

- Take time for oneself.
- Reward oneself with little things.
- Take time to think about the stress, but not dwell on it.
- Realize that there are some things that can control and some things that are beyond one's control and leave out things that cannot be controlled and move on.
- To look at problems and stressful situations as challenges that one can overcome.
- Keeping a positive attitude.

Of the various things listed above the one that is most important is to have time for oneself. To think about oneself and take care of oneself, as a lot depends on how one looks at the stress in terms of being healthy. A healthy person would look at stress in a healthy way, a relaxed person will not allow the stress to overwhelm him and thus taking time to oneself and relaxing and being with oneself and one's thoughts are important to overcome any kind of stress. By looking after oneself one can take care of the stresses also.

Another important thing is being happy and for this even patting oneself at the back for having done something good is sufficient to keep off the stress. Everyone does good things at one time or the other. Every one achieves something at one time or the other. Looking back at these achievements and patting oneself in the back or giving oneself a reward such as going on a vacation with family or get a DVD which one had wanted to see for a long time or get a story book which one wanted to for a long time but could not do so due to pressure of work, can be indulged in as a self reward. Also it is important consider what all can be controlled by one's own self and what are beyond one's control. One should not unnecessarily keep on harping on issues that are beyond one's control. The more the effort to control the uncontrollable stresses, more the frustration and more stress. It is important to therefore consider calmly whether some stress issue is within one's control, and if not the person should allow it to pass and not try to overcome.

The ability to take up stresses as challenges would go a long way in handling that stress rather than meekly succumbing to it. By doing so one's motivation will continue to be high and one would work relentlessly towards one's goal.

Also a positive attitude and looking at things more positively and in a more optimistic manner would also keep the stress level down and the motivation level high.

Self Assessment Questions

1) Define General Adaptation Syndrome.

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2) Describes the three stages of GAS.

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3) Define GAS and the diseases of adaptation.

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4) Describe what is the concept of adaptation energy.

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5) How will you put off the exhaustion stage of GAS?

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2.3 MOTIVATION

Darwin’s theory of natural selection caused many psychologists to try and explain all human behaviours through instincts, however according to the latest research and modern approach to behaviour, it is generally agreed upon that a person’s behaviour is motivated by biological and psychological factors and not necessarily instinctual factors.

Let us take up some of the psychological theories to behaviour.

2.3.1 Drive Reduction Theory

According to this theory, behaviour is motivated by biological needs. A biological need such as hunger, thirst and sex are the needs of our requirements for survival. A drive makes the person act and behave in a way to satisfy that need. For example if a person has the hunger need, he would go to a restaurant, order food and eat and thus satiate the hunger need. Thus our needs drive us towards a behaviour.

Generally the human organism is in a state of balance or what is called as homeostasis. When there arises a need such as hunger etc., the organism goes into a state of imbalance that is the homeostasis is disturbed. This produces considerable disturbance to the individual and the person starts doing something to restore the homeostasis. Now the behaviour is all motivated towards bringing the organism back to a state of balance. Thus the individual goes to a restaurant for food to satiate the need for hunger or goes to a 'piao' to satiate the thirst need. If the person does not find water then he may go to a shop and order for some bisleri or take an aerated drink which ever is available. In extreme cases where there is no water available in the vicinity as in the case of a person stranded in a desert area, the mind in order to restore the homeostasis (imbalance caused by thirst need) may imagine water in a far off place and even imagine drinking the same.

The drives can be primary as stated in the case of need for hunger, thirst and survival need. Needs can also be secondary in that they are learned needs. For instance need for money is a secondary need and in order to earn money which would purchase food which will in turn satiate the primary need, the individual earns and does many things to get that money. Thus money a secondary drive could also be a very powerful motivator of a behaviour.

We must remember that drive reduction theory alone cannot explain all motivations. There are other theories which try to explain the varieties of motivations that people have.

2.3.2 Arousal Theory

According to this theory one seeks an optimum level of excitement or arousal at which level the individual's performance is at its best. Yerkes Dobson Law states that this theory of motivation to perform will keep increasing until we reach the optimum level of arousal. When the arousal goes beyond the limit, the motivation goes down and thus the performance goes down.

2.3.3 Incentive Theory

According to this theory, behaviour is driven by a desire to possess something or to have something. Here the incentives are the stimuli that we are drawn to because of knowledge and learning

2.3.4 Maslow's Hierarchy of Needs Theory

According to Abraham Maslow, human behaviour is motivated by different needs which are arranged in a hierarchical form with the basic biological needs such as hunger etc. being at the lowest which motivates the human behaviour. Once the biological needs are satisfied then there is safety needs and the individual's behaviour is motivated towards satisfying those needs such as looking for a shelter, home etc. Above these are the needs for love and belonging and the behaviour is motivated in terms of these, followed by needs for esteem where the person is motivated to do

something which gets him admiration, recognition etc. Once these needs are also satisfied then the individual is motivated to do things just to actualise his own potentials, and here he is highly self motivated to achieve this as for instance becoming a great painter etc. Thus Maslow pointed out that all needs were not created equal.

Self Assessment Questions

1) Define motivation.

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2) Bring out the characteristics of motivation.

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3) Delineate the drive reduction and arousal theory of motivation.

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4) State the incentive and Maslow theory of need hierarchy of motivation.

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2.4 PSYCHOLOGICAL REACTIONS TO STRESS

Unlike the body's stress reactions, our psychological reactions are shaped by learning and are heavily dependent on the way we perceive the world. We undertake a wide variety of cognitive, emotional, and behavioural responses to stress. However, the most familiar psychological reactions to stress are defense mechanisms. They are called defense, because they are used to protect oneself from perceived threat. Although defense mechanisms are influenced to some extent by learning, most psychologists believe that they are automatic unconscious mechanisms that protect us from the awareness of anxiety, thereby helping us to maintain a sense of balance (homeostasis) and a sense of self worth in the face of threat.

Each of us rely on such mechanisms at one time or the or other. As emergency reactions, they diminish our awareness of anxiety and help to maintain our sense of

adequacy and feelings of worth. Since defense mechanisms involve self deception and distortion of reality, excessive or habitual reliance on them may prove maladaptive and result in stunted personal growth. In fact with these defense mechanisms the homeostasis is maintained but with wrong methods and solutions. The stress is not removed and continues in certain other forms. Let us take up and deal with some of the defense mechanism.

2.4.1 Defense Mechanisms

Avoidance: The individual avoids the anxiety provoking situation, in order not to experience stress. Social phobic avoids social situations, thereby fooling themselves that they have no problems.

Denial: When a situation is too painful to face, an individual may simply deny that it exists. The partner of a terminally ill patient may refuse to accept that there is anything wrong, despite having been given all the facts.

Repression: The problem is pushed into the unconscious so that it does not have to be dealt with.

Projection: The problem is projected to another person rather than being seen as one's own problem. Anger against the boss is projected on to the dog at home. As the person cannot attack the boss, he comes home and kicks the dog. Thus he projects his anger against the boss on to the dog.

Rationalisation: The individual looks for logical reasons for the stressful situation. In fact, these may not appear logical to anyone else. A student who fails in the class rationalises that the teacher does not like him or her and so gave poor marks.

Reaction formation: Other thoughts or feelings are substituted, which are diametrically opposed to the truth. For example, a man may be experiencing stress because he is strongly attracted to his best friend's wife. In order to deal with this, he develops a hatred for her; this feeling causes less stress than does the strong attraction.

Stress also evokes a variety of emotional responses ranging from a sense of exhilaration in the face of minor, challenging stressor to the more familiar negative emotions of anxiety, anger and discouragement. Stressful life experiences such as separation or loss of loved ones are frequently associated with depression.

How people behave depends partly on the level of stress experienced and partly on the motivation. People with high achievement need are able to withstand larger amount of stress.

Similarly personality pattern also affects the way people handle stress. Type "A" personality people are able to cope with higher degrees of stress but are also more prone to fall prey to different psychosomatic ailments.

Mild stress often energizes people to be more alert, active and resourceful. However, moderate stress tends to have a disruptive effect on people's lives, especially on complex behaviours such as in the case of a student writing and completing a term paper by a certain date.

Severe stress tends to inhibit behaviour and may lead to apathy and immobility, as in the severely depressed, who often feel helpless in the face of overwhelming frustration or deprivation.

2.4.2 Motivation to Cope with Stress

Motivation to cope with stress results in two types of approaches:

- i) emotion focused coping and
- ii) problem focused coping.

In emotion focused coping the individual tries to alter the emotional reaction to stress, for example, by expressing rather than suppressing feelings.

Problem focused coping involves trying to understand the problem situation better and taking action to deal with it. This kind of coping includes various forms of stress management.

Stress management

Stress management is a term that is used to describe a number of psychological techniques which are used to help people to reduce stress as for example, time management, relaxation, biofeedback, cognitive restructuring (changing the way one thinks about the situation), etc.

Cognitive appraisal

Cognitive appraisal involves thinking about the stressful situation and trying to find ways of solving the problem. For example, driving to work down the motorway was proving very stressful and so the person by leaving home five minutes earlier, was able to drive to avoid the traffic and reach office on time.

Time management

Not only trying to do too many things in day, but also managing one's time ineffectively, can often be a source of stress. Individuals can be taught to look at what has to be accomplished in a day, or a week, and find efficient ways of working so that they are not constantly backtracking and thereby wasting time. Establishing priorities and working to these is an efficient method of time management.

2.4.3 Types of Motivation

Motivations are many types, such as intrinsic motivation and extrinsic motivation.

Intrinsic motivation

These are rewards we get internally, such as enjoyment or satisfaction. Intrinsic motivation refers to the motivation from within the individual. For example doing work for its own sake and enjoying it and without expecting anything from it for doing the work is intrinsic motivation, whereas:

Extrinsic motivation

Extrinsic motivators are rewards that we get for accomplishments from outside ourselves Ex. Grades, salary, etc. whereas doing the work in order to get extra income is extrinsic motivation.

Then we have whole lot of other motivations . There are other categories or types of motivation as well, usually based on the specific end goal that we are interested in. These are given below:

Social motivation

Social motivation refers to the motivation that comes about as a result of the pressure of the society or peers that drives people towards a certain behaviour as for example following norms of the society and bidding by the norm because societal pressure. Another example is not talking loudly in the library because it is expected that we keep silence in the library

Achievement motivation

Achievement motivation refers to the pleasure of achievement that drives us, it is Achievement motivation. The person concerned is motivated by the need to achieve more and more than what he or she has achieved. Humans seem to be motivated to figure out our world and master skills, sometimes regardless of the benefits of the skills or knowledge. Studies involve looking at differences in how people set and meet personal goals and go about acquiring new knowledge or skills.

Incentive motivation

This refers to the motivation that drives a person in order to obtain the reward or incentive that is being offered for a certain behaviour.

Fear motivation

This refers to the motivation; if it is the fear or repercussion, it is Fear motivation, and so forth.

Knowing what type of motivation an individual responds best to can give managers insight into what strategies will be most effective. Extrinsic motivators are effective for a short period of time but studies show that if we want a behaviour to continue, intrinsic motivation is most effective.

Self Assessment Questions

1) What are the psychological reactions to stress?

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2) What are the important aspects of motivation to cope with stress?

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3) What are the methods to keep motivation on?

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4) Describe the relationship between emotions and stress.
5) What are the ways to manage stress?

2.5 METHODS TO SUSTAIN MOTIVATION

Studies of management styles show two basic attitudes that affect how managers continue to keep the level of motivation high among their employees with second level of GAS continuing.

Theory X: managers believe that employees will work with high motivation only if rewarded with benefits or threatened with punishment.

Theory Y: managers believe that employees are internally motivated to do good work and policies should encourage this internal motive.

Theory Z: Theory Z essentially advocates a combination of all that's best about theory Y and modern Japanese management, which places a large amount of freedom and trust with workers, and assumes that workers have a strong loyalty and interest in team working and the organisation.

Theory Z also places more reliance on the attitude and responsibilities of the workers, whereas McGregor's XY theory is mainly focused on management and motivation from the manager's and organisation's perspective.

Theory Z makes certain assumptions about workers. These include the assumption that workers tend to want to build cooperative and intimate working relationships with those that they work for and with, as well as the people that work for them.

Also, Theory Z workers have a high need to be supported by the company, and highly value a working environment in which such things as family, cultures and traditions, and social institutions are regarded as equally important as the work itself. These types of workers have a very well developed sense of order, discipline, moral obligation to work hard, and a sense of cohesion with their fellow workers.

Finally, Theory Z workers, it is assumed, can be trusted to do their jobs to their utmost ability, so long as management can be trusted to support them and look out for their well being.

One of the most important tenets of this theory is that management must have a high degree of confidence in its workers in order for this type of participative management to work. For this to work, employees must be very knowledgeable about the various issues of the company, as well as possessing the competence to make informed decisions.

Theory Z stresses the need for enabling workers to become generalists, rather than specialists, and to increase their knowledge of the company and its processes through job rotations and continual training. In fact, promotions tend to be slower in this type of setting, as workers are given a much longer opportunity to receive training, and more time to learn the intricacies of the company's operations.

The desire, under this theory, is to develop a work force that has more of a loyalty towards staying with the company for an entire career, and be more permanent than in other types of settings. It is expected that once an employee does rise to a position of high level management, they will know a great deal more about the company and how it operates, and will be able to use

Theory Z management theories effectively on the newer employees takes this notion of perceptions a bit farther and talks about how the workers might perceive management.

While management motivates workers in the above manner, there are also the emotions that contribute to motivation.

2.5.1 Stress and Emotion

These are intimately connected concepts. The term stress can refer to either certain life events (stressors) or how we react to these changes in the environment (stress reactions)

Thomas Holmes and Richard Rahe designed one of the first instruments to measure stress. Their social readjustment rating scale (SRRS) measured stress using life-change units (LCUs). Any major life change increases the score on the SRRS, a person who scored very high on the SRRS is more likely to have stress-related diseases than a person with a low score.

General Adaptation Syndrome (GAS). Hans Seyle describes the general response in humans and animals to stressful events and the three identified stages were the following

Alarm reaction – Heart rate increases, blood is diverted away from other body functions to muscles needed to react. The organism readies itself to meet the challenge through activation of the sympathetic nervous system.

Resistance – The body remains physiologically ready. Hormones are released to maintain this state of readiness. If the resistance stage lasts too long, the body can deplete its resources.

Exhaustion – The parasympathetic nervous system returns our physiological state to normal. We can be more vulnerable to disease in this stage especially if our resources were depleted by an extended resistance stage.

Various studies show that a perceived lack of control over events exacerbates the harmful effects of stress; control over events tends to lessen stress.

Stress management is another method by which one keeps the motivation on despite GAS.

2.5.2 Managing Stress

Managing stress successfully involves more than relying on the automatic, symptoms reducing reactions to stress besides the motivation to deal effectively. Managing stress means taking charge, directing, and controlling our responses to stressors,

thereby modifying the overall stress. However most of the ways to cope with stress fall under two categories – a) modifying ones environment and b) altering life style.

2.5.3 Modifying Environment

This approach includes in it:

Assertiveness training helps people to learn to say ‘no’ when imposed upon. They learn to ask for what they want without being aggressive or self-effacing. It is often a highly effective technique to counteract low self-esteem. This counteracts stress in several ways: by learning to say no, people are not overworked or imposed upon; by asking for what they want, they are more likely to be happy with their situation; by seeing themselves as effective, they become more comfortable with themselves.

Withdrawal means removing oneself physically or emotionally from an activity, organisation or person. It may be an appropriate response to stress, especially when a stressful situation cannot be successfully modified through assertiveness or compromise. For example, a worker after several attempts to convince his boss for promotion may feel that his pleas are falling on deaf ears and decide to actively look for another job. Withdrawal is neither good nor bad in itself.

Much depends on how it is used. On the one hand, if someone habitually withdraws from stressful situations, that person may drift into a constricted lifestyle that prevents adequate adjustment or personal growth. On the other hand the use of withdrawal as a temporary strategy may be a valuable means of coping with stress that has become overwhelming or detrimental to one’s health. But when no suitable solution is possible a permanent withdrawal may be the best solution.

Compromise another adaptive reaction to stress and occurs when an adjustment is made by the modifying opposing ideas or behaviour. The three common types of compromise are conformity, negotiation, and substitution.

Conformity involves a change in our behaviour due to another’s direct influence. For example, as an assistant in the purchasing deptt. you may not like the new elaborate procedure laid down for purchasing but you comply with the new rules only because you don’t want to displease your superiors and coworkers and readily accommodate to the added stress. Besides it is not easy to get new job, therefore, you may find changing that changing attitude is the most realistic approach, because endless strife and resentment would be more stressful.

Negotiation is more active, fruitful and promising to exact a compromise in some stressful situations. Negotiation means that we make mutual concessions with another person. Often used in labour management and political disputes, negotiation is these days widely used at interpersonal level among coworkers, marriage partners, and friends. Negotiation is preferred over conformity when possible as it mutual accommodation among participants.

Substitution means that we seek alternative goals with another person. When negotiation or conformity is not possible substitution is the best way of achieving compromise. For example, a person desirous of achieving higher education may not do so because he is the only bread winner for the family. In such circumstances he may decide to enroll himself at some evening college or some part time course. Thus an alternative way is found to pursue the desired goal.

Compromise in itself is neither good nor bad. It depends on the relation between the satisfaction achieved and the price paid for stress reduction. However, habitual

compromise may bring more frustration and conflict. Many a people exhaust themselves in stifling jobs and frustrating marriages because compromise has been the easy way out. Therefore, before exacting a compromise it's long term impact must be taken into account. A life of passive accommodation to undue stress is certainly more stressful than a more direct headlong approach.

2.5.4 Altering Life Style

Exerting control over oneself is easier than exerting control over the environment. Therefore, attempt to modify something about ourselves or about our behaviour is a better way of managing stress. There are number of ways of altering lifestyle-developing greater tolerance for stress, altering our daily habits, learning to control distressful thoughts, acquiring problem solving skills and seeking social support.

- a) Stress tolerance is defined as the degree of stress one can tolerate or how long one can put up with a demanding task without acting in an irrational or disorganised way. It is found that successful people are often under great deal more stress than is usually thought of. They acquire high stress tolerance. Greater tolerance for stress comes with experience and skill at a given time. People in high stress jobs such as police and administration learn to remain cool and calm in the face of stress because of long experience on the job. Stress tolerance may also be increased by selecting reasonable goals to achieve and adjusting our expectations to match the realities of the immediate situation. Greater aspirations and expecting too much from ourselves is also a big source of frustration.
- b) Another noteworthy aspect of stress tolerance is the ability to function well despite anxiety. There are instances in the life of every person when it is natural to feel anxious. For example, feeling of anxiety is natural when preparing for an important exam. Mild or moderate stress may even impel us to put in our best. We can resist stress if we are physically fit and regular exercise is very important in this regard.
- c) Changing pace of life is another method of reducing stress. It has been observed that one can bring lot of stress in one's life by rushing around and trying to accomplish too much in too little a time. Researches reveal that countries and societies where pace of life is faster than desired, people frequently fall prey to stress related ailments. This can be avoided by better time management. For example:
 - Get up early enough to rushing.
 - Set a radio-alarm clock to your favorite station.
 - Take time for breakfast.
 - Walk at an unhurried pace.
 - Make a list of things to; put the most important things first.
 - Share at least one meal each day with other people.
 - Try exercise regularly.
 - Take some time to relax each day in the manner that is most natural to you.

Avoid procrastination; the sooner you begin the task, the less you will worry about it.

Learn to control distressful thoughts. You might have experienced glancing at the first question on a test and muttering to yourself, “If the rest of this test is this hard, I am going to flunk this test”.

Ironically such negative self monitoring interferes with our performance, making you do worse on the test. One can control such thoughts by first becoming aware of one’s negative, catastrophic thinking and then developing positive thoughts that incompatible with one’s distressful thoughts.

- d) Another way of managing distressful thoughts is to replace them with humorous thoughts; humor really works to reduce stress. Read some cartoons, crack jokes with friends, recall funny events from your life. Humor is valuable way of coping and can have physiological as well as psychological benefits to the distressed person.

Self Assessment Questions

- 1) What are the methods to sustain motivation?

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- 2) What is meant by altering lifestyle?

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2.6 LET US SUM UP

In this unit we studied and discussed the concept of General Adaptation Syndrome as propounded by Hans Selye. We came to know how our body prepares and reacts to stress. We also tried to understand different psychological reactions to stress. Then we explored the relationship between GAS and motivation. We explained how motivation affects our perception and flight or fight approach to stress. This was followed by a discussion on how to manage stress which included different strategies of coping with stress and sustaining motivation.

2.7 UNIT END QUESTIONS

- 1) Explain in your own words how our body reacts to stress?
- 2) Discuss different psychological reactions to stress.
- 3) How motivation affects perception and coping of stress?

2.8 SUGGESTED READINGS

Bandura, A. (1986). *Social Foundation of Thought and Action: A Social Cognitive Theory*. New Jersey: Prentice- Hall

Herzberg, Frederick (1982). *The Managerial Choice*. Routledge, London

Harold F. O'Neil, Jr., Michael Drillings and Harold F. O'Neil. (1994) (Ed). *Motivation: Theory and Research*, Routledge, London

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UNIT 3 STRESS AND AROUSAL

Structure

- 3.0 Introduction
- 3.1 Objectives
- 3.2 Stress
- 3.3 What Stress is and What it is not?
- 3.4 Stressors
 - 3.4.1 Stress and Disease
- 3.5 Arousal, Activation and Energetical Theories
 - 3.5.1 Yerkes-Dodson Law and Arousal Theory
 - 3.5.2 Inverted U Theory
 - 3.5.3 Drive Theory
- 3.6 Alternatives to Inverted 'U' Theory
 - 3.6.1 Marten's Multidimensional Anxiety Theory
 - 3.6.2 Fazy and Hardy's Catastrophe Theory
 - 3.6.3 Hanin's Individual Zone of Optimal Functioning Theory
 - 3.6.4 Jone's Directionality Theory
 - 3.6.5 Apter's Reversal Theory
- 3.7 Let Us Sum Up
- 3.8 Unit End Questions
- 3.9 Suggested Readings

3.0 INTRODUCTION

This unit deals with stress and arousal. It starts with what is not stress and states in detail what stress is not. The next section talks about what is not stress and discusses in detail what actually stress is. Then we take up stressors and stress and its relationship to disease. Then we take up arousal, activation and energetic theories within which we discuss three theories, viz., Yerkes-Dodson's Law, drive theory and inverted U theory. Then we take up various alternate theories to the inverted U theory.

3.1 OBJECTIVES

After completing this unit, you will be able to:

- Define stress and state what is stress;
- Explain what stress is not;
- Describe the stressors;
- Delineate the relationship between stress and disease;
- Elucidate the arousal theories like drive theories etc;
- Analyse the inverted U theory; and
- Discuss the alternative theories to the inverted U theory.

3.2 STRESS

Definition: Stress is the state manifested by a specific syndrome which consists of all the non specifically induced changes within a biologic system. Thus, stress has its own characteristic form and composition, but no particular cause. The elements of its form are the visible changes due to stress, which additive indicators are expressing the sum of all the different adjustments that are going on in the body at any time.

The word stress has been used so loosely, and so many confusing definitions of it have been formulated, that I think it will be best to start by clearly stating what it is not. Contrary to current popular or medical opinion, stress is not nervous tension. Stress reactions do occur in lower animals and even in plants, which have no nervous system. The general manifestations of an alarm reaction can be induced in any organism mechanically.

Stress is not an emergency discharge of hormones from the adrenal medulla. An adrenaline discharge is frequently seen in acute stress affecting the whole body, but it plays no conspicuous role in generalised inflammatory diseases (arthritis, tuberculosis) although they can also produce considerable stress. Nor does an adrenaline discharge play any role in “local stress” reactions, limited to directly injured regions of the body.

Stress is not that which causes a secretion by the adrenal cortex of its hormones. (the corticoids). ACTH, the adrenal-stimulating pituitary hormone, can discharge these hormones without producing any evidence of stress.

Stress is not the nonspecific result of damage only. Normal and even pleasant activities, such as a game of tennis or a passionate kiss, can produce considerable stress without causing conspicuous damage.

Stress is not the deviation from homeostasis, the steady state of the body. Any specific biologic function, for example, the perception of sound or light, the contraction of a muscle, eventually causes marked deviations from the normal resting state in the active organs. This is undoubtedly associated with some local demand for increased vital activity, but it can cause only “local stress” and even this does not necessarily parallel the intensity of the specific activity.

Stress is not that which causes an alarm reaction. The stressor does that, not stress by itself.

Stress is not identical with the alarm reaction or with the G.A.S. as a whole. These are characterised by certain measurable organ changes which are caused by stress.

Stress itself is not a nonspecific reaction. The pattern of the stress reaction is very specific, that is, it affects certain organs (e.g., the adrenal, the thymus, the gastrointestinal tract) in a highly selective manner.

Stress is not a reaction to a specific thing. The stress response can be produced by virtually any agent.

Stress is not necessarily undesirable. It all depends on how a person takes it. The stress of failure, humiliation, or infection is detrimental. However, stress of exhilarating, creative, successful work is beneficial. The stress reaction, like energy consumption, may have good or bad effects.

Stress cannot and should not be avoided. Everybody is always under some degree of stress. Even while quietly asleep our heart must continue to beat, our lungs to breathe, and even our brain works in the form of dreams. Stress can be avoided only

by dying. The statement that a person is under “stress” is just as meaningless as the statement that the person is running a temperature. What we actually refer to here by means of such phrases is an excess of stress or of body temperature.

If we consider these points, we may easily be led to conclude that stress cannot be defined, and that perhaps the concept itself is just not sufficiently clear to serve as the object of scientific study.

Nevertheless, stress has a very clear, tangible form. Countless people have actually suffered or benefited from it. Stress is very real and concrete indeed, and is manifested in precisely measurable changes within the body. So before we proceed to a formal definition of the nature of stress, we will describe what stress is and describe its manifestations.

3.3 WHAT STRESS IS AND WHAT IT IS NOT?

The workings of stress are extremely complex. Apart from specific stimuli, which need not be discussed here, the first effect of any, agent or demand made upon the body as for example, be it running up a flight of stairs, dealing with a viral infection, or performing a dance etc., is to produce a nonspecific stimulus.

This may be a nervous impulse, a chemical substance or lack of an indispensable metabolic factor; it is referred to simply as the “first mediator,” because we know nothing about its nature. We are not even certain as to whether it is an excess or deficiency of any particular substance; it is possible that various derangements of homeostasis can activate the stress mechanism.

Stress is the friction that allows our minds to accomplish tasks on a deadline and to perform complicated tasks, and it is a motivator to push our limits. Too much stress, however, can severely affect the brain and cause problems and symptoms similar to neurological disorders. Knowing some of the signs of excess stress can help a person find ways to alleviate stress and become healthy. As with any medical condition, stress can lead to a number of complications, so it is advisable to seek professional medical help as soon as possible.

Stress causes the brain to release corticosteroids into the endocrine system. These corticosteroids cause the heart rate to increase, *raise blood pressure* and heighten alertness. Over time, this shift into high gear causes damage to the brain and body that manifests as a variety of disorders, particularly mental dysfunction.

One of the earliest neurological symptoms of too much stress is alterations in sleep patterns. Insomnia (the inability to sleep) is common, and shortened sleep patterns, troubling dreams resulting in restless nights, shallow sleep (the inability to fall completely asleep and enter the regenerative phase of your daily cycle), sleepwalking and a feeling of tiredness after sleep also are possible. Sleep deprivation exacerbates other stress symptoms and can lead to other, non neurological *health problems*.

Stress and lack of proper sleep also contribute to behavioural changes sometimes associated with neurological disorders. They can include rapid mood swings, lashing out or volatile temper, nervousness, anxiety or a feeling of impending doom, an inability to concentrate and excessive worry. Sometimes patients mistake these symptoms for brain tumors or other disorders, which only heightens their stress cycle.

Other symptoms of too much stress can include sexual impotence or disinterest in sex, headaches, restlessness, loss of appetite, and dizziness or feeling light headed.

These are generally caused by the constant corticosteroid infusion into the nervous system.

Although we have still to identify the first mediator(s), we do know that eventually stress acts upon the hypothalamus and particularly upon the median eminence (ME). This action appears largely to be mediated through or modified by nervous stimuli coming from the cerebral cortex, the reticular formation and the limbic system.

The incoming nervous stimuli reach certain neuro endocrine cells, most of which are located in the ME. These act as “transducers, “ transforming nervous signals into a humoral messenger, the corticotrophic hormone releasing factor. CRF reaches the anterior lobe through the hypothalamo-hypophyseal portal system that originates in the ME region within a network of capillaries into which CRF is discharged by the local neuroendocrine cells. It is then carried down through the larger veins of the pituitary stalk to a second capillary plexus in the pituitary.

The hypothalamus stimulates the adrenocorticotrophic hormone (ACTH) secretion through blood-borne substances carried by way of the portal veins. Experiments have proven that CRF elicits a discharge of ACTH from the adenohypophysis into the general circulation.

Upon reaching the adrenal cortex, it causes secretion of corticoids, mainly glucocorticoids such as cortisol or corticosterone. These induce glyconeogenesis, thereby supplying a readily-available source of energy for the adaptive reactions necessary to meet the demands faced by the body.

In addition, they facilitate various other enzymatically regulated adaptive metabolic responses and suppress immune reactions as well as inflammation, assisting the body to coexist with potential pathogens.

Furthermore, the glucocorticoids are responsible for the thymicolymphatic involution, eosinopenia and lymphopenia characteristic of acute stress. Curiously, glucocorticoids are needed for the acquisition of adaptation primarily during the alarm reaction, but not so much to maintain the adjustment during the stage of resistance.

The Adrenocorticotrophic hormone (ACTH) plays a comparatively minor role in the secretion of mineralocorticoids, such as aldosterone, which is regulated mainly by the rennin hypertension system and the blood electrolytes, whose homeostasis is in turn influenced by them.

This chain of events is cybernetically controlled by several biofeedback mechanisms. An ACTH feedback by a surplus of the hormone returns to the hypothalamo pituitary system and inhibits further ACTH production.

Another major pathway involved in the stress mechanism is carried through the catecholamines liberated under the influence of an acetylcholine discharge, at autonomic nerve endings and in the adrenal medulla. The chromaffin cells of the latter secrete mainly epinephrine, which is of considerable value in that it stimulates mechanisms of general utility to meet various demands for adaptation.

Thus it provides readily available sources of energy by forming glucose from glycogen depots and free fatty acids from the triglyceride stores of adipose tissue; it also quickens the pulse, raises the blood pressure to improve circulation into the musculature, and stimulates the CNS.

In addition, epinephrine accelerates blood coagulation and thereby protects against excessive hemorrhage should wounds be sustained in conflicts. All of this is helpful

in meeting the demands, whether they call for fight or flight.

At this point it will be helpful to discuss two apparent objections to accepting the concept of a single stereotyped response to stress. That is we must consider the following two important points:

- i) Qualitatively different agents of equal toxicity or stressor potency do not necessarily elicit exactly the same reactions in different people.
- ii) Even the same degree of stress, induced by the same agent, may produce different effects and even lesions in different individuals.

The effects specific to any given agent usually modify the effects and manifestations of the general stress syndrome.

The fact that the state of stress, even if due to the same agent, can cause different effects in different individuals, has been traced to “conditioning factors” that can selectively enhance or inhibit one or the other stress effect.

This conditioning may be endogenous (genetic predisposition, age or sex) or exogenous (treatment with certain hormones, drugs, or dietary factors.) Under the influence of such conditioning factors, a normally well tolerated degree of stress can even become pathogenic, selectively affecting those parts of the body that are particularly sensitized both by those conditioning factors and by the specific effects of the eliciting agent, just as physical tensions of equal strength in different chains will break the particular link that is the weakest as a result of internal or external factors.

The foregoing processes are the principal ones involved in the stress reaction, but by no means the only ones. As well, the level of STH (Somato Tropic Hormone) the growth hormone, may rise, and changes in the output of thyroid hormones of the ovary or testis may take place.

Self Assessment Questions

1) Discuss Stress as a concept.

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2) What stress is not – explain.

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3) What is actually stress? Give suitable examples.

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4) How conditioning factors affect stress?

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3.4 STRESSORS

The agents or demands that evoke this coordinated response which I have designated 11 stress are referred to, quite naturally, as stressors; and of course something is a stressor to the same degree that it calls forth the syndrome.

When the stressor in question is some organism or substance foreign to the body, the curative process resulting from the stress reaction can take either of two forms, according to whether the pathogen causes trouble directly or indirectly. Direct pathogens cause disease irrespective of our body's reaction, whereas indirect pathogens produce damage only through the exaggerated and purposeless defensive responses they provoke.

If a patient accidentally exposes his hand to a strong acid, alkali, or boiling water, damage will occur irrespective of his reactions. Because all these are direct pathogens; they would cause damage even to the body of a dead man who obviously could not put up any vital defense reactions. On the other hand, most common inflammatory irritants, including allergens, are essentially indirect pathogens, which do not themselves cause disease, but are damaging only by stimulating an inopportune and harmful fight against what is innocuous.

During evolution, immunologic reactions which lead to destruction of microbes, grafts, and other foreign tissues undoubtedly developed as useful defensive mechanisms against potentially dangerous foreign materials. However, when – as in the case of many allergens, heart transplants, etc. – the attack against the “foreign” agent is unnecessary or even harmful, man can improve upon the wisdom of Nature by suppressing this hostility. Nevertheless, when the aggressor is dangerous, the defensive reaction should not be suppressed but, if possible, increased above the normal level, which can be done, for example, by catatoxic substances that carry the chemical message to the tissues to destroy the invaders even more actively than would normally be the case.

However, stressors are not exclusively physical in nature. Emotions, e.g., love, hate, joy, anger, challenge and fear, also call forth the changes characteristic of the stress syndrome.

3.4.1 Stress and Disease

In general, the hormonal responses outlined above facilitate adaptation to environmental change or stimuli; but they are sometimes the cause of disease, especially if the state of stress is prolonged or intense. In this latter case, the body goes through the three stages of what is known as the “general adaptation syndrome” (G.A.S.).

The first is the alarm reaction, characterised by the changes above described. Of course, if the stressor (stress-producing agent) is so severe that continued exposure is incompatible with life, the organism will die within a few hours during this stage; otherwise, a stage of adaptation of resistance will ensue, since no organism can be maintained continuously in a state of alarm.

The adaptive stage is characterised by the vanishing or diminishing of the initial symptoms, since the body has achieved optimal adaptation. After still more prolonged exposure to the stressor, however, this acquired adaptation is lost and a third stage of exhaustion is entered into, which, unless the organism receives emergency aid from some outside source, leads to death. Apparently, the adaptability of an organism is finite.

An important instance of prolonged stress is that brought about by various dental problems such as tooth loss and the resultant malocclusion, muscular imbalances and ensuing unrelenting muscle tensions which create both physical and psychological demands. These conditions are often left untreated for years and even decades, and it is easy to see how trouble in this area might lead not only to local wear and tear but also to general, systemic stress, which in turn may create other problems or intensify the original ones.

3.5 AROUSAL, ACTIVATION AND ENERGETICAL THEORIES

3.5.1 Yerkes-Dodson Law and Arousal Theory

One of the earliest theories that attempted to provide a comprehensive framework was arousal theory. Arousal is a hypothetical construct that represents the level of central nervous system activity along a behavioural continuum ranging from sleep to alertness.” Stokes and Kite (2001) suggested that arousal be considered, “the basic energetic state of an organism.”

These definitions provide an adequate foundation for understanding the rather general and nonspecific nature of arousal. As this theory states, arousal mobilises and regulates the human stress response. Everyday living informs us that various events and conditions elicit a response. This response frequently incorporates physiological, cognitive, behavioural, and emotional dimensions. As arousal theory would assert, what facilitates this response is an energetical or activation system that is general and nonspecific.

To understand how the scientific community first came to support arousal theory we must go back to the turn of the twentieth century, specifically to the work of Yerkes and Dodson (1908). Yerkes and Dodson examined mice involved in a simple learning task.

The task put before the mice was to learn to discern a white from a black doorway and pathway (and to refrain from walking down the black pathway). Thus performance was measured by how many attempts the mice made prior to learning that exploring the dark pathway was not a good idea. Electric shock was the aversive stimulus used to shape the animals’ behaviour. Although it is unclear as to how well these shocks were calibrated, different intensities of shock were used to study the effect they had on the mice’s learning.

The results of this study suggested that when mice are shocked with high-intensity electricity, they are quicker to go the other way, in this case through the white doorway and down the white path, than when one uses low-intensity shocks.

This became the first Yerkes-Dodson principle, later becoming a “law” of performance. Over time this finding, and others, led to the postulate that moderate levels of arousal (often used synonymously with stress) will result in optimal performance, whereas too little arousal or too much arousal will degrade performance — a curvilinear relationship sometimes termed an inverted U. This general assertion seems to make

intuitive sense to most people. After all, if one lacks motivation or even the most modest amount of arousal to stay focused and get going, one's performance on various tasks is likely to suffer.

The inverse of that is equally compelling, with too much exertion or strain, our performance is likely to decrease. But does it accurately portray what science says about stress and performance? The answer is not exactly.

3.5.2 Inverted U Theory

The Yerkes and Dodson experiments later became the foundation on which the curvilinear relationship between arousal and performance was based. There have been numerous criticisms of Yerkes and Dodson's experiments, not the least of which concerns the mice-to-man extension of their findings as well as the generalisability of their simple laboratory learning paradigm to real-world complex performance issues.

A further criticism concerns Yerkes and Dodson's failure to measure stress (or even arousal) in these mice. Instead, they administered different levels of shock that were later interpreted as resulting in arousal or stress in the mice. Certainly, one could argue that electric shock would in many instances increase arousal and might even constitute stress, but Yerkes and Dodson did not themselves make this claim. However, a large portion of the psychological community concluded that electric shock increased the arousal in the mice, acting as a stressor of different intensities, motivating the mice to learn faster.

The reality is that we do not actually know how aroused, stressed, motivated, anxious, or upset the mice were. This was never measured physiologically or behaviourally. It is interesting to note that subsequent research has found that mild to moderate electric shocks do not necessarily cause arousal in different animals and can be rapidly habituated to in laboratory settings.

In actuality, the inverted-U hypothesis is not an explanation for the arousal performance relationship; it merely posits that this relationship is curvilinear without explaining what internal state or process produces it. Further concerns have been raised about the methodology required to either prove or refute the hypothesis since arousal can not be generated in the laboratory per se. That is to say, researchers typically measure physiological reactions to workload and stressful conditions, linking them to arousal as supposed markers, since arousal itself is a theoretical construct.

Neiss (1988) explored a reconceptualisation of arousal into specific psychobiological states (an interdependence model between affect, cognition, and such states). Neiss recommended that any investigation of these psychobiological states should optimally include measures that have historically been associated with arousal: respiration, heart rate, electroencephalography, electromyography, etc.

3.5.3 Drive Theory

The drive theory (Hull, 1943; Spence, 1951) held that the relationship between arousal and performance was positive and linear. The Hull-Spence drive theory specifically states that an increase in drive (that has become linked by many to arousal) will increase the likelihood that a well-learned response will occur (likely improving performance); whereas arousal will decrease performance of a task that is not well-learned. Duffy one of the major early proponents of arousal and activation constructs conjectured that humans organise responses to achieve and maintain balance.

We tend to be selective in our response to various stimuli and that our attention is

directed as a result of our personal goals. She indicated that after evaluating the relationship of elements within the environment we mobilise an energetical system to meet the demands presented. Duffy implicated arousal in the activation of this system and indicated that it supplied the energy for the organism's behavioural response and that these three qualities: directional response, relational evaluation, and energy mobilisation, were common to all human responses.

In later work, Duffy (1957) provided a review of the experimental support for arousal as a unitary function in the human response system. She asserted, "In general, the optimal degree of activation appears to be a moderate one, the curve which expresses the relationship between activation and quality of performance taking the form of an inverted U." It was found that performance on simple tasks, like time estimation, was enhanced through modest increases in arousal.

Another experiment attempted to expand Yerkes and Dodson's principle to include different motivational influences (air deprivation instead of electric shock) and a different population, using rats instead of mice. The findings appear consistent with the curvilinear principle—rats swimming speed while immersed under water increased based on the amount of time submerged up to a point, at which it decreased. It was concluded that learning has an optimal level of motivation or drive associated with it, and that when motivation exceeds this level, performance suffers.

Easterbrook (1959), in one of his experiments on the relationship between stress and performance (the effects of emotion on cue utilisation), argued that there is an optimal level of stress associated with cue sampling (attention allocation) as one scans and absorbs the various stimuli in his or her environment. It was proposed that the effects of arousal under stress were motivational in nature, serving to better organise a course of action, as opposed to emotional, leading to a disruption in performance. This too seemed to adhere to the Yerkes-Dodson principle.

Self Assessment Questions

1) What are stressors? Discuss.

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2) Relate stress and disease.

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3) Discuss the arousal, activation and energetic theories.

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4) Describe Yerkes-Dodson Law.

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5) What is arousal theory?

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6) Describe in detail the inverted U theory.

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7) Elucidate the drive theory.

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3.6 ALTERNATIVES TO INVERTED ‘U’ THEORY

In the previous section we learned that inverted-U theory is the primary theory used to explain the relationship between stress and performance. However, psychologists believed that the inverted-U theory is a simple theory that does not capture or explain the complexities of the stress-performance relationship. In this section we look at alternatives to inverted-U theory.

There are five stress-performance theories that we will discuss:

- 1) Martens’ Multidimensional Anxiety Theory
- 2) Fazy and Hardy’s Catastrophe Theory
- 3) Hanin’s Individual Zone of Optimal Functioning Theory
- 4) Jones’ Directionality Theory
- 5) Apter’s reversal theory

3.6.1 Martens’ Multidimensional Anxiety Theory

Multidimensional Anxiety Theory is based upon the notion that stress is multidimensional in nature, composed of a cognitive anxiety component and a somatic anxiety component. Multidimensional theory specifically hypothesizes two things:

- 1) a negative linear relationship exists between cognitive state anxiety and performance, and
- 2) An inverted-U relationship exists between somatic anxiety and performance.

According to the multidimensional theory, in the case of cognitive state anxiety, as anxiety increases, performance begins to deteriorate. But, in the case of somatic state anxiety, as anxiety increases performance increases to a certain level, and after a certain level performance begins to drop. Somatic state anxiety forms an inverted U-shape.

3.6.2 Fazy and Hardy's Catastrophe Theory

The basic assumptions of the Inverted-U theory are that

- a) Small incremental increases in arousal result in small incremental increases or decreases in performance, and
- b) Moderate arousal results in optimal performance.

The Catastrophe Theory questions both these notions. The basic variables of the model include cognitive anxiety, physiological arousal (not somatic anxiety), and performance. The theory suggests that the relationship between physiological arousal and athletic performance is believed to take the form of the inverted-U when cognitive anxiety is low, but to take a very different form when cognitive anxiety increases. At a high level of cognitive anxiety, performance increases gradually as in the inverted-U, but at some points as psychological arousal continues to rise, performance will show a catastrophic drop-off. In other words, if cognitive state anxiety is high, an increase in physiological arousal can result in a sudden and large decrement in athletic performance.

The basic tenets of Fazy and Hardy's catastrophe model were tested by Hardy and Parfitt (1991) and Hardy Parfitt, and Pates (1994), and both of these studies provided strong support for the basic tenets of catastrophe theory.

3.6.3 Hanin's Individual Zone of Optimal Functioning (IZOF) Theory

The individual zone of optimal functioning (IZOF) was developed by Yuri Hanin (1989). This theory also questions the two basic assumptions of inverted-U theory, but more specifically the notion that a moderate level of state anxiety results in best performance. IZOF theory postulates that the level of optimal state anxiety best for one athlete may be different from that optimal for the next athlete.

Thus, for some athletes, the optimal level of state anxiety was very low, while for others it was very high. In IZOF theory an optimal level of precompetitive state anxiety is identified and a narrow band of anxiety functioning created around it. The band of optimal functioning is generally considered to be the optimal level of anxiety. If the athlete's anxiety level stays within the IZOF, he will perform well, but if the level is outside the band, his performance will deteriorate.

Individual zone of optimal theory is a viable theory for explaining the anxiety-performance relationship. An athlete will perform best if his state anxiety is within a certain zone of optimal functioning. Strong support for the concept of an individual zone of optimal functioning (IZOF) has been reported by Prapavessis and Grove (1991), Raglin and Turner (1993), and Turner and Raglin (1996). In each of the cases, the results favored IZOF theory.

3.6.4 Jones' Directionality Theory

Jones (1991) posits that the absolute intensity of anxiety was not nearly so important as the athlete's perception of whether his anxiety intensity was facilitative or debilitating relative to a subsequent competitive event. In simpler words, an athlete's perception of how intensity affects performance is more important than the intensity itself. Jones labeled this facilitative or debilitating perception the direction component of anxiety.

Therefore, according to the directional theory, the important question is not whether an athlete has a high or low level of anxiety, but whether he perceives that this specific level will help him perform better. The application of directionality theory in sport is illustrated in two studies reported by Hanton and Jones (1999a, 1999b).

3.6.5 Apter's Reversal Theory

Reversal theory, as proposed by Apter (1982), has characteristics associated with both drive and inverted-U theory. It is as much a theory of personality as it is a theory of arousal. Individuals are described as being either telic or paratelic dominant. Telic-dominant individuals have a goal-directed orientation towards life, while paratelic-dominant individuals are fun-loving and have a "here-and now" orientation.

While in a telic frame of mind, the athlete seeks to reduce the level of arousal in order to bring about a state of relaxation.

While in a paratelic frame of mind, the athlete seeks to increase arousal in order to increase excitement. The individual's ability to switch back and forth between telic and paratelic modes is referred to as psychological reversal.

3.7 LET US SUM UP

In this unit we discussed at length what stress is and what stress is not. Now from this discussion we can fairly make out what constitutes stress and what does not. Then we studied the concept of arousal and Yerkes-Dodson law and arousal theory and came to know how it relates to stress and performance. We also studied critical evaluation of Yerkes-Dodson law. This was followed by different alternative theories of arousal given by different scientists.

3.8 UNIT END QUESTIONS

- 1) Discuss in detail what constitutes stress and what does not?
- 2) How Yerkes-Dodson law explains relationship between arousal and performance?
- 3) Briefly discuss different alternative theories of arousal.

3.9 SUGGESTED READINGS

Seligman, Martin E.P. (1990), *Learned Optimism*, New York: Alfred A. Knopf, Inc.

Baumeister, R.F.; Vohs, K.D. (2004), *Handbook of Self-regulation: Research, Theory, and Applications*, New York: Guilford Press.

Carver, C.S.; Scheier, M.F. (2001), *On the Self-regulation of Behaviour*, New York: Cambridge University Press.

UNIT 4 MOTIVATION AS AROUSAL

Structure

- 4.0 Introduction
- 4.1 Objectives
- 4.2 Motivation
 - 4.2.1 Intrinsic and Extrinsic Motivation
- 4.3 Drive
- 4.4 Motivation and Homeostasis
- 4.5 Motivation Process
 - 4.5.1 Importance of Learning about the Motivational Process
- 4.6 Motivation as Arousal
 - 4.6.1 Mechanisms of Arousal
 - 4.6.2 Factors Influencing Arousal
 - 4.6.3 Under Arousal
 - 4.6.4 Over Arousal
- 4.7 Arousal in Educational Setting
 - 4.7.1 Factors that Increase the Arousal Level
 - 4.7.2 Factors that Decrease the Arousal Level
 - 4.7.3 Methods to Reduce High Levels of Arousal
 - 4.7.4 Other Factors that Influence Arousal
 - 4.7.5 Motivation, Ability and Opportunity as Separate Concepts of Arousal
 - 4.7.6 Involvement and Goal Satisfaction
 - 4.7.7 Antecedents to One Another
 - 4.7.8 Operational Ranges
- 4.8 Let Us Sum Up
- 4.9 Unit End Questions
- 4.10 Suggested Readings

4.0 INTRODUCTION

This unit is focusing on motivation and arousal. We start this unit with definition of motivation and the major types of motivation and what causes these types of motivation. Then we discuss drive and how it is related to arousal. The motivation and homeostasis are related and these are explained in this section. Then we take up the discussion of motivational process and in this we emphasise on the importance of learning about the motivational process. Then we discuss the main theme of this unit the motivation and arousal in which we present the mechanisms of arousal, factors influencing arousal, under and over arousal and how all these influence motivation. The Arousal in educational setting is covered in which we discuss what the teachers should do to keep up the arousal of students at an optimal level and thus motivate them to the highest performance level. Then we discuss involvement as an important factor for arousal and present some of the research methods related to the same.

4.1 OBJECTIVES

After completing this unit, you will be able to:

- Define and conceptualise motivation;
 - Delineate different types of motivation;
 - Define drive;
 - Explain the relationship between Motivation and homeostasis;
 - Explain the process of motivation; and
 - Analyse the relationship between motivation and arousal.
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4.2 MOTIVATION

A group of young men and women throw themselves out of a plane. As they descend down rapidly they join hands and make a circle and after that they divide into pairs making different formations appears as if they are flowers and these flowers are dancing in the air. It seems they are in a state of eternal ecstasy. They open their parachutes only at the last moments and glide safely to the ground.

In another instance, an individual spends hours to solve rubric cube without any expectation to receive any kind of reward for solving it. In fact he often feels frustrated at not being able to solve it. How do we explain such behaviours? It is quite puzzling why should any person risk his or her life by throwing himself out of plane and play games as they fall toward earth. Why would someone take so much of pain to solve a rubric cube ?

Answer is very simple. These actions occur because the persons involved are motivated to perform them. They are acting in response to their motivation, that is internal processes that can not be directly observed in the situation but which are real, nevertheless, and which serve to activate, guide, and maintain people's actions.

Motivation is the driving force that impels us to strive to achieve certain goals. Motivation is said to be *intrinsic* or *extrinsic*. The term is generally used for humans but, theoretically, it can also be used to describe the causes for animal behaviour as well. Motivation may be rooted in the basic need to minimise physical pain and maximize pleasure, or it may include specific needs such as eating and resting, or a desired object, *goal*, state of being, *ideal*, or it may be attributed to less apparent reasons such as *altruism*, *selfishness*, *morality*, or avoiding *mortality*.

4.2.1 Intrinsic and Extrinsic Motivation

Intrinsic motivation refers to motivation that is driven by an interest or enjoyment in the task itself, and exists within the individual rather than relying on any external pressure. Intrinsic motivation has been studied by *social* and *educational* psychologists since the early 1970s. Research has found that it is usually associated with high educational achievement and enjoyment by students. When is it possible to state that a person, for example a student is motivated? Students for instance are likely to be motivated if they

- attribute their educational results to internal factors that they can control (e.g. the amount of effort they put in),

- believe they can be effective agents in reaching desired goals (i.e. the results are not determined by luck),
- are interested in mastering a topic, rather than just rote-learning to achieve good grades.

Extrinsic motivation comes from outside of the individual. Common extrinsic motivations are rewards like money and grades, *coercion* and threat of punishment. Competition is in general extrinsic because it encourages the performer to win and beat others, not to enjoy the intrinsic rewards of the activity. A crowd cheering on the individual and trophies are also extrinsic incentives.

Social psychological research has indicated that extrinsic rewards can lead to *over justification* and a subsequent reduction in intrinsic motivation.

In one study demonstrating this effect, children who expected to be (and were) rewarded with a ribbon and a gold star for drawing pictures spent less time playing with the drawing materials in subsequent observations than children who were assigned to an unexpected reward condition and to children who received no extrinsic reward.

4.3 DRIVE

Drives and desires can be described as a deficiency or need that activates behaviour that is aimed at a goal or an incentive. These are thoughts that originate within the individual and may not require external stimuli to encourage the behaviour.

Basic biological drives that are essential for human survival could be sparked by deficiencies such as hunger, which motivates a person to seek food. On the other hand, there are more subtle drives such as the desire for praise and approval, motivates a person to behave in a manner pleasing to others.

By contrast, the role of extrinsic rewards and stimuli can be seen in the example of training animals by giving them treats when they perform a trick correctly. The treat motivates the animals to perform the trick consistently, even later when the treat is removed from the process.

4.4 MOTIVATION AND HOMEOSTASIS

What do the state of hunger, thirst and cold have in common? These are all unpleasant states and impel us to do something to reduce or eliminate them. This basic fact provides the basis for a major approach to motivation called drive theory.

Drive theory states that biological needs arising within our bodies create unpleasant states of arousal that is the feelings that we describe as hunger, thirst, fatigue etc. In order to eliminate such feelings and restore a balanced physiological state, or homeostasis, we engage in certain activities.

Thus according to drive theory motivation is basically a process in which various physiological needs push us to actions designed to satisfy these needs.

Behaviours that result in elimination or reduction of the appropriate drive are strengthened and tend to be repeated while those not able to produce the desired result are weakened and tend not to be repeated when the drive state reoccurs.

Though the drive theory primarily focused on biological needs and the resultant drive, psychologists soon extended this model to other forms of behaviour not so clearly

linked to basic needs, such as drives for stimulation, status, achievement, power and forming stable relationships.

4.5 MOTIVATION PROCESS

What is motivational process? The motivational process is the steps that you take to get motivated. It is a process, that when followed produces incredible results. It is amazing what you can do if you are properly motivated, and getting properly motivated is a matter of following the motivational process.

Like any other process it takes a little work and foresight and planning on the part of the individual. However, the return on the individual's investment of time is significant, and it is important when needing extra motivation that the person applies the motivational process.

Thus the motivational process consists of

- 1) Determining what you want to be motivated to do or accomplish. This is a specific goal in a very specific area of your life.
- 2) The motivational process is not best for general motivation, but does wonders when you need to get motivated to do a specific task, or reach a specific goal.
- 3) Making up the steps to get to the determined goal, little by little. These are the little things one needs to do, like read your goals each morning. This is an important part of the motivational process because this is the part that breaks the task up in to manageable and convenient sized pieces.

When you look at the task at hand in little, manageable segments, it does not seem as overwhelming, and thus it is easier to get motivated, and to stay motivated

- 4) Removing the distractions so that the person stays motivated is important. This is key to the motivational process.
- 5) Getting motivated does little good if one cannot stay motivated, so this part of the process is the part where the person removes those things that ruin his or her ability to stay focused and stay motivated.

4.5.1 Importance of Learning about the Motivational Process

By learning about the motivational process, the person learns how to apply the same to his or her own life. They recognise the steps to get motivated so that they can apply it to the situations and parts of their life that need motivation.

By learning about and how to apply the motivational process to one's own life, the person becomes much more successful in all areas and all endeavors of his or her life.

For example, when the person learns about the motivational process and applies it to getting motivated to be more kind, they make efforts, widen their circle of friendship, and will have better, longer lasting friendships.

When the person learns about the motivational process and applies it to getting motivated to live a healthier lifestyle, the person may do the little things that it takes to get healthier. For example, the person may start drinking more water, eliminate the bad foods, get enough sleep, exercise regularly etc. This in turn would help the person to have increased energy, and more of an ability to accomplish other goals.

When the person learns about the motivational process and apply the same to getting motivated to work harder, the person becomes more efficient and end up doing the things required to get promotions, and get a raise at work. The person will make more money, be happy about his or her job, and have a more rewarding and successful career.

The motivational process is a great way to not just get motivated, but also stay motivated to accomplish your goals, and to become a better person. When you use the motivational process you begin to find that getting motivated to do things that once seemed hard is much easier, and staying motivated to stick with things until you are finished, is a breeze. So, learn all that you can about the motivational process, and apply it to your life in every situation that you have the requires an extra boost of motivation.

Self Assessment Questions

1) Define motivation.

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2) Differentiate between intrinsic and exgrinsic motivation.

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3) What is drive and how does it contribute to arousal and motivation?

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4) Discuss the relationship between motivation and homeostasis.

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5) Why do we have to learn about the motivational process?

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4.6 MOTIVATION AS AROUSAL

Motivation is not entirely a psychological concept. In addition to an intellectual and emotional interest, a person's tendency to engage in a behaviour is at least partially determined by the person's physiological state. A major physiological factor is the level of arousal, which refers to the overall readiness of the human organism to engage in activity. Research recognises arousal as the energy source for behaviour, being the primary key in initiation, strength and persistence of all motivational behaviours.

It must be kept in mind that one can be aroused without being motivated, but yet the person cannot be motivated without being aroused.

Motivational arousal can increase and decrease with its level of intensity being guided by how an individual perceives a task. If a task is expected to be difficult the need for motivational arousal will increase, whereas if the task is expected to be easy motivational arousal will decrease. The relationship between the level of arousal and learning is summarized in Figure below, which shows that people at either a very low level (nearly asleep) or at a very high level (nearly panicking) learn very little. People tend to learn best at a medium level of arousal. This means that if learners are at a very low level of arousal, the teacher should do things that are likely to increase arousal. On the other hand, if learning is impeded by an excessively high level of arousal, then the teacher should do things that are likely to reduce the level of arousal.

Arousal is operationally defined by sensory alertness, motor activity and emotional reactivity, and is the driving force behind the behaviour of all organisms according to their responses to stimuli. The three elements of the operational definition are influenced by the electrocortical, behavioural and autonomic mechanisms that provide a basic structure for understanding arousals contribution to motivation.

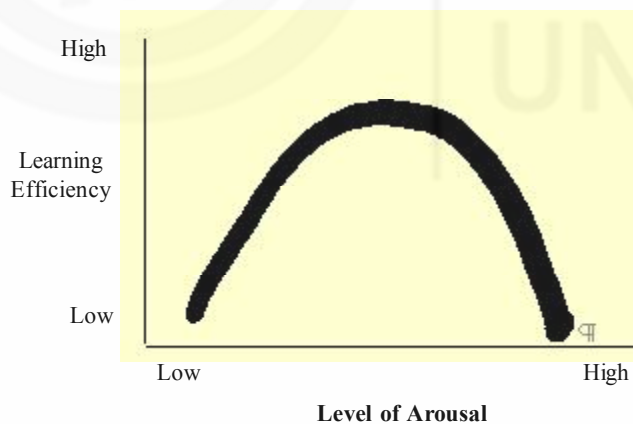


Fig. 1: Relationship between level of arousal and learning efficiency

4.6.1 Mechanisms of Arousal

There are three mechanisms of arousal, viz.

- 1) electro cortical arousal that arouses the brain,
- 2) behavioural arousal, and
- 3) autonomic arousal that arouses the body.

Often functioning independently these three systems are only activated by the body when needed, and thus this ensures conservation of energy and helps to limit adverse affects which come from over use.

Change in the frequency of brain waves through speeding up or slowing down is recognised as **electrocortical arousal**. Electrocortical arousal can be monitored through the use of an electroencephalograph (EEG). Electrocortical arousal can also be recorded through the use of Functional Magnetic Resonance Imaging (fMRI), which assesses blood flow through the brain to recognise various areas that respond to external stimuli and cognitive demands.

Behavioural arousal is measured through observable behaviours such as restlessness, tension, fidgeting, and muscle twitching. Alternatively **autonomic arousal** is recognised as a biological response, triggered by the nervous system which potentially can lead to sympathetic responses that include increased heart rate, pupil dilation, and changes in breathing.

4.6.2 Factors Influencing Arousal

Four factors have been recognised to influence arousal level's relationship with performance, these are:

- Skill level,
- Personality,
- Trait anxiety, and
- Complexity of the task

Knowledge of the above four influences helps individuals exercise control over their arousal levels and enhance their performance.

Skill levels can increase an individual's flexibility to give better performance beyond his optimal level of arousal. The more skill a person has to complete the task, the better he can perform in a state lesser or greater arousal. If an individual lacks the skills required to complete the task correctly due the task being unfamiliar, he is likely to experience high levels of arousal which only hinders with performance. But if he has already mastered the skill needed and has experience in performing the task, chances are greater that he will correctly complete the task in greater then optimal arousal levels.

Personality is another factor that influences an individual's optimum level of arousal. Whether a person is introverted or extraverted has been discovered as a leading factor in arousal seeking behaviours. Extraverts tend to dampen arousing effects, and thus seek out highly arousing activities in order to reach optimal levels of arousal. Whereas introverts seek out less arousing activities because of their sensitivity to stimulation, needing only minimally arousing activities to reach their optimal level of arousal. This would suggest an extraverted person would be able to perform better than an introvert if there were to complete the same highly stimulating activity.

Task complexity refers to the level of conscious attention that a person needs to place on a task in order to complete it. A lower level of conscious attention and higher level of arousal can go well with Skills that are low in complexity because simple tasks require fewer decisions to be made. However, skills high in complexity require a lot of decision making and concentration, therefore lower level of arousal is likely to occur. For example driving on an unfamiliar road is perceived as more

complex than driving on a familiar road, such as trip from home to work. Driving on the unfamiliar road would require more conscious awareness for learning unfamiliar driving conditions, thus needing low levels of arousal in order to maintain optimal performance.

Trait anxiety is also thought to influence optimal arousal. Thoughts of failure, negative self-talk and lack of confidence tend to govern the cognitions of people with high trait anxiety, making even a simple task more complex and arousing. An individual with low trait anxiety is recognised as being able to handle a higher threshold of pressure, as they are less likely to enter into the same damaging thoughts. The lower the trait anxiety, the more likely an individual is to believe he can successfully complete the task, consequently low task complexity and arousal levels.

4.6.3 Under Arousal

A low resting heart rate and shallow breathing are considered an indicator of physiological under arousal.

If a person is under aroused there is no driving force to motivate him or her for behaviour and fulfill his needs. For example, boredom is a sign of underarousal.

The effect of underarousal, has been studied through boredom and sensory deprivation research. Sensory deprivation refers to an individual's sensory and emotional experience within an unchanging environment.

In a study 19 volunteers were placed in a sensory deprivation chamber which completely dampened sound and blocked out light. Each participant spent 15 minutes in the chamber sitting on a padded chair. Before being sent to chamber each participant was given a hallucinations scale questionnaire, out of 19 participants 9 scored in the upper 20th percentile (predisposed to hallucination), while the other 10 scored in the lower 20th percentile. Individuals in the upper percentile recorded experiences of hallucinations and delusions when inside the chamber. The remaining 9 participants, not recognised as predisposed to hallucinations, also reported experiences of hallucinations or delusions but to a lesser extent than the high percentile group.

The experiment supported theories of arousal in that the brain prefers constant and moderate levels arousal from the environment, and is continuously attempting to achieve its optimal level of arousal. Without external arousal the participant's brains were left to rely on internal cognitive and behavioural methods to increase arousal.

Under arousal is a common disposition of antisocial people and those who are involved in criminal and social deviant activities. Underarousal is also recognisable in disorders such as conduct disorder and antisocial personality disorder.

4.6.4 Over Arousal

Increased heart rate, pupil dilation, and changes in breathing have been attributed to excessive stimulation and physiological **over arousal**. Effect of excessive stimulation and over arousal can be seen in the form of stress, as it triggers heightened levels of arousal and threatens optimal functioning. For example, serious illness, death, divorce or separation, mental illness, serious disability, abuse or violent crime, trouble with police, and witnessing violence.

Sensation Seeking is a personality trait. Through engaging in risky behaviours a sensation seeker's main objective is to raise levels of internal arousal. It has been found that individuals high on sensation seeking participate in behaviours such as fast

driving, whereas individuals low tend to drive with in the stipualted speed limit. In one of the studies it was found that high sensation seekers are more likely to use recreational drugs such as ecstasy, marijuana, alcohol and tobacco when compared to low sensation seekers. The study delved further, recognising a strong correlation between a high sensation seeker using drugs and drug use within their group of friends. Results indicate that sensation seekers look towards drugs to provide them with a quick boost in arousal.

Self Assessment Questions

1) Discuss motivation as arousal.

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2) Explain the mechanism of arousal.

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3) What factors influence arousal?

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4) Define Under arousal.

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5) What is meant by over arousal and how does this affect motivation?

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4.7 AROUSAL IN EDUCATIONAL SETTING

In educational set up level of arousal is influenced by what teachers do, by what learners do, and by other factors. The following are some factors that increase the level of arousal in the classroom:

4.7.1 Factors that Increase the Arousal Level

- The teacher can introduce topics in an interesting manner;
- Use humor during lectures;
- Avoid talking in a monotone;
- Encourage students to participate in class discussions;
- Call on students in an unpredictable rather than predetermined order;
- Raise questions to which students are eager to learn or discover answers;
- Vary the style or order of presentation. In other words, avoid doing everything in the same order every day;
- Give tests or quizzes at appropriate intervals, so that students feel constantly accountable for what they learn.
- Move around the room rather than standing stiffly behind a podium;
- Give breaks during long class sessions.

4.7.2 Factors that Decrease the Arousal Level

Teachers often accidentally or inappropriately lower the level of arousal of their students when they do such things as the following:

- Talk in a monotone;
- Lecture from a text of which the students already have an exact copy;
- Give the entire presentation themselves, without letting anyone ask questions or contribute insights;
- Do the same thing in the same order every day;
- Skip breaks when students need them;
- Give students the impression that they will not be held accountable for their learning until some Time in the vaguely distant future.

The preceding list focused on inappropriately lowering level of arousal. Note, however, that if students are at an excessively high level of arousal, it is desirable to do things such as the following to reduce arousal:

4.7.3 Methods to Reduce High Levels of Arousal

Since students will be at high level of arousal before the examination etc. it is important to keep the arousal level optimal so that students could perform to their best capability and capacity. For this the teacher may resort to the following measures:

- Give students sample test items so that they will be less anxious about their performance at the time of final examination.
- Do nothing unusual or outside the routine between recess and lunch hour on the day before spring vacation, when students are likely to be at a high state of arousal;
- Follow a very ordinary routine in a school which has just been touched by a tragic event, such as a civil disturbance or the death of a community leader.

4.7.4 Other Factors that Influence Arousal

Perhaps the most frequently studied antecedent has been motivation to process information. The most common driving force behind one's motivation to process has been labeled "involvement" and has been the subject of extensive categorisation efforts.

For instance, Gardner, Mitchell, and Russo (1978; 1985) have suggested that three involvement categories serve as antecedents to persuasion and arousal which are for instance,

- i) high involvement,
- ii) strategy limited low involvement, and
- iii) attention limited low involvement.

Other categorisations of involvement have been included in the hierarchy of effects terminology, including cognitive, affective, and low involvement categories as well as four levels of audience involvement: pre attention, focal attention, comprehension, and elaboration.

To give examples from the advertisement field, it may be stated that High involvement refers to the state of arousal to process brand relevant advertising information.

Strategy limited low involvement contends that consumers are attentive to non brand advertising content (music, scenery, sources etc.).

Attention limited low involvement implies an absence of attention to either brand or non brand ad content.

It is more appropriate to consider the involvement level as being on a continuum from low to high. In fact, similar arguments have been made for a continuum of message elaboration. Yet, operationally, the notion of an involvement continuum would present problems in an experimental manipulation.

Recently, researchers have explored relationships among combinations of possible antecedent conditions to message elaboration. For example, there has been considerable interest in the elaboration likelihood model (ELM) in that it can be said to have intelligently incorporated a variety of persuasion variables into a succinct and empirically testable framework. Specifically, the ELM suggests that the likelihood of message elaboration occurs as a function of separable elements of one's motivation and ability to process information. The arousal is quite at a high level with involvement also being high.

When a message receiver is both motivated to process message content (e.g., due to the personal relevance of the message) and has the ability to process the content, the central route to persuasion is hypothesized to occur.

These conditions of motivation and ability are said to result in the following:

- 1) foster message relevant thinking,
- 2) activate cognitive responses,
- 3) create changes in cognitive structure, and eventually
- 4) lead to an enduring impact on one's attitudes toward the communicated topic.

When these antecedent conditions are not present, attitude formation or attitude change can occur via the peripheral route to persuasion. Here, the message recipient focuses not on primary message content, but upon background cues (e.g., music, scenery, source characteristics) that are peripheral to the main message content.

Attitudinal effects under the peripheral route are hypothesized to be less enduring than those under the central route, thereby keeping arousal quite high.

Motivation and ability are antecedent conditions to arousal and to information processing. Recent research has been extended in order to delineate three antecedent conditions to cognitive response generation, that is (i) The message recipient's motivation, (ii) ability, and (iii) opportunity to process information.

4.7.5 Motivation, Ability and Opportunity as Separate Concepts of Arousal

When we deal with arousal related research, it is important to establish the conceptual independence of variables in experimentation in order to avoid confounding of the manipulations. If confounding of manipulations occurs, the researcher's confidence in causal explanations of the experimental results will be greatly reduced.

Establishing the theoretical meaningfulness of concepts is the first and perhaps the most important step toward construct validation. At the heart of this process is the notion of construct explication or the procedure of making an abstract word like arousal or motivation rather explicit in terms of its observable variables. A precise explication of constructs is vital for high construct validity since it permits tailoring the manipulations and measures to whichever definitions emerge from the explication.

These emerging definitions should be clear and in accordance with general understanding of the words being used. For example, although several definitions of involvement exist, the underlying theme of involvement can be said to be the personal relevance of the goal object (e.g., advertising, product, purchase decision) to the individual.

Most would also agree that involvement can be defined as an individual, internal state of arousal with intensity and direction properties. This internal state can be distinguished from its possible antecedents (e.g., risk), and consequences. Therefore, researchers should avoid conceptualising and/or measuring involvement as:

- 1) antecedents to involvement, such as product importance, risk, symbolic or hedonic values
- 2) brand awareness product knowledge or emotions
- 3) cognitions or affect
- 4) familiarity, commitment, or importance
- 5) information search

Many of the researchers would reason that by virtue of measuring involvement antecedents or consequences of arousal, the state of involvement can be inferred. Preferably, antecedents theoretically predicted to influence involvement should be manipulated, while indicators tapping the true involvement should be used as a measure of involvement.

Necessary Evidence

An observed relationship between an indicator of involvement and that of cognitive response production may mean one of four things:

- 1) both indicators measure involvement,
- 2) both indicators measure cognitive response production,
- 3) a third variable (e.g., opportunity to respond) has altered the relationship between involvement and cognitive responses,
- 4) the indicators do indeed reflect different, but related, constructs.

It has been pointed out that demonstration of a shifting, nonmonotonic and asymmetric relationship provides evidence to reject the hypothesis that both indicators reflect the same construct.

A shifting, nonmonotonic relationship indicates that as the magnitude of one indicant increases, there is at least one change in the direction of the other indicant. The term “non-monotonic” covers a family of formal frameworks devised to capture and represent *defensible inference*. that kind of inference of everyday life in which reasoners draw conclusions tentatively, reserving the right to retract them in the light of further information. Such inferences are called “non-monotonic” because the set of conclusions warranted on the basis of a given knowledge base, given as a set of premises, does not increase with the size of the knowledge base itself. This is in contrast to standard logical frameworks logic, whose inferences, being deductively valid, can never be “undone” by new information.

Apart from non monotonic, there is also asymmetric relations. Asymmetric relations bring down the arousal. A relationship is said to be asymmetrical when the relationship of A to B is not identical to that of B to A.

Also, regarding the antecedents to message elaboration, the likelihood that elaboration occurs can be viewed as a function of separable elements of motivation and ability. The separability of these concepts is based upon the following reasoning:

If a person is highly aroused to process a message but lacks the prerequisite motivation, little processing will occur. Conversely, if a message processor is motivated to process message content but lacks the required ability and/or opportunity, little message elaboration will occur. Therefore, each individual antecedent condition serves only as a necessary, but not sufficient condition for message elaboration. In other words the arousal and motivation are not adequate to reach the goal of elaboration of the message.

Table 1 provides a list of additional factors influencing one’s motivation, ability, and opportunity to respond. It should be noted that these factors serve as antecedents (as opposed to indicators) of their respective arousal factors.

Table: Factor Influencing Motivation, Ability and Opportunity to Process Information*

Motivation	Ability	Opportunity
personal relevance	knowledge	distraction
personal responsibility	self-schema	exposure time
number of sources	familiarity	message length
need for cognition	expertise	message comprehensibility
forwarning of message content		number of message arguments
forwarning of persuasive intent		message medium clutter

*Adapted from Batra and Ray(1986) and Petty and Cacioppo (1986 p. 220)

The examination of the differences and involvement has led other researchers to make similar conclusions about the separability of the concepts.

4.7.6 Involvement and Goal Satisfaction

Involvement in actively processing information is largely a function of a person’s recognition that the information has goal satisfaction value to him. Involvement is thus grounded in the perceived meaning of the specific content. An advertisement that is

highly arousing to a receiver by virtue of its content may be transmitted in a form that restricts his opportunity for response, or vice-versa. Arousal to process and opportunity to process should, therefore, be treated as theoretically separate variables.

Support for this contention was found in the examination of the interaction between content involvement and media conditions. When exposed to the broadcast message, individuals were noted to be engaged in equal counter argumentation regardless of involvement. When exposed to the print message, high content involvement subjects engaged in significantly more counter argumentation than low content involvement subjects.

Others have argued for conceptual distinctiveness between ability (due to expertise) and motivation (due to involvement).

It may be noted that expertise may not be necessarily related to involvement because involvement is a motivational construct whereas expertise is a sustaining construct representing knowledge structure. One does not necessarily have to be an expert in order to be involved with the product. However, involvement may motivate one to gather information and in time become increasingly knowledgeable about the product.

Even though it can be argued that motivation, ability, and opportunity are conceptually distinct and should be treated as such in experimental settings, several operational problems can still occur.

4.7.7 Antecedents to One Another

As indicated by several writers, measures of motivation, due to perceived importance, and ability (due to acquired knowledge) have been found, in some practical situations, to be significantly correlated with one another. This can create problems for the conceptual and, especially, the operational distinctiveness of the measures. However, there are three possible explanations for the significant correlations.

First, motivation to process can, over time, develop into an antecedent condition influencing one's ability to process. For example, those motivated to find out more about an advertised topic might be more likely, over time, to develop greater expertise or invoke self-schema than those who are less motivated.

Second, the self-report measures of product expertise knowledge have been criticized as being inflated measures of "true" expertise/knowledge. Studies involving "true" measures of expertise have found no relationship between expertise and involvement levels.

Third, the operationalisation of motivation as "measured product importance" is certainly quite different from its operationalisation as "experimentally manipulated involvement in a product's advertisement." It would be interesting to see the relationship between motivation and ability across a variety of operationalisations of motivation.

Another perplexing problem is that motivation, ability, and opportunity may all interact in some situations.

The possibility of the three-way interaction among motivation, ability, and opportunity should serve as a caution in the development of operationalisations. For example, consider a hypothetical situation in which a researcher predicts increased cognitive response activity to print advertising under a high level of motivation (e.g., due to greater personal relevance) and a high level of ability (e.g., due to subjects having extensive product knowledge). In such cases there is a three way interaction amongst these variables.

Take the high personal relevance treatment which was perceived by subjects as severely limiting their opportunity to process the advertising information. This actually caused subjects exposed to the high personal relevance treatment to generate significantly fewer (as opposed to greater) cognitive responses.

With the manipulation of any one of the conditions, every effort should be made to hold the other conditions constant. In fact, one should include checks to determine if the manipulated condition inadvertently affected the non manipulated conditions.

In addition, longitudinal studies might be insightful in untangling causal interpretations concerning the time occurrence of the variables. Perhaps of equal practical significance is the reality that the manipulation of one variable (e.g., motivation) may ultimately depend upon the level selected in holding the other variables (e.g., opportunity) constant.

4.7.8 Operational Ranges

Cook and Campbell (1979) caution researchers to be careful in experiments that involve the manipulation of several discrete levels of an independent variable that is continuous. For example, one might conclude that “manipulated high involvement” does not impact cognitive response production when in fact the “manipulated high involvement” was at an involvement level too low to produce cognitive responses. Therefore, it is important to conduct research at many levels of the continuous variable.

Another problem arises when a related, nonmanipulated variable (e.g., opportunity to respond) in an experiment occurs at a level either too low or too high to allow the intended manipulation (e.g., involvement) to operate. For instance, if an experiment contained an unlimited time to process a single advertisement, it is doubtful that a significant separation between manipulated high and low involvement groups would be attained.

Similarly, if an experiment contained an overwhelming number of advertisements under an unreasonably short exposure time, significant separations between manipulated involvement groups would again be difficult to achieve.

As argued with inverted-U effects in cognitive response production, the manipulation of message processing involvement (with subsequent message elaboration) will tend to operate only in a given range of one’s opportunity to process the message. The solution to this dilemma is to conduct several pretests varying the level at which other important, non-manipulated conditions are held constant.

For interpretative and causal reasons, it is important to establish the conceptual distinctiveness of the motivation, ability, and opportunity antecedents to message elaboration. For example, one may have the desire to be involved in an advertised message, possess sufficient knowledge to process its claims, but distraction may severely limit the message processor’s opportunity and ultimately reduce message elaboration. In addition, to infer that an involvement manipulation was the sole influence on cognitive response production assumes that the involvement concept has been found to be independent from related, but theoretically distinct, concepts such as ability and opportunity.

Although the variables are recognised as being conceptually distinct, the success of the manipulation of one antecedent condition (e.g., motivation) can ultimately depend on the level at which other conditions (e.g., opportunity) are held constant. Therefore,

it is important for researchers to understand the relative level at which a variable is manipulated as well as levels used to hold constant other theoretically related variables.

Because of the practical considerations found in developing successful manipulations of motivation, ability, and opportunity conditions, it is important to go beyond traditional manipulation check measures and include confounding checks as well. This procedure is important to ensure that a manipulation of one condition (e.g., motivation) will not inadvertently affect the perceptions of other non manipulated conditions (e.g., opportunity). Internal analyses of manipulation and confounding checks can provide researchers with helpful suggestions in the redesign of motivation, ability, and opportunity experiments.

Coming back to the educational settings, students themselves have a large degree of control over their physiological readiness to learn. For example, students may eat an inappropriate diet. By eating too much sugar, students may be at a level of arousal too high to learn effectively. Other students have sleeping habits that interfere with level of arousal. They may get too little sleep because they stayed up late watching TV, because they have to work to help support their family, because the neighbourhood is too noisy, or because they have to ride a bus a long time to get to and from school. These factors may bring students to a level of arousal that is too low.

In addition to factors directly controlled by students and teachers, there are other ingredients that influence level of arousal. For example, level of arousal is likely to drop precipitously on an extremely hot day, or even on a cold day when the heating system renders the classroom too warm. Likewise, classroom furniture may be oppressively uncomfortable (and provoke fatigue after a half hour) or too comfortable (and induce sleep at the end of a tough day). While teachers can exercise some control over these factors, in other cases they must merely be aware of them and make adjustments appropriately.

Actually, level of arousal theory can lead to over simplification. For example, sometimes extremely high levels of arousal are actually more productive than medium levels of arousal. This is especially likely to be true when the high level of arousal occurs because of interest directed toward the topic under consideration. (An equally high level of arousal may be maladaptive in the same situation if it is directed toward a peripheral element.) The important principle from level of arousal theory is for teachers to identify situations in which an inappropriate level of arousal is interfering with learning and to help students adjust their arousal to a more appropriate level.

Self Assessment Questions

1) Discuss arousal in educational settings.

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2) What factors influence arousal level in educational setting?

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3) How can the teacher in a classroom make use of this knowledge?

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4) What are the methods to reduce high levels of arousal?

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5) Discuss involvement as a factor of arousal.

4.8 LET US SUM UP

In this unit we studied the concept of motivation. We came to know what a motive means and what is meant by the terms like Drive, Need etc. We also studied forms motivation like extrinsic and intrinsic motivation. This was followed by a discussion on motivation process as to make you aware of how motives actually work and accomplish behaviourally. Then we discussed the concept of arousal. What we mean by the term arousal in ordinary language. What mechanisms are used in arousal. We also tried to cover personality factors that influence level of arousal with in an individual. We also tried to understand the effect of underarousal and overarousal as reflected in the behaviour of the individual. In the last we tried to understand implication of arousal in educational settings.

4.9 UNIT END QUESTIONS

- 1) How would you define motivation? Discuss the process of motivation.
- 2) How is arousal related to motivation? discuss with suitable examples.
- 3) Define arousal. What factors influence arousal and performance?
- 4) Can arousal level affect performance in educational settings? What should a teacher do to increase the arousal of students in classroom setting.

4.10 SUGGESTED READINGS

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UNIT 1 INTRODUCTION TO EMOTION, BASIC EMOTIONS AND CONCEPT OF EMOTIONS

Structure

- 1.0 Introduction
- 1.1 Objectives
- 1.2 Feelings
 - 1.2.1 Dimensions of Feelings
 - 1.2.2 Distinction between Feelings and Emotions
- 1.3 Emotions
 - 1.3.1 Basic Emotions
 - 1.3.2 Concept of Emotions
 - 1.3.3 General Characteristics of Emotions
 - 1.3.4 Changes in Emotions
 - 1.3.5 The Physiological Changes in Emotions
 - 1.3.6 Development of Emotions
 - 1.3.7 Components of Emotions
- 1.4 Comparison of Emotions of Children and Adults
- 1.5 Let Us Sum Up
- 1.6 Unit End Questions
- 1.7 Suggested Rreadings and References

1.0 INTRODUCTION

All of us at some point of time or the other in our everyday life feel happy, sad, angry, love, pity, jealousy, hatred, fear, agony etc. What are these feelings which we experience in our lives? What makes us feel these? Imagine our lives without these feelings or experiences? These are actually emotions. Our life would have been absolutely boring and meaningless without emotions. Our emotions and how we feel about certain things most often influences our thinking. Even our perception is not always determined by the outside stimulus but by our internal feelings, emotions, desires, and aversions. Thus feelings and emotions are dynamics of our behaviour, and thus are very important. In our practical life, feelings and outside behaviour are closely related. It is therefore very essential to know the difference between emotions and feelings which are highly inter related and both together and individually affect our behaviours. Emotions and feelings often appear just as different stages of one phenomenon.

1.1 OBJECTIVES

After completing this unit, you will be able to:

- Explain about the feelings and emotions;
- Discriminate between feelings and emotions;
- Identify the characteristics of emotions;

- Enumerate the types of emotions; and
- Explain about the components of emotions.

1.2 FEELINGS

Feelings is a term which is always used for various kinds of experiences. This term is generally used when we are not sure of the answer to a particular question. For instance, when we talk about feelings of pleasure, familiarity, we say I feel fine. These feelings can be put into various categories. Feelings like displeasure, grief, discontent, sadness etc. can be categorised under one category characterised by a tone of unpleasantness and avoidance. Similarly feelings like pleasure, happiness, joy, delight etc., will come under one category characterised by desirable pleasant feeling tone. In this manner we can enumerate many more experiences of feelings coming under various categories. Having known a little about what feelings are, now let us look at the dimensions of feelings.

1.2.1 Dimensions of Feelings

It has been stated by psychologists that each experience of feelings has three main characteristics. For instance, each feeling whether anger, pleasure, desire or sadness can be said to have a certain pleasantness-unpleasantness dimension.

Secondly, all feelings have a certain tone of excitement or numbness. For instance, pleasure has a tone of excitement. Similarly anger also has a tone of excitement. Sadness has a tone of numbness. Thus any feeling state has its position on excitement-numbness dimension.

Thirdly it is also noticed that most feelings have a tone of tenseness also referred as tone of expectancy or a tone of relaxation. All feelings connected with our waiting for something to happen or all feelings with anticipation will be characterised by the expectancy tone. In the same way when our feelings refer to something that has already happened, then there is a tone of relief or release. The feelings like anxiety and longing will have expectancy tone and feeling of sadness will have a tone of release since the sad event has already happened. Thus it can be stated that any feeling has a position on tension relaxation dimension.

1.2.2 Distinction between Feelings and Emotions

A feeling has also has some characteristics of its own, distinguishing it from experiences like sensations and emotions. Feeling is an internal experience and not felt in any one particular part. One may sometimes say that he/she experiences pain in the back of his leg. Here the individual uses the term feeling in a different sense. It is actually directed towards perception of part where the pain is sensed.

A pain may be unpleasant but the unpleasant feeling connected with it has no definite location in any part of the body. In this matter, it is different from sensations.

A visual sensation is experienced at the retina of the eye. It means that the sensation is localised but the whole organism is involved in feelings.

The feelings need not be strong always, sometimes they are very mild or as dull background states. This acts as discrimination between feelings and emotions.

The most important difference between a feeling and an emotion is one of degree or strength. The term invariably refers to a very strong and stirred up feelings or experiences.

1.3 EMOTIONS

Emotions not only give colour but also meaning to our lives and experiences. The crimes and even inhuman acts are all because of emotions. Emotions play a very important role in human behaviour and life. In fact, even moral behaviour is based on emotion to some extent (Daniel Goleman 1995).

The emotion is defined as ‘a strong mental or instinctive feeling such as love or fear’ (Oxford English Dictionary, 1996) involving many bodily processes, and mental states. An emotion combines cognition, bodily arousal and behaviour in a ready made formula for responding in line with the way the situation has been interpreted. There is a huge difference in the ways of feeling emotions by human beings and animals although both of them experience anger, fear, sadness, and joy.

Emotion can be defined as the “feeling” aspect of consciousness, characterised by certain physical arousal, a certain behaviour that reveals the feeling to the outside world, and an inner awareness of feelings. Emotion is associated with mood, temperament, personality and disposition and motivation. The English word ‘emotion’ is derived from the French word *émouvoir*. This is based on the Latin *emovere*, where *e-* (variant of *ex-*) means ‘out’ and *movere* means ‘move’. The related term “motivation” is also derived from *movere*. No aspect of our mental life is more important to the quality and meaning of our existence than emotions. They are what make life worth living, or sometimes ending. So it is not surprising that most of the great classical philosophers—Plato, Aristotle, Spinoza, Descartes, Hobbes, Hume—had recognisable theories of emotion, conceived as responses to certain sorts of events of concern to a subject, triggering bodily changes and typically motivating characteristic behaviour.

1.3.1 Basic Emotions

Energy in motion is an emotion and is a way of expressing oneself in life. Emotions cannot be considered as good and bad as each emotion has a specific role to play in colouring our life. Emotions expressed by humans can be divided into two broad categories and are called as positive and negative emotions. In positive emotions an attempt or an intention to include is expressed. They are fueled by an underlying desire for enjoyment and unity. Interest, enthusiasm, boredom, laughter, empathy, action, curiosity are the examples of positive emotions.

In negative emotions an attempt or intention to exclude is expressed. They are fueled by an underlying fear of the unknown, a fear of the actions of others, and a need to control them or stop them to avoid being harassed. Apathy, grief, fear, hatred, shame, blame, regret, resentment, anger, hostility are examples of negative emotions. The negative emotions are helpful and act as a motive in moving away from what one doesn’t want and positive emotions are useful for moving towards what one wants.

According to McDougall’s concept of emotions instincts and emotions were both innate patterns. This view was supported to some extent by James-Lange theory. Thus for a long time, it was believed that emotional behaviour was inherited. John Watson who is considered as leader of behaviourism examined this belief and concluded that there are three basic emotional patterns which are found even in infants and therefore can be regarded that emotions are inherited. Watson identified fear, anger and love as the three basic emotions. Paul Ekman has dedicated his career to researching emotions, focusing primarily on the following seven basic emotions.

Fear — Danger lurks
Sadness— Impending loss
Anger — Nonspecific threat, trespass, thwarted goals, plea for justice
Joy — Impending gain
Surprise— Unexpected event
Disgust — Contamination, toxic contact
Contempt — Substandard behaviour or being

There are hundreds of emotions along with their blends. The basic members and families of emotions, though not all agree on them, which are proposed by some theorists are as follows:

According to Daniel Goleman, the basic families of emotions are:

Fear: (Safety) anxiety, apprehension, nervousness, concern, consternation, misgiving, wariness, qualm, edginess, dread, fright, terror and in the extreme cases phobia and panic.

Anger: (Justice) fury, outrage, resentment, wrath, exasperation, indignation, vexation, acrimony, animosity, annoyance, irritability, hostility, and perhaps these are manifest in the extreme as hatred and violence.

Sadness: (Loss) grief, sorrow, cheerlessness, gloom, melancholy, self-pity, loneliness, dejection, despair, and depression in the extreme case.

Enjoyment: (Gain) happiness, joy, relief, contentment, bliss, delight, amusement, pride, sensual pleasure, thrill, rapture, gratification, satisfaction, euphoria, whimsy, ecstasy, and at the far edge, mania.

Love: (Attraction) acceptance, friendliness, trust, kindness, affinity, devotion, adoration, infatuation, and agape.

Disgust: (Repulsion) contempt, disdain, scorn, abhorrence, aversion, distaste, and revulsion.

Surprise: (Attention) shock, astonishment, amazement, and wonder.

Shame: (Self-control) guilt, embarrassment, chagrin, remorse, humiliation, regret, mortification, and contrition.

Daniel Goleman and Paul Ekman (1992) do not agree with the categorisation of emotions instead they think emotions in terms of families or dimensions, the main families' being-anger, sadness, fear, enjoyment, love, shame and so on.

Each of this family is considered to have a basic emotional nucleus at its core and its relatives rippling out from there in countless mutations. These outer ripples are moods which last longer than an emotion.

Beyond moods are temperaments, making people melancholy, timid or cheery. And still beyond such emotional dispositions are the outright disorders of emotions such as clinical depression or unremitting anxiety (Daniel Goleman 1995).

1.3.2 Concept of Emotions

Emotions expressed by humans can be divided into two broad categories and are called as positive and negative emotions. Examples of positive emotions include the following: Interest, enthusiasm, boredom, laughter, empathy, action, curiosity.

An attempt or intention to exclude is expressed by Negative emotions. Apathy, grief, fear, hatred, shame, blame, regret, resentment, anger, hostility are examples of negative emotions.

Emotions are accompanied by activation or an aroused state in the organism. They are normally accompanied by both physiological and psychological changes. The physiological changes normally include changes in gestures, muscular movements, facial expression, changes in physiological reactions like blood-pressure, pulse rate, heartbeat, respiration, etc. and psychological changes include blurring or clouding of consciousness, blocking of memory, confusion in perception etc.

1.3.3 General Characteristics of Emotions

All emotions have certain definite characteristics. Different emotions also have their own characteristics and behavioural patterns. Some of the general characteristics of emotions are as follows:

- i) **Emotions and biological drives:** Emotions mostly occur when any basic need is thwarted or challenged or when such a need is satisfied. Emotion is said to occur as a reaction when some basic drive is frustrated or properly satisfied. For example, fear is a response associated with expected danger. Anger is a response when some activity is blocked. Similarly joy is felt when the need is satisfied.

The other way in which emotions are related to biological needs is that they not only occur as a reaction to the thwarting of a need, but also, as experiences that help and direct the organism towards the satisfaction of the needs. To cite an example, in anger we are able to use more energy in fighting the obstructing situation.

Thus emotions serve the organism in a helpful manner in the satisfaction of basic needs.

- ii) **Emotions and reasoning:** Emotion does not surge up in the most challenging or disturbing situation in facing the problem by reasoning and thinking. An emotional response is always weakened by the application of our reasoning process. Logical reasoning locks emotions and strong emotions block logical thinking. These two phenomena seem to be opposed to each other. It is known that emotion is a primitive form of reaction than reasoning. Emotions have their own biological value in helping the organism to meet an emergency situation. In critical situations immediate and vigorous action is called for and there may not be much time for thinking and reasoning.
- iii) **Emotion and overt behaviour:** Each emotion has certain definite muscular and overt behaviour. Generally, each emotion is said to have its own expressive behaviour. But many emotions have common expressive signs. Certain strong emotions have their own characteristic behaviour patterns. For instance in anger, there is typical behaviour of attacking and all activities connected with it. In fear, there is the activity of fight or escape. Several other forms of overt behaviours such as smiling, laughing and crying are also expressions of emotions.
- iv) **Emotions and internal response:** When we experience emotions there are certain internal activities and disturbances in the autonomic nervous system, ductless glands and visceral organs.
- v) **Emotions and mood:** Unlike feelings emotions are very strong in intensity. So any emotional experience even after it ceases, leaves behind a kind of 'after feeling' called as mood. We all might have had experienced these moods at some point of time or the other in our lives. For example, after we had an outburst of anger, for a much longer time we would be in an angry mood. When we are in this mood we

are liable to become angry even with a slight provocation. After an experience of intense fear, we would be in a frightened mood for much longer time and unexpected sound or event will make us afraid again.

1.3.4 Changes in Emotions

We all have been experiencing various emotions in our day to day life. Have you ever noticed what changes happen in you when you experience an emotion? Let us understand more about the changes which happen in us due to emotions. As mentioned earlier emotions are characterised by definite overt behaviour patterns. Emotions when experienced cause certain overt changes and also disturbances of visceral patterns. Here we enumerate some of the important changes. These changes are produced because of the activities of ductless glands and the autonomic nervous system.

1.3.5 The Physiological Changes in Emotions

- i) **Facial expressions:** Various muscles of the face including the eye, the lips, the nose and the forehead undergo changes by way of twisting and taking different poses. Most of the emotions have their facial expressions but it may not always be easy to judge the emotion from these expressions. Some facial expressions are universal.
- ii) **Muscular adjustment:** Sometimes the entire muscular system of the body undergoes contraction and adjustments. For example, the bodily changes that take place in “startle reaction” when there is quick, unexpected and strong stimulus. The startle response consists of sudden movement of the head, blinking of the eyes, a characteristic facial expression, raising and drawing forward of the shoulders, turning inward of the upper arms, bending of the elbows, turning downward of the forearms, flexion of the fingers, forward movement of the trunk, contraction of the abdomen and bending of the knees.

Some have questioned considering ‘startle reaction’ as an emotion as they consider startle reaction as one of the basic reflexes. There is some truth in this claim as the same type of bodily changes also appears in cases of fear response.
- iii) **Gestures and movement of the hands:** Gestures may sometimes involve the movements of the whole body.
- iv) **Change in voice:** The voice gets affected in an emotion. When excited the voice becomes loud and high pitched. Under fear the voice takes a sinking and low tone.

There are other changes of a miscellaneous nature associated with emotions such as the hair standing on end, stimulation of sweat glands, drying of the tongue etc.

Another change that takes place under emotions is the fact that we have unusual amount of energy at our disposal. For example, when we are fighting a fire, we seem to have strength and energy beyond our ordinary limit. When we are running away from danger, we are able to run much faster and the energy at our disposal seems to be much more than what is ordinarily available for us (some of us who may never win a prize at running a race may perhaps even beat a champion if we were chased by a cobra or a tiger). We would even notice a comparatively weaker person when under strong anger overcoming a much stronger man in a fight. All these are due to release of abnormal amount of energy helping us to meet the critical situation and thus preserve our well being.

The changes that occur internally are:

- There is greater intensity of heart action.
- The pulse rate increases. This is commonly seen in fear and anger.
- Blood pressure increases in emotional excitement.
- There are many changes in gastro-intestinal tract. For example, Churning movement, slow down or stop in the stomach, the flow of saliva and other gastric juices necessary for digestion is reduced by 85 to 90%.
- There is greater secretion of glycogen into the blood stream,
- Sweat glands become more active and there is increased muscular tone.

1.3.6 Development of Emotions

The fine emotions of an adult, with his controlled and symbolic expressions of some of them, are certainly far removed from the blunt, massive direct action of a baby under an emotion. The difference almost resembles that between a 'cold war' and an actual front line battle on the field. Obviously great changes are taking place during the years of growth of the individual from infancy to adulthood. Almost everyone has his own characteristic developmental process as the individual develops from an infant to an adult. One of the most widely accepted schemes of the development of emotions was proposed by Bridges(1932). Let us now understand the stages of emotions as proposed by Bridges.

Katherine Bridges' Theory - Emotions develop as babies age

Newborns - One emotion only: diffuse excitement

3 Months - Distress and delight

6 Months - Distress differentiates into fear, disgust, and anger

12 Months - Delight differentiates into elation and affection

2 Years - Jealousy develops from distress; joy develops from delight

According to Bridges, new born infants have no differentiated emotional responses, but only have uncoordinated skeletal visceral responses, to all emotional stimuli. As the organism develops and matures, various emotions begin to differentiate with general distress and delight by about 6th month, distress developing into definite anger, distress and fear. Like this various emotions appear as the child advances in years. By about the age of 5 years, the responses such as envy, anxiety and shame appear.

Investigation undertaken by Bridges, several studies have been made on child development with reference to emotional characteristics. It has been noticed that different emotional responses are shown at different ages. Sometimes a particular stimulus which produced emotional response at an earlier age produces a distinct emotion at a lower age. The converse also takes place.

These differences in emotional responses at different age levels occur as a result of both maturation and learning. One such study showing these changes was reported by Blatz and his colleagues. Observations have been made with deaf blind human subjects and also with chimpanzees. The role of maturation and role of learning plays a very vital role in the process of development of emotions. These investigators claim that many of the emotional responses and the way of behaviour are learned. Maturation also plays an

important part in as much as, some of the response patterns depend mainly on the maturational process.

Emotional expressions and emotions in a child vary from those in an adult in various ways. Apart from role of maturation, the learning process also plays a very great part in the development of emotions. As the child grows it learns a great deal with regard to its emotional life. It learns to experience new emotions. It learns to experience emotions like anger and fear towards a new stimuli. It learns new ways of expressing of emotions. Most of the changes in emotional life of a child that takes place due to the process of learning are associated with what is ordinarily known as emotional maturity or proper development of emotions.

Emotions were found to be developed from environmental and genetic influences. Instincts and emotions are both innate patterns. Fear, Anger and Love are considered to be three basic emotional patterns found in infants and regarded as being inherited.

Emotions have been acting as wise guides in the evolutionary long run. According to Darwin (1965), emotions are developed primarily to prepare animals for action, particularly in emergencies. The nature of emotional state may be termed as psychological conditions, or as a psychological condition modified by cognitive process, where psychological arousal emerges as an essential factor, usually guided and steered by present cognitive factors and by evaluations of past experiences (Leventhal, 1980).

1.3.7 Components of Emotions

Most psychologists would agree that an emotion is a complex pattern of changes that include physiological arousal, subjective feelings, cognitive processes and behavioural reactions, all in response to a situation we perceive to be personally significant.

Accordingly, an emotion has four components:

- i) **Physiological arousal:** Emotions involve the brain, nervous system and hormones, so that when you're emotionally aroused the hormone secretion is more to give us instant energy. Each emotion has a specific characteristic of physiological aspects. For example: When angry, the blood rushes to our hands in order to fight. When afraid, the blood rushes to our skeletal system and leg to facilitate the fight or flight responses.
- ii) **Subjective feelings:** Emotions also include subjective awareness, or 'feeling' that involves elements of pleasure, liking and disliking. Thus, in studying emotion or knowing another person's feelings, we must rely heavily on that person's own self reports.
- iii) **Cognitive processes:** Emotions also involve cognitive processes such as memorial, perceptions, expectations and interpretations. Our appraisal of an event plays an especially significant role in the meaning it has for us.
- iv) **Behavioural reactions:** Emotions also involve behavioural reactions, both expressive and instrumental. Facial expressions such as smiles and frowns, as well as gestures and Lories of voice, all serve to communicate our feelings that may enhance our chances for survival.

The various theories of emotion differ mostly is regard to which of these various components is given priority. In much the same way, authorities differ about how emotions are activated or triggered.

The various components of emotion can be illustrated with a famous illustration from William James (1884) paper, 'What is an emotion?' James cited the example of

encountering a bear. “Imagine you are walking casually through the woods enjoying the sights and sounds of nature. Suddenly, there is a roaring sound, a crashing of undergrowth and a bear emerges into the clearing immediately in front of you. You immediately come to a halt, your heart is pounding, your mouth is dry, your muscles tense and you feel intensely afraid. You remember that it is important, when confronted by bears, to stand your ground and so you stand your ground and so you stay very still despite your fear. Eventually, after an impressive paw waving show of aggression, the bear wanders off and you are safe.

In this example, the emotion is one of the intense fear or terror, when you encounter the bear in the woods. The fear goes hand in hand with marked physiological changes; for example, the dryness in the mouth, the tension in the muscles, the racing heart and so on. The fear is also characterised by a readiness to run or to fight the ‘Fight or Flight’ syndrome. This is the functionality of fear in this instance. However, although there is action readiness, you do not actually follow that through to the level of behaviour; instead, you stand your ground.

Another part of the fear is the cognitive aspect where you actually feel extremely afraid because the bear has been understood at some level to be threatening to your current concerns such as personal survival.

1.4 COMPARISON OF EMOTIONS OF CHILDREN AND ADULTS

An individual is considered to be emotionally grown up and mature when he has outgrown some of the characteristics of emotional life of a child and had developed the characteristics of a normal adult. This process can be understood by comparing the characteristics of a child’s emotion with those of the emotions of a normal adult.

The child’s emotions are few. The primary emotions of a child shown from birth are three i.e., love, fear and anger. At the earliest stages, it does not have any emotional responses to complex situations that would arouse in a grown up adult blended emotions like jealousy, wonder, awe, admiration etc. these complex and secondary emotions are learned by the child from the adults as they grow and as opportunities occur.

In the early years of life of the child the stimuli that provoke the basic emotions are very few. They are limited to its immediate surroundings and certain biological needs. Fear is aroused only by loud noises, and when there is loss of physical support and balance. Anger is produced only when there is interference with its activities or when thwarted in its attempt to satisfy biological needs, like hunger. Love is seen when it is fondled and as a reaction to affectionate treatment by few individual adults like parents or close relatives.

Another important difference is that the child freely gives vent to the muscular and motor expressions of emotions, much more than adult. The child when is angry, kicks about, rolls on the ground, tears the clothes etc. the emotions of children are not organised and balanced. At one moment the child may be extremely angry but at the next minute it may be just the opposite state. As we grow up, we learn to organise emotions properly, to behave in a steady and dependable manner.

Self Assessment Questions

- 1) Emotion is defined as _____.
- 2) _____ emotions are helpful and act as a motive in moving away from what one doesn’t want.

- 3) Examples for positive emotions are _____.
- 4) The role of _____ and role of _____ plays a very vital role in the process of development of emotions.
- 5) The components of emotions are _____.
- 6) The _____ Nervous system comes into activity when the individual is in a state of danger or emergency.

1.5 LET US SUM UP

Feelings are a term which is always used for various kinds of experiences. Feelings like displeasure, grief, discontent, sadness etc. can be placed under one category characterised by a tone of unpleasantness and avoidance. Similarly feelings like pleasure, happiness, joy, delight etc., will come under one category characterised by desirable pleasant feeling tone. The feelings need not be strong always; sometimes they are very mild or as dull background states. This acts as discrimination between feelings and emotions.

The most important difference between a feeling and an emotion is one of degree or strength. Emotion can be defined as the “feeling” aspect of consciousness, characterised by certain physical arousal, a certain behaviour that reveals the feeling to the outside world, and an inner awareness of feelings. Emotions when experienced cause some overt changes and also disturbances of visceral patterns.

According to Paul Ekman there are seven basic emotions, viz., Fear, Sadness, Anger, Joy, Surprise, Disgust and Contempt. Emotions were found to be developed from environmental and genetic influences. An emotion has four components 1) Physiological arousal, 2) subjective feelings, 3) Cognitive process and 4) Behavioural changes. The sympathetic and parasympathetic nervous system plays a significant role in emotions.

1.6 UNIT END QUESTIONS

- 1) What are feelings?
- 2) Write about the development of emotions.
- 3) What are the basic emotions?
- 4) Explain about the various components of emotions.

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UNIT 2 THEORIES OF EMOTIONS

Structure

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- 2.1 Objectives
- 2.2 Theories of Emotions
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 - 2.2.3 Bem's Explanation of Behaviour
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2.0 INTRODUCTION

This unit explains about different theories put forward to explain basically about the emotion and to explain the number of events occurring during emotions which we have discussed in the previous unit. The experimental work by psychologists and physiologists has tried to identify the order of these events and also what changes are associated with each event. This in turn has given rise to number of different theories of emotions.

As mentioned earlier, the emotion which is experienced has physiological, cognitive and subjective components. But the important point is to determine whether the physiological arousal leads to emotion experienced or the emotion experienced gives rise to physiological arousal. This point has led to research in formulating various theories of emotion. The oldest theory was James-Lange theory, given by Lazarus.

2.1 OBJECTIVES

After completing this unit, you will be able to:

- Define emotions in terms of different theories;
- Explain the concept of emotions according to each theory;
- Put forward the various theories of emotions;
- Identify and explain the typical factors that explain emotions under each theory; and
- Elucidate the similarities and differences among the various theories of emotions.

2.2 THEORIES OF EMOTIONS

Psychologists have proposed a number of theories about the origins and function of emotions. The theorists agree on one thing that emotion has a biological basis, which is evidenced by the fact that the **amygdala** (part of the limbic system of the brain), which plays a large role in emotion, is activated before any direct involvement of the **cerebral cortex** (where memory, awareness, and conscious “thinking” take place). There are the following theories which explain the complex mental and physical experiences that take place in humans called as “feelings” and these are:

- James-Lange theory
- Cannon-Bard theory
- Schachter-Singer theory
- Opponent-process theory
- Lazarus’s cognitive theory
- Arousal theory
- Social theories of emotions.

Suppose, in one of your courses, you are required to make a class presentation. As you walk towards the dais, the front of the room, your pulse races, your mouth feels dry and you can feel beads of perspiration coming on your forehead. This is just because you are terrified. What is the basis for this feeling? Sharply contrasting answers are offered by Cannon-Bard and James-Lange theories of emotion.

2.2.1 James-Lange Theory of Emotion

Proposed independently by psychologist William James and physiologist Carl Lange, the James-Lange theory of emotion proposes that emotions occur as a result of physiological reactions to events. According to this theory, you see an external stimulus that leads to a physiological reaction. Your emotional reaction is dependent upon how you interpret those physical reactions. For example, suppose you are walking in the woods and you come across face to face with a bear. You begin to tremble and your heart begins to race. The James-Lange theory proposes that you will interpret your physical reactions and conclude that you are frightened (“I am trembling, therefore I am afraid.”)

William James explained the same thing differently. He said that the bodily changes follow directly the perception of the exciting fact, and that our feeling of the same changes as the facts occur and these feelings are called emotions.

The James-Lange theory states:

Environmental influence (event) → Physiological change → Psychological experience

In other words, James and Lange would say, “I feel afraid because I tremble”. If a person sees a bear while walking along in the woods, James and Lange would suggest that the person would tremble and then realise that, because they are trembling, they are afraid.

According to James, his theory is that the bodily changes follow directly the perception of the exciting fact. Our feelings of the same changes as they occur and this is called the emotion.

Common sense says that when we lose our fortune, we are sorry and weep. We encounter a bear, are frightened and run. We are insulted by a rival and we get angry and strike that person.

This order of the sequence does not seem to be correct. What is actually correct, according to James is that we feel sorry because we cry, angry because we strike, afraid because we tremble.

Without the bodily states following the perception, the latter would be purely cognitive in form, pale, colourless, and devoid of emotional warmth. We might then see the bear, and judge it best to run, receive the insult and deem it right to strike, but we should not actually feel afraid or angry.

Problems:

Later studies separated the internal organs that James said caused arousal from the CNS, but this did not eliminate emotional responding. So, perceptions of bodily changes could not be the only factor involved in emotions. James Lange theory offers a more surprising view of emotion. It suggests that the subjective emotional experiences are actually the result of physiological changes within our bodies. In other words you feel frightened when making your speech because you notice that your heart is racing, your mouth is dry, and so on. We feel sorry because we cry, angry because we strike, and afraid because we tremble.

Self Assessment Questions

1) Discuss the theory of emotion as put forward by James and Lange.

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2) How is the theory explained in terms of physiological aspects?

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2.2.2 Cannon – Bard Theory of Emotion

This theory suggests that various emotion provoking events induce simultaneously the subjective experiences which are labeled by humans as emotions. All these emotions are accompanied by physiological reactions and thus in the situation given as an example of a student going to the stage to give a lecture, the sight of the audience and of his professor, whose pen is poised to evaluate the student’s performance, causes the student to experience a racing heart, a dry mouth and other signs of physiological arousal and at the same time, also to experience subjective feelings which is labeled as fear. In other words it may be stated that this situation stimulates various portions of the nervous system so that both arousal, mediated by the autonomic nervous system and subjective feelings, mediate in part by the individual’s cerebral cortex.

The Cannon-Bard theory is a physiological explanation of emotion developed by Walter Cannon and Philip Bard, and states that we feel the emotions and experience the physiological reactions such as sweating, trembling and muscle tension simultaneously. More specifically, it is suggested that emotions result when the thalamus sends a message to the brain in response to a stimulus, resulting in a physiological reaction.

For example: I see a snake → I am afraid → I begin to tremble.

According to the Cannon-Bard theory of emotion, we react to a stimulus and experience the associated emotion at the same time.

The Cannon Bard theory of emotion differs from other theories of emotion such as the James Lange theory of emotion, which argues that physiological responses occur first and this in turn cause the emotions.

The questions in regard to the emotions that arise are for instance

Where do our emotions come from?

What is it about the human body and mind that has the capacity to form emotions and reactions to such a variety of situations?

Even more important, Why do we form these emotions?

According to Cannon-Bard, emotions do not come as a response to physiological conditions. However, at the same time, neither do emotions come and then the body creates a physical reaction to the said emotions. When we consider this philosophy we realise that according to Cannon-Bard

“emotions and physiological responses occur at exactly the same time.”

When both these theories (James Lange and Cannon Bard’s) are considered, the issue arises is that which of these theories is closer to the truth. Until recent decades, most of the psychologists believed that Cannon-Bard theory was more accurate. They reached this conclusion on the basis of several forms of evidence. More recently though the pendulum of scientific opinion has begun to swing the other way and certain aspects of James-Lange approach have gained increasing acceptance.

Additional support for the James-Lange theory of emotion is provided by studies of the facial feedback hypothesis according to which changes in our facial expression sometimes produce shifts in our emotional experiences rather than merely mirroring them.

In other words, as James would suggest, we feel happier while we smile, sadder when we frown, and so on. While there are many complexities in examining the hypothesis, the results of several studies offer support for accuracy.

Self Assessment Questions

1) Describe Cannon Bard Theory of emotions?

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2) How do emotions emerge?

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3) In what way Cannon Bard’s theory differs from that of James Lange theory?

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4) What are the common aspects in the above two theories?

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2.2.3 Bem’s Explanation for Behaviour

In 1978, Thomas Gilbert published *Human Competence: Engineering Worthy Performance* which described the Behaviour Engineering Model (BEM) for performance analysis. This model consists of three Leisurely Theorems that:

- 1) Distinguished between accomplishment and behaviour to define “worthy performance”,
- 2) Identified methods for determining the “potential for improving performance (PIP)”
- 3) Described six essential components of behaviour that can be manipulated to effect performance.

Determine Worthy or Desired Performance

The first step to using the BEM involves identifying desired or “worthy” performance. This level of performance is characterised by **behaviour** (B), or what a person does, and **accomplishment** (A), the outcomes of the behaviour.

Determine the Potential for Improving Performance (PIP)

The gap between desired and current performance can be determined by comparing “the very best instance of that performance with what is typical” **Exemplary performance** is demonstrated when behaviours result in the best outcomes. **Typical performance** is the current level of performance. The **potential for improving performance** is the ratio between the two and can be expressed as:

The PIP is the performance gap. The greater the gap, the greater the potential for typical performers to improve their performance to the exemplary level. Rather than viewing this gap as a problem, this model helps people see the potential for improvement more positively (Chyung, 2002).

In order to understand what changes must be made to a management system to achieve worthy performance, a performance technologist must first determine the influences on behaviour. Gilbert (1978) states that behaviour is the product of the personal characteristics of an individual (repertory) and the environment where behaviours occur. Within each of these aspects of behaviour there are conditions that can be examined for deficiencies and ultimately manipulated to improve performance. These six conditions of behaviour are data, instruments, incentives, knowledge, capacity and motives.

Following the sequence of steps in the cause analysis process is most likely to uncover the variables that can be improved with the least costly intervention strategies first. Improvements to environmental conditions generally have the greatest leverage for performance improvement. Providing people with clear expectations of and feedback on performance, the right tools for the job, and appropriate rewards and recognition for performance are often the most cost effective changes that can be implemented within a management system.

2.2.4 Schachter-Singer's Two-factor Theory of Emotions

This theory is similar to Bem's explanation for the cause of behaviour in general. Schachter's theory looks specifically at how we decide what emotions we are experiencing especially when we are experiencing one.

When trying to understand what kind of person we are, we first watch what we do and feel and then deduce our nature from this.

This means that the first step in the experience of motions is to experience physiological arousal. You are physiologically up or down compared to normal. We then try to find a label to explain our feelings usually by looking at what what we are doing (behaviour) and what else is happening at the time of arousal (environment) Thus we do not just feel angry, happy or whjat ever. We experience general feeling and then decide what the experience mean, a specific emotion.

Physiological arousal + Environment circumstances = Attributed emotions

e.g. 1. I am tense and sweating + a gun is being pointed at me = I am afraid.

e.g.2. I am tense and sweating + Sheela is looking at me and smiling = I am in love.

In both the examples, the state of arousal is the same. What changes is the environment. Two factor theory argues that the cues in the environment are what determine the emotions that we believe we are experiencing. Change the environment the emotions will also change.

Like the James Lange theory of emotion, Schachter and Singer felt that physical arousal plays a primary in emotions. However, they suggested that this arousal was the same for a wide variety of emotions, so physical arousal alone could not be responsible for emotional responses.

The two-factor theory of emotion focuses on the interaction between physical arousal and how we cognitively label that arousal.

So, imagine you are alone in a dark parking lot walking toward your car. A strange man suddenly emerges from a nearby row of trees and rapidly approaches. The sequence that follows, according to the two-factor theory, would be much like this:

- 1) I see a strange man walking toward me.
- 2) My heart is racing and I am trembling.

- 3) My rapid heart rate and trembling are caused by fear.
- 4) I am frightened!

The process begins with the stimulus (the strange man), which is followed by the physical arousal (rapid heartbeat and trembling). Added to this is the cognitive label (associating the physical reactions to fear), which is immediately followed by the conscious experience of the emotion (fear).

2.2.5 Schachter and Singer's Experiment

In a 1962 experiment, Schachter and Singer put their theory to the test. A group of 184 male participants were injected with epinephrine, a hormone that produces arousal including increased heartbeat, trembling and rapid breathing. All of the participants were told that they were being injected with a new drug to test their eyesight. However, one group of participants was informed of the symptoms the injection might cause, while other participants were not.

Participants were then placed in a room with another participant who was actually a confederate in the experiment. The confederate either acted in one of two ways: euphoric or angry. Participants who had not been informed about the effects of the injection were more likely to feel either happier or angrier than those who had been informed.

Schachter and Singer developed the two-factor theory of emotion. The two-factor theory suggests that emotion comes from a combination of a state of arousal and a cognition that makes best sense of the situation the person is in. For example, the two-factor theory of emotion argues that when people become aroused they look for cues as to why they feel the way they do. If a person experiences a state of arousal for which they have no immediate explanation, they will describe their emotions in terms of the cognitions available to them at the time.

If a person experiences a state of arousal for which they have an appropriate explanation e.g. 'I feel this way because I have just received an injection of adrenalin', then they will be unlikely to describe their emotions in terms of the alternative cognitions available. If a person is put in a situation, which in the past could have made them feel an emotion, they will react emotionally or experience emotions only if they are in a state of physiological arousal. The participants were 184 male college students, taking classes in introductory psychology at Minnesota University.

As soon as the participant arrived, he was taken to a private room by the experimenter and told that the aim of the experiment was 'to look at the effects of vitamin injections on visual skills', and was asked if he would mind having an injection of 'Suproxin' (made up name).

184 out of 195 participants agreed to the injection. They were given an injection (by a doctor) of either adrenalin (epinephrine) or a placebo, which was actually a saline solution, which has no side effects at all. The effects of the adrenalin are an increase in blood pressure, heart rate, blood sugar level, respiration rate, and blood flow to the muscles and brain, with an accompanying decrease in blood flow to the skin. This is often experienced as palpitations, tremors, flushing and faster breathing. The effects begin after three minutes and last from ten minutes to an hour.

The participants were then put in one of four experimental conditions:

- 1) Adrenalin Ignorant - participants were given no idea of the injection adrenalin
- 2) Adrenalin informed - participants were informed what adrenalin will do

- 3) Adrenalin misinformed - participants were given wrong information about adrenalin effect
- 4) Control group.

The researchers then made observational measures of emotional response through a one-way mirror, and also took self-report measures from the participants. In the euphoria condition the misinformed participants were feeling happier than all the others. The second happiest group was the ignorant group. This demonstrates that these participants were more susceptible to the stooge because they had no explanation of why their bodies were reacting differently.

2.2.6 Criticism of Two-Factor Theory

While Schachter and Singer's research spawned a great deal of further research, their theory has also been subject to criticism. Other researchers have only partially supported the findings of the original study, and have also shown contradictory results.

Other criticisms of the two-factor theory:

- Sometimes emotions are experienced *before* we think about them.
- There are actual physiological differences between emotions.

To sum up this theory, strong emotions are a common part of daily life, but how do we tell them apart? How do we know that we are angry rather than frightened, sad rather than surprised? One potential answer is provided by a third theory of emotion, that is the two-factor theory of emotions by Schachter and Singer.

According to this view, emotion provoking events produce increased arousal. In response to the feelings of arousal, we search the external environment in order to identify the cause of such arousal feelings.

These causes that we select play a key role in determining the importance we place on our arousal. If we feel aroused after a near-miss in traffic, we will probably label our emotion as fear or perhaps anger. If instead we feel aroused in the presence of an attractive person, we may label our arousal as attraction or love. In short, we perceive ourselves to be experiencing the emotion based on the external cues, as well as our processing them, and then suggest what we should be feeling. The theory is described as a two factor theory because it considers both arousal and cognitive appraisal that we perform in our efforts to identify the cause of such arousal.

2.2.7 Opponent-Process Theory: Action and Reaction to Emotion

Have you ever noticed that when you experience a strong emotional reaction, it is soon followed by the opposite reaction? Thus, elation is followed by a let-down, and anger is followed by calm, or even by regret over one's outbursts. This relationship is an important focus of the opponent-process theory of emotion.

The theory has two central assumptions:

- 1) Emotional reactions to a stimulus are followed automatically by an opposite reaction and,
- 2) Repeated exposure to a stimulus causes the initial reaction to weaken and the opposite reaction, to strengthen.

To cite an example, let us say a student who initially enjoys making speeches in public may experience a kind of a letdown after each speech is finished.

With repeated experiences in delivering speeches, the pleasure the student feels at addressing large crowds may weaken, while the letdown intensifies or occurs sooner after the speech is over. This would result in the student to gradually cut down on his public speaking activities.

We have pairs of emotions that act in opposing pairs, such as happiness and sadness, fear and relief, pleasure and pain. When one of these is experienced, the other is temporarily suppressed. This opposite emotion, however, is likely to re-emerge strongly and may curtail or interact with the initial emotion. Thus activating one emotion also activates its opposite and they interact as a linked pair.

To some extent, this can be used to explain drug use and other addictive behaviour, as the pleasure of the high is used to suppress the pain of withdrawal.

Sometimes these two conflicting emotions may be felt at the same time as the second emotion intrudes before the first emotion wanes. The result is a confusing combined experience of two emotions being felt at the same time that normally are mutually exclusive. Thus we can feel happy-sad, scared-relieved, love-hate, etc. This can be unpleasant but as an experiential thrill it can also have a strangely enjoyable element (and seems to be a basis of excitement).

Research

Solomon and Corbit (1974) analysed the emotions of skydivers. Beginners experienced extreme fear in their initial jump, which turned into great relief when they landed. With repeated jumps, the fear of jumping decreased and the post-jump pleasure increased.

Example

A person buys something to cheer themselves up but later feels guilty at having spent so much. So they buy something else to cheer up again.

A thrill seeker goes rafting. The excitement of the journey is a mix of fear of the next rapids and relief at having survived the last one.

To stop a person feeling one thing, stimulate the opposite emotion.

Tell people good and bad news in close succession. Then in the confusion get them to agree to your real request.

Defending

When you are stimulated to feel one emotion, pause and think about the future: will the opposite appear afterwards? Is this what you want?

When you feel conflicting emotions, take care not to agree to anything. Calm down first.

2.2.8 Lazarus's Cognitive Theory

The importance of cognitive interpretation of circumstances in determining the arousal levels is central to Lazarus Theory. In this theory he suggests that some degree of cognitive processing is essential before an emotional reaction, either overt or internal, can occur.

Lazarus et al. (1980) proposed a theory suggesting that emotion is a cognitive function, arising as a result of appraisal of a situation. A situation may be appraised as nonthreatening leading to positive emotional states.

The actual emotion experienced depends upon other characteristics or circumstances. A stimulus appraised as threatening leads to direct action, such as attack, retreat or freezing, together with physiological responses such as these which accompany negative states, including fear, anger or depression.

If direct action is impossible, coping strategies may be employed to reappraise the situation benignly, in order to live with the threat. These coping strategies may be simply to redefine the threat as 'not' as bad as it was first perceived.

For example, why does a wife continue to live with her husband who is violent towards her? The husband who is the stimulus is appraised as threatening, but for various reasons the wife cannot take direct action. Probably she cannot fight back, as her husband is stronger, she cannot run away, as she has no one and nowhere to go.

In such cases, the situation is to be reappraised and a different solution is to be found such as staying on with the husband and losing the extreme fear and doing things that may prevent violence etc. A different thinking pattern may also perhaps help. In other words, the woman may start thinking that the husband may not perhaps hit her again, and that he is very considerate the next day and so on. Living with this reappraised threat is less problematic than fear of the outside of that situation.

This theory is primarily descriptive, but the underlying mechanisms involved in emotion such as the relationship between cognitions, feelings and expressions of emotion are undefined to a great extent.

Thus to sum up the cognitive theory of emotions, it may be stated that as follows:

Lazarus' cognitive-mediational theory: This is an extension of Schacter-Singer theory. Cognitive appraisal of a situation is of primary importance in emotional states. In contrast, Zajonc (pronounced "ZI-ANTS," rhymes with "science") holds that we feel first and think later. In other words, the emotional state strongly influences the cognitive appraisal. More recently, cognitive scientists have proposed that there may be different components to our response to stimuli, but it is not productive to segregate them into cognitive vs. emotional categories.

2.2.9 Arousal Theory

Many researchers have suggested that arousal theory could form the basis of a theory of emotion. Arousal is a nonspecific physiological response, heightening a person's awareness. Mandler (1982), suggested that the interruption of ongoing thought process or behaviour sequences is sufficient to activate the Autonomic Nervous System. This creates a state of general physiological arousal, which is then given an emotional label, based on the cognitive interpretation of the stimulus. This suggests that all physiological and all emotional responses are the same and that differentiation arises solely at cognitive level. However sadness and depression are two emotions seen as parasympathetic responses and not simply a lack of arousal.

2.2.10 Social Theories of Emotions

Emotion can spread rapidly through large crowds, as the massive social proof leads us into extreme states. This explains much of crowd behaviour, where 'normal' people act in ways they may later deeply regret. Social contagion effects, can also occur when

people believe they have been infected by a disease. As more people show the (psychosomatic) symptoms, this is taken as proof that 'I am bound to get it'. To give an example, emotions take over when people are watching a football match and all of them react as if they are almost one. If you yourself go to this match, you will also get into the same emotional state of mind.

To wind someone up, take them to an exciting mass-audience event, from sports to rock concerts. Whilst they are in the flow of the moment, start whooping and dancing wildly. They may well join in. Then take a photo of them and show all your friends. When at crowd events, by all means get swept up in the enjoyment, but keep a part of you separate, watching for inappropriate behaviour in other people. Let it step in to prevent you from slipping over the cliff into hysteria.

There are number of theories which concentrate only on social aspect of emotion. As we all know there is a fundamental human need to belong to social groups. Evolution has taught us that survival and prosperity is more likely if we live and work together. However, to live together, we need to agree on common beliefs, values, attitudes and behaviours that reduce in-group threats act for the common good.

We thus learn to conform to rules of other people. And the more we see others behaving in a certain way or making particular decisions, the more we feel obliged to follow suit. This will happen even when we are in a group of complete strangers. We will go along with the others to avoid looking like a fool. However the forces are strongest when we care most about respect and love from others in the group. Thus families and friends can apply very strong normative influence in regard to emotions.

People with lower self-esteem and who crave approval of others may well be more easily influenced this way. When a person in a group does not conform, then they may be considered a deviant and both private and public advice may be given to them on how to fit in. If they still do not obey norms, they will eventually be ejected and membership of the group revoked. Many emotional expressions depend on this factor based on various situations.

National culture also has a significant effect upon emotional expression and emotions and people in countries like Japan, who have collectivist cultures, are far more likely to be influenced than in more individualistic cultures, such as in the USA (although it is a testament to the power of this effect that it still has a massive impact here). Solomon Asch showed a group of people a line on a card and asked them to find a matching line from a group of three lines on another card, one of which was pretty obviously the right choice. The catch was that all except one person in the group were collaborators and chose the wrong line. When it came to the 'victim's turn, guess what? In a range of experiments, 76% of them followed suit. The presence of just one supporter reduced this to 18%. To give an example fads and fashions lean heavily on normative social influence. So do racial, political and other situations of persuasion. All these influence emotional status considerably. Thus, to change a person's emotions and behaviour, put them in a group who (perhaps primed) clearly all exhibit the desired behaviour. Then engineer the situation so the person must exhibit the behaviour or face potential rejection or other social punishment. If they do not comply, ensure the group gives steadily increasing social punishment rather than rejecting the target person immediately. When they do comply, they should receive social reward (e.g. praise, inclusion).

This theory states that the likelihood that a person will respond to social influence in regard to emotional expression, will increase with:

- *Strength*: how important the influencing group of people are to you.
- *Immediacy*: how close the group are to you (in space and time) at the time of the influence attempt.
- *Number*: How many people there are in the group.

Increasing the numbers has a decreasing incremental effect (going from 2 to 3 has more effect than going from 66 to 67). In fact beyond four or five, the effect tails off rapidly. This is the *Social Influence Model*. The effect is most powerful when everyone in the group (apart from the person being persuaded) clearly agree.

When your friends try to persuade you about something, find out who is behind it, and who is just going along with things. Divide and conquer: set up a counter-group. Or expose the situation for what it is. The rules that a group uses for appropriate and inappropriate values, beliefs, attitudes and behaviours. These rules may be explicit or implicit.

Failure to stick to the rules can result in severe punishments, the most feared of which is exclusion from the group. A common rule is that the some norms must frequently be displayed; neutrality is seldom an option.

Other norms include:

- Injunctive Norms are behaviours which are perceived as being approved of by other people.
- Descriptive Norms are perceptions of how other people are actually behaving, whether or not these are approved of.
- Explicit Norms are written or spoken openly.
- Implicit Norms are not openly stated (but you find out when you transgress them).
- Subjective Norms: Expectations that valued others have about how we will behave.
- Personal Norms: Standards we have about our own actions.

Norms are often transmitted by non-verbal behaviour, for example with 'dirty looks' when people act outside the norms. They may also be transmitted through stories, rituals and role-model behaviour. Norms have very strong influence on emotions. People get swayed by the norms and get emotional when there is a deviance from the norm. For instance, a common group norm amongst academics is that dress is casual (with the underlying implication that what goes on in the mind is more important than what goes on the body).

Think up a rule. When other people transgress it, frown. When they follow it smile. Before long they'll get the point and you'll be smiling all of the time. Identify the rules that other people are putting on you as a condition for being in their group. Do you really want to follow these rules? Are there any which are particularly irksome? Can you lead a revolution? Is it really worth putting up with these, or is leaving the group a better option?

When we do not know how to behave, we copy other people. Even in regard to emotions we tend to go by others' emotions. Thus others act as information sources for how to behave or what kind of emotions to express as we assume that they know what they are doing. Also because we care a great deal about what others think about us, this provides a safe course of action, that is at the very least, they cannot criticize us for our actions.

We are more likely to use this principle when the task in question is important to us.

This leads to such effects as people ignoring public muggings and cult members being led into bizarre and even suicidal acts. This shows how people can be swayed by emotions.

Private acceptance occurs when we genuinely believe the other person is right. This can lead to permanent changes in beliefs, values and behaviours. On the other hand, public compliance occurs when we copy others because we fear ridicule or rejection if we behave otherwise.

Informational social influence (also called *social proof*) occurs most often when:

- The situation is ambiguous. We have choices but do not know which to select.
- There is a crisis. We have no time to think and experiment. A decision is required now!
- Others are experts. If we accept the authority of others, they must know better than us.

In other words, when we are not sure of our own ability to know what to do, we will look to others to tell us.

For permanent change, precede this by sufficient work that they trust you completely and view you as an authority with enviable values and beliefs.

- i) Averill’s social theory: According to Averill (1983), emotions are considered as transitory social roles. A person adopts the role defined by his or culture for the emotion being experienced.
- ii) Weiner’s attributional theory: This theory suggests that we attribute causes to all events that happen irrespective of having adequate information. Weiner sees emotions as coming from these attributions. These may initially be good or bad reactions, which are then refined into recognisable emotions once a cause has been attributed to the situation.

Self Assessment Questions	
Match the following:	
A. Stimulus leads to bodily arousal first, which is then interpreted as emotion	1. Opponent Process theory
B. Strong emotional reactions are followed by opposite emotional reaction	2. Arousal
C. State of mental readiness for activity	3. Cannon-Bard Theory
D. Reactions coming from attributions later are refined as emotions	4. James-Lange theory
E. The physiological reaction and the emotion are assumed to occur at the same time	5. Lazarus theory
F. Two factor theory	6. Schachter Singer theory

2.3 LET US SUM UP

Different theories have been put forward by various psychologists and physiologists to explain basically about the emotion and to explain the number of events occurring during emotions. The theories of emotions include James-Lange theory, Cannon-Bard theory, Schachter-Singer theory, Opponent-process theory, Lazarus's cognitive theory, Arousal theory and Social theories of emotions. The James-Lange theory contends that the emotion provoking stimuli induce physiological reactions and these form the basis for subjective cognitive states called as emotions. The Cannon-Bard theory of emotion suggests that emotion provoking events simultaneously elicit physiological reactions and the subjective cognitive states are labeled as emotions. Another theory known as Schachter-Singer theory suggests that when we are aroused by emotion provoking stimuli, we search the external environment for the cause of our feelings of arousal. The causes we select then determine the emotions we experience. According to opponent process theory, strong emotional reactions are followed by opposite emotional reactions.

2.4 UNIT END QUESTIONS

- 1) What are Emotions? Describe the characteristic features of emotions.
- 2) Why does emotion arise?
- 3) What are the effects of emotions on the behaviour of the individual?
- 4) Discuss each theory of emotions and bring out the salient features.
- 5) What is the hallmark of Schachter Singer theory?
- 6) What are social theories of emotions?

2.5 GLOSSARY

Two factor theory of emotion	:	Schachter's theory which proposes that both physiological processes and cognitive appraisal are implicated in the experience of emotions.
Arousal	:	is defined as a state of mental readiness for an activity.
Cognitive appraisal	:	it is a process through which we can assess the possible effect of a situation on our state of wellbeing, before responding to it.

2.6 SUGGESTED READINGS AND REFERENCES

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UNIT 3 AROUSAL LEARNING AND PERFORMANCE

Structure

- 3.0 Introduction
- 3.1 Objectives
- 3.2 Physiology and Emotions
- 3.3 Autonomic Nervous System
 - 3.3.1 The Role of Hypothalamus
- 3.4 Emotion and Cognitions
 - 3.4.1 Emotion and Arousal
 - 3.4.2 Arousal and Learning
 - 3.4.3 Emotions and Performance
- 3.5 Let Us Sum Up
- 3.6 Unit End Questions
- 3.7 Glossary
- 3.8 Suggested Readings and References

3.0 INTRODUCTION

In the previous unit you had read about various theories of emotions. In the present unit we shall see about arousal, learning and performance. The unit focuses on mainly the meaning of arousal and its role in learning and performance. It depicts very clearly the link between emotions and arousal, learning and performance. In the previous unit we have seen that emotions are strong feelings and these, at many times, act as motivating factors in enabling an individual to perform certain acts to satisfy the needs. Before knowing these it is very essential to know the physiological basis for emotion which includes the anatomy and physiology of various endocrine glands and the Autonomic nervous system and their role in emotional experience. This unit explains how the physiological changes take place when there is arousal because of the role of endocrine glands and autonomic nervous system.

3.1 OBJECTIVES

After completing this unit, you will be able to:

- Describe what arousal means;
- Explain the physiology of emotions;
- Identify the effects of emotions on arousal; and
- Analyse the relationship between emotions, learning and performance.

3.2 PHYSIOLOGY AND EMOTION

Our emotional reactions and the changes happening both internally and externally due to emotions are because of the Endocrine glands and the Autonomic nervous system. So it is very essential to understand the functions of hormones and the Autonomic nervous system (ANS). This will help us to know the physiological changes that take

place in our body. When there is Arousal it brings about the changes in our behaviour. Let us look into these details.

The Ductless Glands: In our body there are a number of glands which maintain and stimulate the normal process of growth and development. Physiology deals with all these in detail. In psychology we are more concerned with some of the glands called as ductless glands. The interplay of these ductless glands is largely responsible for the physiological changes connected with experiences of emotion. These glands are called as ductless glands because they have no ducts or pipes. Their secretion is directly poured into the blood stream. They are also called as endocrine glands. These secretions are called as hormones. These hormones have the power to accelerate or retard the activity of the body and its organs. The increased physical energy available during an emotion is due to these hormones which are secreted at an accelerated rate while under certain emotions. These endocrine glands are: the thyroid, the parathyroid, Adrenal, the Gonads, the Pituitary and the Pancreas. The figure below presents the different glands in different areas of our body. (Refer to www.justintra.net/nepa/what.php)

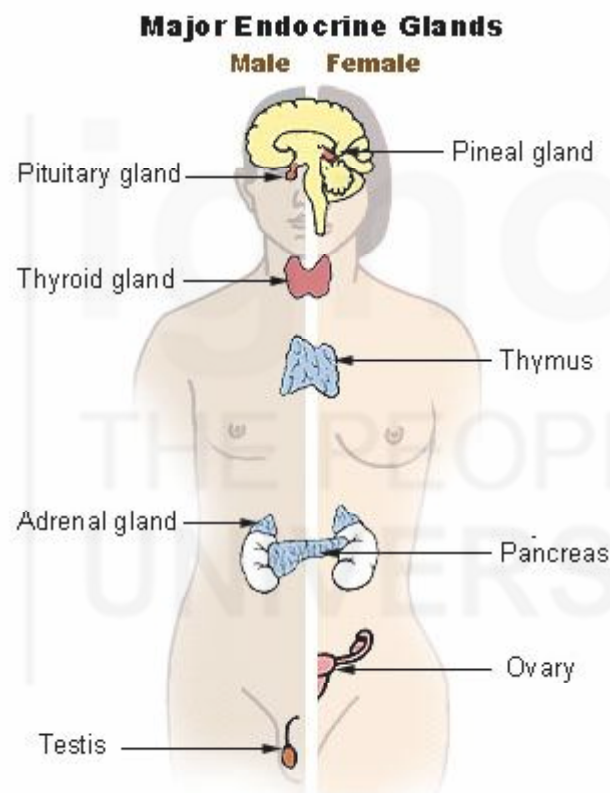


Fig. 1

A proper balance of the secretions from different glands is necessary to ensure good physical and mental health. Though we consider each of these glands separately, it should be remembered that these endocrine glands are highly interdependent. There is constant interaction amongst these glands.

The thyroid gland: This is located at the base of the neck and the hormone secreted by this gland is called thyroxin. Thyroxin is essential for the metabolism of the body. If this hormone is not adequate, the amount of oxygen consumed becomes less and metabolism gets affected. When thyroid is active to an abnormal extent the individual becomes restless, irritable and unstable. If the gland is destroyed the individual becomes sluggish and forgetful. Malfunctioning of this gland during early childhood will affect physical growth and development as well as intelligence. These glands thus influence temperamental, emotional and intellectual characteristics of an individual.

The parathyroid gland: These are still smaller glands lying near the neck close to the thyroids. They are four in number. These are known to control assimilation of calcium. They have also important functions with regard to emotions. If parathyroids are defective, the individual becomes restless and emotionally unstable. It might be noted that similar restlessness is produced by excess of thyroxin, the hormone of thyroid gland. Thus we find thyroid and parathyroids are opposed to each other in their function. Hence for normal health, appropriate balance between the two will be necessary.

The adrenal glands: These are the little glands located near the kidneys. Each adrenal gland has two parts, an outer covering called cortex and the inner part called the medulla. Each part has its own function and hormone. The medulla or the inner area secretes the hormone called 'adrenalin'. Adrenalin is a very potent hormone having various effects on our general physiological working. If a small quantity is injected into the blood it can produce changes like strong rapid heart beat, delay in the activities in the stomach and intestines, release of extra sugar from the liver, retarding muscular fatigue etc. Thus we find that the accelerated activity and increased physical strength and stamina during some emotional experiences are due to extra discharge of adrenalin.

The hormone secreted by outer part of the cortex of the adrenal gland is called 'cortin'. Absence of this hormone results in death. It helps in sustained muscular activity. Some of the psychological characteristics resulting from want of cortin produces pronounced masculine characteristics in women like change in voice, growth of beard, etc.

The Gonads: The gonads are the basic sex organs forming the ovary in female and testes in males. The primary function is to produce the reproductive cells viz., ovum and the spermatozoa. These glands are also responsible for general developmental process of the individual. These gonads begin to function only at the time of puberty, during which they promote the development of sex organs and sex characteristics. Most of the personality characteristics resulting from over-sexuality depend upon these hormones.

The pituitary gland: The pituitary gland is situated at the bottom of the brain. It is also called as the master gland because it controls most of the other glands. Part of the pituitary gland produces hormones which stimulate all the other glands. These glands actually depend on the pituitary gland for their normal development and normal functioning. The other part of pituitary gland controls to a large extent the process of physical growth.

The Pancreas: It is situated near adrenals and produces the hormone called insulin which helps in burning of sugar to produce energy. Failure of pancreas causes the disease Diabetes and an excess of insulin will produce anxiety, restlessness and mental distress.

We have so far emphasised the role of endocrine glands in producing certain psychological characteristics and also physiological changes connected with emotions. It should be kept in mind that the form of any one particular psychological characteristics as restlessness, or under sexuality, one cannot make the diagnosis that a particular gland is not functioning. The outward expressions of these psychological characteristics and physiological changes also depend in case of humans, to a large extent on various social and cultural factors.

The endocrine glands are closely related with functioning of autonomic nervous system and Hypothalamus. Hence it is also very essential to understand autonomic nervous system and the Hypothalamus.

3.3 AUTONOMIC NERVOUS SYSTEM

The ANS is a part of central nervous system but has autonomy of its own. The autonomic nervous system is controlled more by hypothalamus and the cerebral cortex. It is directly involved in our emotional life. As said earlier, that one of the characteristics of emotion is that, if we bring the cerebral cortex into action and reason out things, the emotion tends to disappear. Thus it can be seen that emotions are related to the interbrain rather than the cerebrum.

The ANS has its own important functions to perform. The ANS has its own nerves that are connected to various glands and internal organs such as heart, lungs, liver, stomach, kidneys, etc. The autonomic nervous system has got two functional divisions called as parasympathetic and sympathetic division. Both these divisions are connected with all the internal organs and glands. The parasympathetic division controls the glandular activities that are needed for the health of the organism. These include nutrition, oxidation promoting growth, sex functions etc.

In the normal state all these biological functions are controlled and promoted by parasympathetic part of the ANS. The sympathetic division comes into activity when the individual is in a state of danger or emergency. The extra energy which is needed in a dangerous situation is released and controlled by this sympathetic system through the relevant endocrine glands. When the sympathetic division is active the parasympathetic functions are withheld or suspended. This happens because they perform the opposed functions. For example, when there is danger it is more important to overcome that than to digest one's food or attend to some other biological need.

The threat to the very existence of the organism should be attended to at first. In recent years some psychologists have noticed that individuals differ in this differential functioning. Some individuals tend towards more of sympathetic functioning and some towards parasympathetic functioning.

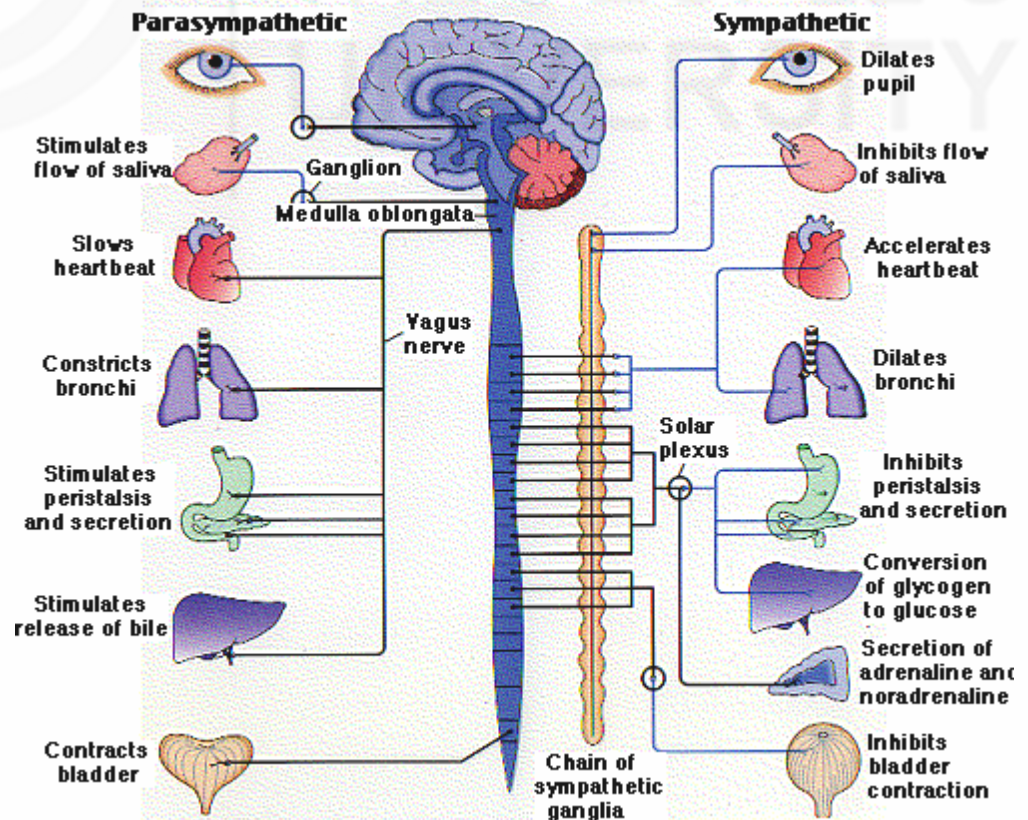


Fig. 2

3.3.1 The Role of Hypothalamus

The hypothalamus is considered to play an important role with regard to the experiencing of emotion. This was first noticed when it was found that the individuals with injured hypothalamus became incapable of having emotions. They were characterised by an apathy. Subsequently experiment were also conducted with animals conforming this result. The experiments, however, have not fully explained the nature of the part played by the hypothalamus. The available results show that the overt behavioural expressions during emotion are activated by the hypothalamus. The conscious experience of feeling of emotion and the important aspect of emotional experience, viz., its being directed towards some particular goal or situation, have not been in any manner explained by these experiments conducted on animals. When hypothalamus is electrically stimulated in animals, they undergo some psychological changes and bodily expressions similar to those obtained in actual emotional experience. But many observers have noticed a kind of unreality about it, because taking the whole context into account, the animal's behaviour seemed artificial and significantly different from that of an animal undergoing a real emotion.

3.4 EMOTION AND COGNITION

How thoughts are shaped by feelings and feelings are shaped by thoughts.

The findings of many different studies indicate that our current moods do indeed influence many aspects of cognition. It has been found that our moods, or affective states as they are often termed (Isen, 1987), strongly influence our perception of ambiguous stimuli. In general we perceive and evaluate these stimuli more favorably when we are in a good mood than when we are in a negative one.

The positive and negative moods exert a strong influence on memory. In general, information consistent with our current mood is easier to remember than information inconsistent with it. Positive and negative affect have also been found to influence the way in which information is organised in memory. For example, when we are in good mood we tend to learn better as we have good memory. Similarly in bad state of mood there is a negative effect on memory and hence there will be lot of forgetting happening obstructing the learning process.

3.4.1 Emotion and Arousal

We all feel emotions on an ongoing basis. At times we get into such a state of arousal that our bodies experience heightened physiological activity and extremes of emotion. This can be both powerful and dangerous, both for ourselves and for others.

States of arousal can be positive or negative and may include any of these such as fear, anger, curiosity and love, which are felt with an overpowering intensity that drives us to act, often in an unthinking way.

Emotional arousal is considered as a *process*, which means it happens as a sequence over time. The first step here is that arousal often happens through a trigger, which appears through one of our senses. Thus, for example, arousal can happen through:

- Touch: A punch, kiss or caress
- Vision: Seeing something shocking or desirable
- Hearing: A sudden noise or somebody saying something
- Smell: An evocative odour that triggers powerful memories
- Taste: Of wonderful or disgusting food

Arousal typically happens when the body releases chemicals into the brain that act to stimulate emotions, reduce cortical functioning. When the cortical functioning is reduced, to that extent the persons' conscious control is also reduced. Thus the entire body gets the maximum energy input from various sources and thus becomes ready to act against the stimuli that is creating the imbalance.

In situations of negative stress, we enter the fight or flight state, when primitive responses designed to keep us alive are kicked into motion.

In sexual arousal, our bodies prepare themselves for sexual intercourse and our brains go into overdrive in a state of intense desire for completion of this most basic of acts.

In other states of stimulation, people report feelings of 'being more alive', as senses become more acute and the skin prickles in excitement.

For many people being aroused is a pleasurable state that plays to basic needs for stimulation.

Even negative states such as fear and anger have their benefits. Angry people report feeling all-powerful, perhaps harking back to neonatal states of infantile omnipotence.

Fearful people also may access early memories of being subsequently comforted. Fear is also a common factor in many hobbies, especially extreme sports, where people do things deliberately to become aroused, from skiing to watching horror movies.

In states of depression, the opposite occurs and the person may be unable to feel any sense of arousal, interest and engagement with the world.

By understanding the process by which people become aroused, one can gain control of whether and how arousal happens. The first place to start with this is one's own self. If the person becomes emotionally aroused, then the possibility of the person losing some control over thinking and other cognitive functions become high. This is often not a good thing, so learning self-control can be a critical skill.

The next step is to understand how others become aroused and learning to control that process, from activating triggers to managing the emotions.

Arousal has been defined as a 'state of mental readiness for activity'. Arousal is mediated in the CNS through the reticular formation. Low arousal may be manifest by a drowsy or bored state, indicating a low level of activity in the reticular formation and the areas of the cortex to which it projects. High arousal states, excitement, panic or hysteria, are the behavioural equivalents of high neural arousal. Arousal is nonspecific and can be assumed to apply to many forms of motivation. Arousal theory suggests that animals, including humans, are constantly seeking an optimum level of arousal. Extremes of arousal produces stress and a corresponding decrement in performance (Yerkes- Dodson law). Performance increases up to an optimum level of arousal. If arousal continues to increase, performance declines. Stress may occur. The figure below present s the detail. (Taken from Dodson + law & btnG =Search+images

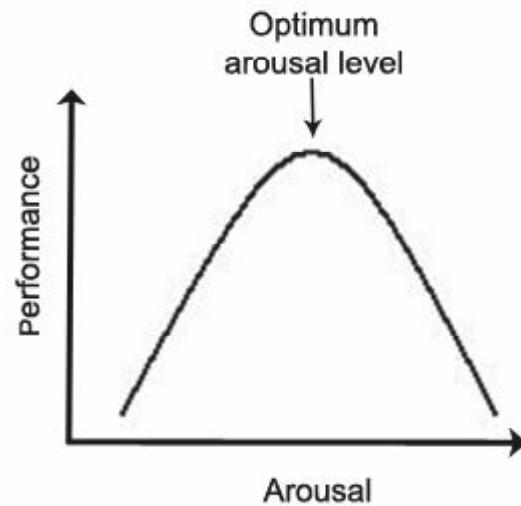


Fig. 3

<http://www.google.com/images?sa=3&q=Fig.+3.4%28i%29%3A+Yerkes-+>

A higher level of arousal is necessary for a simple, boring task, while slightly lower level of arousal for more complex task. Arousal level vary between individuals. You may have noticed this phenomenon yourself: if you become too highly stressed before an exam, perhaps because you are desperate to do well, your performance is likely to be lower than you would expect of yourself. The nonspecific idea of arousal would suggest that all stimuli would produce the same pattern of arousal; in real life, researchers have not found this to be so. As a model of stress, the concept of arousal has limited use.

Research has found that different tasks require different levels of arousal for optimal performance. For example, difficult or intellectually demanding tasks may require a lower level of arousal (to facilitate concentration), whereas tasks demanding stamina or persistence may be performed better with higher levels of arousal (to increase motivation). For example, Why do you do those things which you like very well and which is your passion? The answer to this question is very simple. Anyone would say that the performance is because of interest within you. It is exactly right because the strong feeling in this case is the amount of liking towards that particular thing energizes the person by arousal effect to perform much better.

3.4.2 Arousal and Learning

It is a known fact that performance of any individual is directly based upon the learning of that individual. For example, a student performs well when his learning had been of a good standard. If the student did not learn the task which he/she has to perform then definitely their performance will be poor as performance is based on learning.

Man learns many things because of his superior intelligence and the power of retention and recall. Factors of arousal which can be in the form of strong motives also enables the individual to learn. For example, if a child has love towards parents then the child learns to do those things very easily by learning them to do very quickly. Similarly if the child had not been aroused, he may feel bored and hence would learn the task rather later than the child who has been aroused optimally.

To give an example, we may say that because of passion towards driving a car, the individual pays more attention and energy to learn what he wants and satisfies his desires. An angry person wanting to take revenge on the other person learns the necessary things much quickly to satisfy his goal when compared to another person who does not have any emotional involvement in learning the same task.

3.4.3 Emotions and Performance

Emotions act as a very important tool in helping in the performance of an individual. Things which are normally done at a very low pace are done at a much faster rate in individuals who are under some emotional arousal. For example, a person may run faster than ever before at the site of a snake or a tiger because of the emotion called fear is experienced by him. An angry man for example can defeat a mighty man because of his extra energy due to his emotion called anger. However, if the arousal is too high then the performance of the individual will get adversely affected. For example, a student who is too tensed and very anxious about the exam may not be able to concentrate properly on preparation, forgoes sleep and food because of fear and thus the performance gets adversely affected.

A certain amount of arousal can be a motivator towards change obtained through learning. But too much or too little will be acting against the learner. Too little arousal has an inner effect on learner impeding learning process and too much arousal has an arousal effect impeding learning and performance in an individual. Thus it can be stated that optimal learning and optimal performance depends on optimal level of arousal.

Self Assessment Questions

1) What is the effect of high arousal level of an individual on their performance on a particular task?

.....

2) What does Yerkes- Dodson law state?

.....

3) How are emotions and performance related?

.....

3.5 LET US SUM UP

Arousal is a state of mental readiness for activity. During this state the various endocrine glands function accordingly in releasing their hormones which act as the cause for bringing various internal and external changes in the body of an individual. The changes in ANS comprising of sympathetic and parasympathetic nervous system brings about changes in making an individual to act according to the stimulus experienced. According to Yerkes- Dodson law, the Performance increases up to an optimum level of arousal ; if arousal continues to increase, performance declines. Optimal learning and optimal performance depends on optimal level of arousal.

3.6 UNIT END QUESTIONS

- 1) Explain the role of emotion on learning and performance.
- 2) How does arousal affect performance?
- 3) Explain the role of endocrine gland ad ANS in emotions.

- 4) Discuss the physiology of emotions.
- 5) How are emotions related to cognitions?
- 6) Discuss the role of autonomic nervous system in emotions.

3.7 GLOSSARY

Arousal	: state of mental readiness for activity.
Endocrine glands	: Glands that are ductless and directly pouring their hormones into blood.
Adrenal gland Adrenal gland	: One of a pair of small glands, each of which sits on top of one of the kidneys. The adrenal is made up of an outer wall (the cortex) and an inner portion (the medulla). The adrenal glands produce hormones that help control the heart rate, blood pressure, the way the body uses food, and other vital functions. The adrenal cortex secretes steroid (cortisone-related) hormones and mineralocorticoids that regulate the levels of minerals such as sodium and potassium in the blood.
Thyroid gland Thyroid gland	: A gland that makes and stores hormones that help regulate the heart rate, blood pressure, body temperature, and the rate at which food is converted into energy. Thyroid hormones are essential for the function of every cell in the body. They help regulate growth and the rate of chemical reactions (metabolism) in the body. Thyroid hormones also help children grow and develop. The thyroid gland is located in the lower part of the neck, below the Adam's apple, wrapped around the trachea (windpipe). It has the shape of a butterfly: two wings (lobes) attached to one another by a middle part.

3.8 SUGGESTED READINGS AND REFERENCES

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UNIT 4 MANAGEMENT OF EMOTIONS AND PSYCHOLOGICAL STATUS

Structure

- 4.0 Introduction
- 4.1 Objectives
- 4.2 Emotional Intelligence
- 4.3 Emotional Competency
- 4.4 Management of Emotions
- 4.5 Emotions and Psychological Status
- 4.6 Let Us Sum Up
- 4.7 Unit End Questions
- 4.8 Glossary
- 4.9 Suggested Readings and References

4.0 INTRODUCTION

The nearest and dearest emotion to many people is happiness which is a state of well-being and contentment that is much to be desired. According to Mayers and colleagues (2000), happiness is the key to many things enabling the perception of the world as a safer place, healthier and more satisfying lives, and perception also that one has the ability to make decisions more easily.

Emotions play a very vital role in every individual's life. They add colour to our lives and without emotions there is no meaning to our lives. Life becomes boring and monotonous without presence of emotions. It makes life beautiful and also lively but at the same time the same emotions can make life even worst and miserable by making them commit worst of the crimes. It is very essential for an individual to understand the importance of emotions in our lives and the role they play making our lives happy and joyful and also in making our lives miserable and sad. The modern concept of emotions focuses on emotional competency and emotional intelligence. Having knowledge of emotional intelligence and enhancing ones own emotional competency levels to become emotionally competent helps in contributing towards maintaining good psychological status.

4.1 OBJECTIVES

After completing this unit you will be able to:

- Explain the importance of emotions on psychological health;
- Define and describe emotional intelligence;
- Explain emotional competency;
- Discriminate between emotional intelligence and emotional competency; and
- Identify strategies in the management of emotions and its influence on psychological status.

4.2 EMOTIONAL INTELLIGENCE

The modern concept of emotions focuses on Emotional competency and emotional intelligence. The term emotional intelligence has been widely used by many people. It was first brought into focus that intelligence is not just the general ability but has three different levels of functioning i.e., abstract intelligence, mechanical intelligence and social intelligence. Later Gardner(1983), has brought about the concept of multiple intelligence. Mayer and Solovey(1990) had coined the term “Emotional Intelligence”, being aware of the previous work on non-cognitive aspects of intelligence. They described emotional intelligence as a form of social intelligence. In the early 1990’s Daniel Goleman became aware of Salovey and Mayer’s work and eventually led into the study in his book “Emotional Intelligence”. Goleman has tried to make a distinction between emotional intelligence and emotional competencies. It is referred in relation to emotions. The merging of emotion and intelligence as a cognitive ability under the caption of ‘Emotional intelligence’ was proposed by a Yale Psychologist (Salovey, Woolery, & Mayer, 1990) of university of New Hampshire. Emotional intelligence may be more clearly distinguished from general intelligence as involving the manipulation of emotions and emotional content.

Emotional intelligence determines our potential for learning the practical skills based on the five elements: self awareness, motivation, self regulation, empathy and adeptness in relationships. Emotional intelligence involves striking a balance between emotion and reason in which neither is completely in control. Emotionally intelligent people know when it is right to control their emotions and when it is right to be controlled by them. Emotional intelligence also involves the ability to read other people’s emotions correctly.

4.3 EMOTIONAL COMPETENCY

Emotional Competency is “A learned capability based on emotional intelligence that results in outstanding performance at work (Cary & Goleman, 2005). Emotional Competencies are job skills that can, and indeed must be learned. An underlying Emotional Intelligence is necessary, though not sufficient, to manifest competency in any one of the four Emotional Intelligence domains, or clusters. Although our emotional intelligence determines our potential for learning the practical skills that underlie the four Emotional Intelligence clusters, our emotional competency shows how much of that potential we have realised by learning and mastering skills and translating these skills into coping strategies of practical life. Emotional Competency is “A learned capability based on emotional intelligence that results in outstanding performance at work. Let us take an example, Let us say that an individual travelling in the bus accidentally stamps another man’s leg and immediately says sorry for that. But the other person whose leg was stamped could not control the anger because of pain and starts shouting at the person and makes a fuss of that. If we take this person into consideration who had stamped, even though knowing that the other person is provoking to fight, he simply ignores and continues to move on his way by handling the situation intelligently without being effected.

Emotional competency thus is an efficiency to deal effectively with several dissociable but related processes. It is a blending of five competencies (Coleman, 1970):

- i) **Adequate Depth of Feeling:** It is feeling capable with all reality assumptions associated with effective judgment and personality integration ensuring vigorous participation in living. Example: Having very slight impact of day to day events on oneself.

- ii) **Adequate Expression and Control of Emotions:** It is to accept emotions and have adequate control over them marked by adequate emotional expressiveness based on fulsome expression and control of emotions. To give an example of this we can say that a person does not lose control at all even on major life incidents.
- iii) **Ability to Function with Emotions:** It refers to the ability of an individual not to get affected by emotional situations. He maintains adequate mode of functioning in performing daily routine actions properly. For example, even in the conditions of feelings like fear, anxiety, anger the individual will be able to take decisions and does his job properly.
- iv) **Ability to cope with Problem Emotions:** It is to have understanding of the role of sensitivity and the detrimental effects of problem emotions and resist their harmful effects. To give an example, it may be stated that the fear of strange circumstances does not remain or linger on in the individual.
- v) **Encouragement of positive Emotions:** It is to have a high proportion of positive emotions, which show a constructive influence in the dynamics of behaviour to ensure a meaningful and fairly well integrated life. To take an example, let us say that an individual never misses an opportunity to be happy.

An individual is said to be emotionally competent when they possess competent ways of handling the emotions as described in the above components of emotions.

4.4 MANAGEMENT OF EMOTIONS

To handle emotions and manage emotions effectively, it is very essential to know about emotions, which involve the meaning of emotions and biological basis of emotions, the nature of emotions, types of emotions and effects of emotions on health of an individual.

The most important aspect of managing emotions primarily focuses on the emotional intelligence of the individual and to become emotionally competent.

Some of the common means of handling emotions include:

- Identify the emotion which you are feeling at the moment.
Example: if you had a fight with your friend then it is very important to know how you are feeling at that point of time. Ask yourself whether you are angry with your friend or sad for the thing which had happened.
- Accepting the emotions without denying them.
Example: If you are angry or jealous or sad, then let yourself know that you are jealous etc., and say to yourself that you are angry or jealous rather than denying by not accepting.
- Not hanging on too much by thinking excessively about the unpleasant emotions if being experienced.
Example: If you are sad because of the thing which happened, then do not keep thinking about it again and again all the time keeping away all the things which you have to do. Try to do something which diverts your mind from the thought that makes you feel sad by remembering the incident.
- Sharing the feelings with some one whom you trust rather than piling up them within one self.

Example: It is very essential to vent out your feelings to the right person whether it is your friend, partner or parents on whom you have confidence. You feel lightened and released. This does not allow the emotions to get piled up within yourself leading to frustration and stress which may further lead to mental disturbances.

- Expressing out your emotions when you experience them.

Example: When you experience sadness express your feeling by letting the other person know how you are feeling or weep so as to get relief from your emotion. If being happy share your happiness to express either in words or acts. Do not express too much of your emotions or too less of them. Express them appropriately.

- Cultivate regular habits of exercising, taking good diet. A good diet and exercises keeps you both physically and mentally healthy.
- Think optimistically always and do not forget to laugh. Always think positively. This keeps you charged and motivates you to do your deeds.
- Change the things which you can change. Things which we can change need to be worked out and implemented for bringing changes. Ex. If I want to secure good percentage of marks, then I need to work hard by motivating myself.
- Identify the things which you can change and which you cannot change by knowing the difference between these two. Life and death are not in our hands and there are few things which happen in our lives are not in our control and cannot change them. Those things only have to be accepted.
- Listening to happy and joyful songs and avoiding being isolating when being sad or low.

4.5 EMOTIONS AND PSYCHOLOGICAL STATUS

It has been pointed out in the earlier section that emotions are accompanied by physical changes in the body. This can be reduction in salivation, that is the mouth becomes dry, there is a reduction in salivation, increase in skin perspiration, that is the person becomes almost wet with perspiration, and there is sudden energy flow due to the secretion of epinephrine or adrenaline. There is also another type of energy flow which is called as the *ch'i* that flows through the acupuncture meridians in the body. This felt energy flow (the initial arousal) is the emotion, whether pleasant or unpleasant. It may be triggered by a cognition (seeing or remembering) or by a facial expression (frowning or smiling). When no energy flow is triggered, there is no emotion.

Joy as an emotion, for example, is a very pleasant emotion and we feel so relaxed when we experience that emotion. This joy emotion can be left as it is without any interference or processing, unless it in some way or the other makes a person incapable of experiencing joy or the individual resists that joyous emotion for some reason. This has to be explored and we have to make sure that this negative aspect is removed and the individual is able to experience that joyous emotion.

Let us say a young child sees a snake. She has been previously told about poisonous snakes and their dangers. She presently believes (cognizes) that she is in mortal danger. The whole body prepares to flee, triggering the release of adrenalin (and *ch'i*), and she runs to a safe place. Already safe, the child now directs her attention to, or is distracted by, other things, and she ignores the flow of energy that is still ongoing. Somebody converses with her about an entirely different topic, and her mind is distracted from the fear experience. The flow of the energy is stopped, thus freezing it somewhere in the

system. This frozen energy stays there as a block or congestion until released. It may stay there for 10 days, 10 years or a lifetime. Remember when we undergo a similar experience once again in life, we may draw upon from this frozen energy and use the same to overcome the fear or the concerned strong emotion.

Next time the child sees a snake, the biologic system sends out the fight-or-flight energy or ch'i response, pushing or putting pressure on the frozen energy that clogs the system. This triggers the trapped energy, which is felt as an unpleasant energy movement in the body. It is strongly or weakly felt depending upon the quantity of frozen energy triggered. This felt energy is the fear. The biologic response of fight-or-flight that is accompanied by a rush of adrenaline or ch'i does not constitute fear itself. It is the triggering of this frozen energy that is felt as fear. This triggered energy is felt as a hardening in the pit of the stomach, or as a sinking feeling, or a weakening flow of energy in the extremities. It may be felt as a tingling sensation or warmth. When strong enough, it causes numbness, or even stiffness of the muscles.

When the body has no energy blocks or congestions during times of tension or crisis or danger, the natural energy flows and is felt as heightened alertness or preparedness, like a table tennis player's heightened state while playing, but which is not felt as fear.

In a person who experiences fear, it means that some prior unpleasant experience has accumulated a reservoir of energy in certain specific parts of the body that has not flowed properly when it was aroused. It is this congestion of energy that is stimulated by the cognition of the threat. Emotional pain therefore is the presence of this energy congestion that is triggered by a memory, a situation, or a stimulus. When this congestion dissipates or is released, the emotional pain disappears.

This understanding of the nature of emotional arousal is based on hundreds of processing sessions with people whose fears or anger or resentment disappeared after the congested energy has been allowed to flow or be released. Such release normally occurs within thirty minutes, although in a minority of cases it takes much longer.

We will now look into the nature of unpleasant emotions, and understand why self-awareness processing is able to resolve many emotional burdens very quickly.

Basic and Derivative Emotions

Unpleasant or painful emotions are of various kinds. Some examples are: hurt, resentment, anger, irritation, rage, fury, wrath, worry, fear, guilt, envy, jealousy, sadness, depression, gloom, melancholy, loneliness, anxiety, panic, shame, embarrassment, exasperation, annoyance, anguish, distress, aversion, disgust, remorse, regret, despair.

While there are many types of unpleasant emotions, there are only a few basic or primary emotions. The other emotions are derivatives of these basic emotions. Knowing how to handle root emotions will enable us to deal effectively with the secondary derivative emotions.

There are six basic negative emotions, as far as we can presently determine. They are fear, anger, hurt, aversion, dejection, and guilt. These basic emotions are not reducible into one another. This list is not meant to be final and does not, for our purpose, include the positive emotions, such as joy, since we are presently only concerned about effective management of emotions that are obstructive to human growth and maturity.

1) ***Fear***

Fear is a biological reaction that has been embedded into our system for self-preservation. We share it with animals. In human beings, however, the fear reaction develops into

deeper levels of complexity and subtlety that engender a wide variety of downstream secondary emotions.

Research among infants shows that there are only two natural fears: fear of loud sounds, and fear of falling. All other fears are acquired: fear of snakes, dark, strangers, heights, people, etc. Fear is a major cause of human unhappiness and is a serious obstacle to our growth. So much so, that the self-transformation process devotes special attention to it.

The following are the secondary derivative emotions of fear:

Worry is a mechanism of our psyche that prompts us to do something. The prompting energy is fear – usually fear of some consequence. Because it is fear, the person tends to avoid thinking about it. Thus worry tends to perpetuate itself in a circular way – the fear causes non-action, and non-action further causes worry. We will devote an entire chapter on this important negative emotion and how to deal with it.

Anxiety is a fear whose object is nonspecific or vague, whereas worry is about something specific and identified. Anxiety is the result of repeated unprocessed fears that have accumulated in one's subconscious. It has become a vague feeling about an impending misfortune but which cannot be dealt with because it is unspecified. To resolve it, it must first be converted to specific worries, and then one can apply the guidelines on how to handle worry.

Panic is an overwhelming fear that makes the person confused and unclear about what to do. This is the accumulated result of many fears, worries and anxieties that have not been resolved and not been handled well. It sometimes results in panic attacks, those inexplicable feelings that may not have any immediate cause but which just manifests in the person.

Phobias are fear-reactions that are (a) out of proportion to the actual danger, such as jumping and shrieking at the sight of a rat or cockroach, or (b) irrational, such as trembling when seeing the photo of a spider.

Trauma is a psychological “wound” that can still cause distress in a person. Strictly speaking, acquired fears are really traumas in varying degrees of intensity. But a trauma becomes pathological when it causes periodic distress such as nightmares, intense reactions to anything that reminds one of it, or it severely disturbs one's daily life and work. .

Envy is a more complex emotion, since it's a mixture of a number of things: low self-esteem, resentment, and fear. We don't envy the successes or achievements of those whom we can identify with, that is, those whom we love and care for. Their achievements are vicariously ours too. On the other hand, the achievements of those whom we cannot identify with, particularly those whom we resent, are felt as threats to our own self-esteem.

Embarrassment involves a “loss of face” and being confused and perplexed at the same time. The embarrassment may not have been caused by anyone, as when one slips and falls down “disgracefully.” Hence there is no cause for anger toward anyone (except perhaps oneself). The action is withdrawal and hiding, not wanting to face people. At its root is the fear of what people might think or say. Shame is a similar feeling.

Fear not only engenders secondary or derivative emotions, but also certain psychological states or personality characteristics:

Insecurity is a subtle and chronic psychological state of being unable to cope. It is rooted in fear, and is somewhat different from the felt flow of emotions like anxiety or panic. It is the outcome of the subconscious accumulation of fears. A person is hardly aware of the feelings connected with insecurity, but will nevertheless behave according to these fears. When the various forms of fear are resolved through self-awareness processing, however, the sense of insecurity disappears.

Low Self-esteem is another state of being that is characterised by poor self-regard, insecurity, the desire to be loved and appreciated. It is no longer an emotion, but an attitude or psychological state. But it is rooted in distressful experiences that have not been properly processed, and which have sunk deeply into the subconscious.

2) *Anger*

Anger has biological roots. It is manifested in the aroused state of body that is ready to fight or attack. Physical and etheric (ch'i) energy is summoned from one's reserves, and discharged into the system to respond to the emergency. Animals would bare their teeth, their backs arched, hair bristling, and displaying fierceness of form.

Among humans, anger has acquired a level of complexity and subtlety that it is no longer a question of fighting with teeth and claws. Social norms have come in to check the outward expression of such an arousal, resulting in constant suppression and the building of another kind of congestion within the system.

Anger does not start as anger. It is preceded by irritation. But irritation in turn does not start with irritation. It is preceded by a subtle feeling of discomfort or displeasure that often goes unnoticed. And because the discomfort is unnoticed, it is unresolved and it tends to build up into irritation or anger while the stimulus for the discomfort continues to remain present.

When anger is unresolved and continues to build up, it becomes rage or fury. At that state the person is no longer in control. He has reached a state of mental incapacitation and his behaviour will now be controlled by his rage rather than by reason. There is a tendency toward violence, and if he holds a weapon, he can injure or kill another person whom he cares for.

There are degrees of anger, but discomfort is not one of them. One can feel a discomfort without being angry. Below are some of the derivatives of anger:

Frustration is the feeling of not being able to do something about an undesirable state. It is usually accompanied by irritation and anger, and leads to aggression.

Irritation is a mild level of displeasure about a person or a situation that is accompanied by impatience or anger.

Rage is a violent and uncontrolled anger. It is the result of accumulated anger and is like the eruption of a volcano.

Wrath is strong anger accompanied by malevolence or sometimes by hatred. It is manifested as a feeling of righteous indignation.

3) *Hurt*

Being hurt is usually not one of the basic emotions listed by psychologists. But our observations in self-awareness processing indicates that it is an emotional reaction different from the others. It is not a form of fear, neither is it anger nor frustration. Being hurt is a feeling wherein one's self-worth or self-esteem seems to have been assaulted.

It is a psychological reaction that differs from anger and fear, which are more closely rooted to their biological origins. But it may be analogous to the biological drive toward self-preservation and survival, except that in this case it is the preservation of the psychological ego, the sense of self-hood.

The energy response in hurt is one of withdrawal, and its physical focal point is in the chest area. It is a “sinking” feeling, at times like a “stabbing” feeling in the chest around the heart area.

When one is hurt, as when a husband or a wife says or does something that took one for granted, or ignored one, there may or may not be anger. When the hurt is not accompanied by anger, the person may just sulk, or withdraw, and feel the hurt alone. It is like being wounded, and the wound needs time to heal.

But oftentimes being hurt is accompanied by a feeling of being a victim of injustice, hence it is at times accompanied with indignation and resentment.

Feeling insulted is a feeling of being degraded by others. The reaction is usually anger.

Self-pity is self-indulgent lingering upon one’s hurts and sorrows.

Depression can arise from such self-pity.

Resentment is hurt mixed with irritation or anger. We may be angry at a certain dictator, but we do not resent him unless we have been personally affected or hurt.

Hatred is an intense level of resentment. In this case, there is anger, not simply irritation.

4) *Dejection*

This group of emotions is somewhat difficult to classify, but it is characterised by lowness of spirit, diminution of strength. It can be caused by the loss of something or someone, or loss of hope, or a separation from one’s object of desire.

Sadness is characterised by a low energy level, a lack of motivation and interest, a loss of zest. It is more of a mood, and may not be caused by a loss of something.

Depression is a state of despondency accompanied by self-depreciation, low energy, and feeling of inadequacy. There are two kinds: (a) the normal depression that is a temporary low point which eventually dissipates in time, and (b) the neurotic or psychotic depression that is deep, long-lasting and sometimes suicidal.

Despair is a loss of hope, and is somewhat different from sadness, but shares the same lowness of energy.

Grief, as a word, is used in somewhat different senses. Often it is used to describe a bitter sense of loss of a loved one, which would fall under this class of emotion (dejection). But the word is sometimes used to refer to bitter remorse, which will make it fall under the category of Guilt.

5) *Aversion*

Aversion is intense desire to avoid something. It is repugnance or revulsion; a strong dislike or distaste for something. Aversion is different from fear, although there are features that make them similar. For example, aversion to caterpillars may involve the unpleasant feeling as if it is crawling on one’s arm. The unpleasant feeling usually evolves into a fear of caterpillars. Aversion to slimy things or to dung may not evolve into a fear.

Disgust for certain foods can be experienced as nauseating or queasy feeling.

6) *Guilt*

Guilt is a feeling that results from one's perceived violation of a particular moral code or principle.

Remorse describes a more intense feeling of distress due to guilt.

Emotions and Energy Movements

Each of the six basic emotions has corresponding locations in terms of the movement and congestion of the ch'i energy in one's physico-etheric system.

- 1) Fear of an impending event is often felt as a movement or congestion of energy at the pit of the stomach or solar plexus. It may be felt as "butterflies in the stomach" or as a hard ball. When actually faced with a threat (height, snake, etc.), the reaction is often felt in the limbs, such as trembling, weakening, or freezing.
- 2) Anger is almost always felt in the head, although it may be followed by pain in other parts such as the back.
- 3) Hurt is felt in the chest, usually on the left side, about two inches to the left of the breastbone. It can be a stabbing pain, or a hard congealed ball in that area. The person feels a heaviness on the chest that makes breathing more difficult.
- 4) Dejection or sadness involves a weakened feeling, a lack of psychic and physical energy. Depression, which is the extreme form of dejection, is conducive to thoughts of suicide.
- 5) Aversion, when not associated with fear, is felt as nausea or other forms of unpleasant sensations (such as standing hairs at the thoughts of caterpillars crawling on one's skin).
- 6) Guilt is also in the chest, but in the center, at the lower part of the breastbone. It is also felt as a heaviness.

In all these reactions, we note that there is an energy disharmony or congestion or withdrawal. Restoring the natural flow of energy in the affected areas and throughout the system will effectively remove the distress.

While this statement may appear to be a simplistic approach to such serious disorders as traumas and phobias or depression, it is well to verify the statement first through experimentation before conveniently brushing it aside without investigation. Years of experience have repeatedly affirmed the effectiveness of this approach in helping relieve individuals of their emotional pains.

Expression vs. Release

Occasionally we read of books that advise the expression of an emotion such as anger as a way of releasing it. Thus, I once read that in one Japanese factory, the company provided a room with a pillow tied to a post, with the drawing of a face. When a worker is angry or frustrated at his supervisor, he can go into this room and punch the pillow as a way of venting his anger.

Does this method solve the problem of frustration or anger? We think not. It may temporarily release dangerous pent up energy, but it does not solve the basic frustration or anger within.

Expressions of hostility do not necessarily diminish it. In fact, research shows that

expression can intensify hostility. In one study, 100 laid-off engineers were interviewed. Some of them were asked questions that allowed them to vent off their hostility. When the entire group was given a questionnaire regarding their attitude toward the company, it was found that those who vented their anger showed more hostility than those who did not.

Self-awareness processing is a nonviolent approach to releasing the stored energy. The energy that is released resolve the emotional distress or pain permanently. While in itself it does not solve the external conflict that caused the internal distress, the release of the congested energy removes the push-button reactions that tend to blind the person to objective reality.

Emotions thus help us in a number of ways such as:

- 1) by alerting us when basic needs are not met,
- 2) enable us in making decisions by being as a source of information,
- 3) help in communication to others about the feelings.

The mental status of every individual is maintained at optimum levels both psychologically and physiologically when emotions are handled appropriately. Generally it is observed that many individuals are facing sadness or unhappiness which further leads them into in depression mainly because of lack of knowledge and awareness about managing emotions in their lives.

There are certain emotions like fear, anger, jealousy, hatred, envy etc., which have negative effects on us. These emotions if not expressed appropriately or not handled properly leads to physiological diseases like increased blood pressure, stress ulcers, gastrointestinal disorders, cardiac disorders, cancer etc and various other psychosomatic disorders. Ex. excess anxiety or fear causes stress ulcers, hypertension. This sort of physiological disturbances also changes the psychological status of individuals causing them depression or anxiety disorders and also bringing changes in their personality.

Emotions, whether pleasant or unpleasant, always sustains activity which either maintains or enhances the organism. Incongruent and devaluating experiences are perceived to be threats which arouses anxiety and forces the self to take some defensive measures. Immature persons not capable to defend against these threats, fail to foresee the probable consequence of the actions, which result in disintegration and catastrophic psychological break-downs (Schachter, 1964).

Learning about emotional intelligence and becoming emotionally competent enables every individual to overcome emotional problems and to help lead a emotionally stable life. If we have good philosophy in our lives, then we do think in a healthier way which keeps us mentally healthy.

Self Assessment Questions

- 1) What is emotional competency? Discuss the factors that can help identify emotional competency in a person.

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2) What is emotional intelligence?
3) What are the methods to handle emotions within oneself?

4.6 LET US SUM UP

Emotions to many people is happiness which is a state of well-being and contentment that is much to be desired. It is very essential for an individual to understand the importance of emotions in our lives and the role they play making our lives happy and joyful and also in making our lives miserable and sad. The modern concept of emotions focuses on emotional competency and emotional intelligence. Having knowledge of emotional intelligence and enhancing ones own emotional competency levels to become emotionally competent helps in contributing towards maintaining good psychological status. Emotional intelligence determines our potential for learning the practical skills based on the five elements: self awareness, motivation, self regulation, empathy and adeptness in relationships.

Emotional intelligence involves striking a balance between emotion and reason in which neither is completely in control. Emotional Competency is “A learned capability based on emotional intelligence that results in outstanding performance at work (Cary & Goleman, 2005). Emotional competency is an efficiency to deal effectively with several dissociable but related processes is a blending of five competencies (Coleman, 1970): Adequate Depth of Feeling, Adequate Expression and Control of Emotions, Ability to Function with Emotions, Ability to cope with Problem Emotions and Encouragement of positive Emotions. Immature persons not capable to defend against these threats, fail to foresee the probable consequence of the actions, which result in disintegration and catastrophic psychological break-downs.

4.7 UNIT END QUESTIONS

- 1) How do emotional imbalance affect the psycholgiical and physiological state of an individual?
- 2) What are positive emotions?
- 3) What is emotional intelligence? How will you differentiate between emotional intelligence and emotional competency.
- 4) What strategies do we adopt to manage emotions?

4.8 GLOSSARY

- Psychosomatic disorders** : physiological diseases occurring because of Psychological factors.
- Emotional intelligence** : Emotional intelligence determines our potential for learning the practical skills based on the five elements: self –awareness, motivation, self –regulation, empathy and adeptness in relationships.
- Emotional competency** : A learned capability based on emotional intelligence that results in outstanding performance at work.

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