**Emotion---**

‘Emotion’ word is made by a Latin word ‘Emovere’ which means to getting exited. Man is rational organism. But he is Emotional too. Some time he is happy, sad, afraid, angry etc. And due to emotins some time enemies becomes friend and friends become enemies. Our loved one becomes the cause of jealous and some time we murder too. According to Hebb— ‘Emotion is both organizing and disorganizing. It is both energizing and debilitating. We can understand emotion with some points---

a) Human emotions are mix up with one another like colour spectrum.

b) Emotional and non emotional behaviors are not distinguishable easily.

c) Emotional reactions are generalized in nature and involve the entire system of organism.

**Theories of Emotions---**

**James Lange Theory---** This theory was developed by James & Lange in 1880. James & Lanje were having same thinking about Emotion That’s why this is called James & Lange theory. As commonly we talk that I was afraid and ran away. But According to this theory we runs away that’s why we are afraid. For example ---We see the lion and we runs away. It means that first we emotionally react then feels emotion. We can understand it with following illustration.

<table>
<thead>
<tr>
<th>Presence of emotion provoking stimulus</th>
<th>Perception of emotion provoking</th>
<th>Emotional behavior</th>
<th>Conscious experience of the emotion</th>
</tr>
</thead>
</table>

**Canon – Bard theory---** Basically this theory was developed by Canon but latter on Bard favored after his exoperiment. So it is called Canon –Bard theory. According to this theory we feels emotional due to Hypothalamus. It is the part of central nervous system’s cerebrum. It lies below the thalamus. That’s why this theory is called ‘Thalamic or Hypothalamic theory. According to this theory emotional behavior and feeling both happens together. Let’s consider following points—

- To arise emotion there must be stimulus.
- From sensory organs nerve impulse reach to cerebral cortex through Hypothalamus.
- Cerebral cortex decreases control from Hypothalamus and in some special situation sends nerve impulses to brain.
- Hypothalamus gets activated completely.
Operant (Instrumental conditioning of Skinner (1938) — In reality this work was started by Thorndike but promoted by Skinner. He gave new name to response as ‘operant’. According to Skinner operant is such response that is ‘emitted’ (which is unknown) or ‘elicited’ (which is known). Skinner did an experiment to give it right direction and to prove it.

Skinner’s main subject was ‘Rat’. To do this experiment he used a box. Which is called skinner box. This box was set in such a way that after pressing lever food plate were released.

He left a hungry Rat in this box. He observed that in starting The Rat was inactive but soon it adjusted in environment. Since the rat was hungry it started to explore the food in box. He started to make trial after some trial eventually he pressed the lever and food plate released. After eating it continued exploring its environment and by pressing Lever -> Food Plate released. Using trial and error method he learnt how to press leaver and get food. In fourth trial he confirmed that lever pressing releases food.

This experiment can be analyzed as -----

NEED -> MOTIVATION -> EXPLORATION -> GOAL

- Need is first stage to reach the goal.
- Need Motivate us
- Motivation lead us to do something (Respond).
- Response leads us to our goal.

For e.g. we can see this tendency in 2-2 ½ years child who achieve his goal in absence of mother 😊.

Thorndike connectionism (1898-1913):-- Connection means Association. Here association is established between Stimulus -> Response. The association is established only after Trial and Error. That’s why it is also called trial and error theory. This theory was developed by E.L. Thorndike in 1898. This theory was named trial and error because we organism is served with new stimulus then face problem how to solve it. And to solve it starts trial and makes many errors. And it continues until he reach the goal. To understand we can consider over experiment done by Thorndike....

Puzzle box ---- Thorndike kept a hungry cat in cage which he called Puzzle box. A fried fish kept outside of the box which was easily seen and smelled by cat. In cage slate was arranged vertically and loop of string was arranged in such a way that by pulling it the door of cage used to get open. The cat used to reach to its Reward (Fish) easily. Since cat was hungry so it started to struggle like-squeezing between slates, scratching the box, clawing the door But all trial was useless. Eventually once it pulled the string and door opened and cat reached to its reward.

Pulling string was lucky mistake. Which she learnt after number of trial and making mistakes (errors).
As we consider over above experiences we can understand that in episodic memory past events and experiences are stored. There is a characteristics of episodic memory that it is emotional in nature. The pleasant and unpleasant memories are stored in this memory. But when we remember it is reconstructed and modified so it is not reliable.

**Semantic memory**—This memory is like dictionary. Informations are stored in this memory as concept, fact, ideas which can be applicable further as per requirement. The semantic memory is organization of knowledge. We can understand it with example as following—

- I know who is the prime minister of India.
- I know how to write one billion 1000,000,000.
- I know how illusion takes place.
- I know that Sun does not moves.

Above example express that semantic memory is not like episodic memory. It is not related to time and place. It also not affect our emotion. Semantic memory can be tested and measured. It can be measured as following method—

**Lexical**—In this letters are presented and asked to subject that do it makes word. Like—c, o, w, d, o, g etc.

**Categorical**—In this in front of subject same category elements are presented and asked to category.

**Symbolic comparison**—In this category, subject is required to respond about property—Which is greater disaster Drought or Flood? Who did murder Ram or Sonu etc.

**Sentence verification Task**—In this statement is checked and respond in “yes or No” like Cow is four footed animal. Cow gives us milk etc.

**Procedural Memory**—In this type of long term memory we can understand and memories that how things to be done. Like how to drive car, how to operate machine, computer etc.

**Retention**—Retention means storing information into memory for long term use. It is also called memory trace. Remembering is very much dependent on retention As much as retention is good remembering will be that much good. So the better retention better memory will be.

**Measurement of retention**—Measurement can be done with some methods—recall, recognition and relearning. Let’s discuss—

**Recall or reproduction method**—Recall refers to calling back again. It means bringing some thing in conscious in same way as it was learnt. For e.g. you remember answer of question in your reexamination hall. Recall can be various types as Free recall, serial recall, prompting and anticipation, and paired association.
Thomas and Robinson developed it. It is very useful technique to memories certain things.

P = Purview (observing main titles, pictures and the summary)

Q = question (read material should be put in questioning form.)

R = Read (reading of concerned section should be done.)

S = Self recitation (after reading we should rehearse ourself.)

T = Test (After completing all above stage we should test what we have learnt).
Motivation----

All living organism specially human being is doer and knower. But what we do? Why we do? It’s the matter of discussion. Psychologis tried to find the answer. The answer is we are motivated to do that’s why we do.

Motivation refers to intention to display particular behavior.

Motivation is a process that initiate, guide and maintain goal oriented behavior. When we are motivated from any need like taking glass of water to reduce thurst, or read book for getting knowledge. There are some points must be discussed about motivation---

- Motivational is internal state which may be our imagination.
- When we get motivated we lead to act something.
- This action is motivated for goal achievement.
- This state aroused out of need, want or drive.
- Motivation is selective nature.
- Motivation is particular state or condition of organism.

We can define motivation in simpler term as—

**Motivation is an internal state of the organism which starts with a physiological or psychological feeling of wontedness or need to act,behave and directs towards attainment of a goal.**

Motivation cycle----

Motivation is general term which refers to state within the organism and which arouses a particular behavior in organism. In above cycle we can see that first state is Driving state in which motion by bodily needs or environmental stimuli. Then we behave directed to goal. And at last we reach to goal.

Some terminologies are related to motivation---

Need → Drive → Incentive → Instinct
is also called push theory. Since it is psychoanalytic theory so Freud explained that behavior is the result of two contradictory instincts—(1) life instinct (2) death instinct. The motivational energy of life instinct is called libido. Libido refers to desire for sex and it will be influenced by biological, psychological, and social factors. While death instincts are quite destructive.

**Incentive theory**—According to this theory for motivated behavior—drive is not so important as the goal is. Our behavior is directed by our expectation. That’s why this theory is also called expectation theory. There is some qualities and power in expectation which pull our behavior that’s why it is also called pull theory.

**Opponent process theory**—This theory was developed by Solomon and Corbit. Some important changes were made by Solomon. This theory is dependent on Hedonistic laws. We grow to such goals which gives us happiness. But we run away from such goals which gives us pain. Because we never want to be unhappy. We always want such things which gives us happiness. That’s why this theory is called Theory of emotion.

**Need-hierarchy theories and humanistic approach**—Abraham Maslow proposed need hierarchy theory. This theory includes both kind of need—deficiency related as well as growth related. In deficiency need we seek to restore the homeostatic state which is disturbed due to lackness of something. But in growth related need we want to go beyond. The person who is growth oriented they welcome uncertainty, tension and pain. That’s why they becomes popular. Maslow arranged the need in a hierarchy as:

1. **Biological**—food, water, sex
2. **Safety**—life security, emotional stability
3. **Attachment**—need to belong and to love
4. **Esteem**—self respect
5. **Cognitive**
6. **Aesthetic**
7. **Self actualization**
8. **Transcendence**
In above we can see that First need from bottom starts As biological needs are primary need in which we can include hunger, thirst, sex etc. When these needs are completed then we want safety. Like little kids also wants protection they don’t want to go to whom he is unknown. After that we want to attach to some one. Then we like to maintain our self esteem. Then we want to take knowledge. And then we want to look better (Aesthetic), After that we move on self Actualization need. In this need we fully utilize our potential to do our best like—responsive, creative, open to novelty, spontaneous etc. And at last we transcendence. This involves higher state of consciousness.

**Theories of Achievement Motivation theory---**

**Atkinson’s theory**—— This theory has been developed by Atkinson and Birch. According to this theory tendency to get success is based on two motives. (1) Tendency to get success And (2) Tendency to avoid failure. And this tendency can be seen at that time when the possibility is 0.5%. This theory has three aspects---

1. Motivate to success
2. Motivate to avoid failure
3. Achievement motivation.

**Attribution theory**— This theory is based on Wiener’s research. According to this theory we are motivated to understand our behavior. For example someone got success then he think that it’s due to his hard work and potential. There are two factors according to which Wiener has described attribute theory—

First one is source which is external or internal. In external factor difficulty level of work, luck etc may come. While in internal it may be qualification, capacity, and trials.

Second one is stability. Difficulty level and internal capacities are always stable. For example—If someone says that he is always failure in maths work. Because math is difficult to solve and his internal capacity is also weak.

**Conflicts---** According to Ruch --- When we have to choose one of two goals or towards same object we have positive and negative feeling then we faces conflict. Kurt Lewin has classified conflict in four categories---

- **Approach-Approach Conflict**—— When We have two positive goals and we want to achieve both at a time then this conflict arises. For e.g.—Someone wants to have cold drink an coffee both. Or Someone want to be lecturer and IAS both at same time.

- **Avoidance-Avoidance Conflict**—When We have two options but both are negative then this conflict arises. For e.g.—If a child don’t do homework then he will be scolded in school teacher and at home on complaint of teacher parent will scold his.
Figure and Ground perception

According to Gestalt theory we perceive thing as a whole. For example, we don’t see the eyes, nose or ear separate from face but as a whole face. When we perceive something then we perceive some part clearly but some part is unclear. The cleared part is called figure and unclear part is called background. We can understand it with example—Moon and cloud. Moon has shape and can be clearly seen but cloud cannot be. So moon is a figure while cloud is background. Rubin gave the concept of figure and background.

Contour— Contour is very important factor in perception. Contour makes shape of an object and mark the difference between ground and object. Suppose there is a white paper on white table cloth then it will not be easily seen. But on white table cloth red paper is there then definitely we will be seen. This is the e.g. of contour.

Perceptual Constancy (Stability)--- Our perceptual object doesn’t be changed from any angle. Because all object have some shape and will not be changed for me or others. If there is a plate then as much as angles we change we will see it in same size and shape. Let’s discusses different constancy—

Size constancy--- It refers to perceive an object in its original size. If an object is viewed from distance its image on our retina is different when viewed from near. However, the perception of that object is not changed. So the retinal image of an object is variant the perceptual size is constant.

Shape constancy— We see our window from different angle it its look trapezoid. These change are in our retinal image of an object’s shape. Inspite of it we perceive window in its rectangular shape this is called shape constancy.

Colour and brightness constancy— Brightness of different coloured like white, red, black etc are perceived in those situation of reflection of lights. This is called colour constancy. The brightness of retinal image depends upon two things—First—on the stimulus what is the source of light and what is the quantity. In lighting terminology it is called Illuminance. It is denoted by ‘I’. Second thing is that how much light is reflected from the surface of stimulus. The quantity of light reflected from surface is called Reflectance. It is denoted by ‘R’. The constant amount of light reflected by stimulus is called Albedo. The intensity of retinal image is called luminance. It is denoted by ‘L’.

\[ L = I \times R \]

Note—Theory of unconscious inference was developed by Helmholtz.

Location constancy— Location of thing are also perceived as it is. For example if we are lying down in room the position in room the retinal images of walls and things of room are transformed in significant manner. Despite we perceive in their original location.
Projective test—In this measurement of personality is done indirectly. Let’s discuss—Association technique---In this we try to associate one thing with other.

- Word-Association technique---In this number of words are presented and subject have to say the word which came in his mind first after listening word.
- Rorschach test---In 1921 Rorschach test was developed by Rorschach. In this test there are 10 cards with ink blotted pictures and subject have to say about picture.
- Holtzman also developed ink blot test in 1961.
- Construction test---In this test subject is supposed to construct story or any thing creative. TAT(Thematic Apperception test) was such test which was developed by Murray. In this test there are 30 cards to which subject have to see and make story. There are some more such test are available for children—CAT(children apperception test) by Bellak. Rozenwig---picture frustration test 1949, Robert Apperception test for children by Roberts in 1982.
- Completion test---In this test incomplete sentences are given and subject is asked to complete.
- Expressive test---In this test subject can express himself by activities like drawin. DAP(Draw a person test) is good example of this type of test.
- Choice ordering test---In this test subject have to choose stimulus and arrange it in order as per his likeness. Szondi test, Kahn test are good example of this test.
- Observational technique---In this technique subject is observed with attention and judged. For this rating scale of interview are used.
- Self–concept—In this subjects are required to express himself. Rogers has developed client centered technique.
Pituitary/hypopysis 9 kinds of growth hormones controls growth of bone and muscles and regulates protein, carbohydrate and fat.

Thyroid
Thyroin (TSH)
Regulates basal metabolism

Parathyroid
Parathomone
Regulates level of calcium & phosphate

Adrenal gland
Aldesterone
Maintains water level
  • Adrenal cortex Gluco corticoids/sex hormone sex growth and body function
  • Adrenal medulla Adernaline/Noradernaline
These are produced under fear, stress, anger, fear, anemia

Pancrease
* insulin
Regulates sugar in blood and store glucose
  * glucagon

Gonads
Androgens Promotion of male sex and growth
  • Male Oestrogenes Regulates menstrual cycle
  • Female Progesteron Maintains pregnancy

Nerve impulse-----Neuron is smallest unit of nervous system. This is used to change stimulation into Electrical impulse. So it is also called Biological transducer. There are 12.5 Million neurons in human body Out of which 10 million in brain. There are Neurolia or glial cells which keeps neurons healthy. Types of neurons-----

Sensory Neurons----- This sends Nerve impulse received from receptors to brain.

Motor Neurons----- These neurons sends nerve impulses from Brain to Muscles and glands.

Association Neurons----- These neurons are found only in brain and spinal cord. It makes relationship between sensory and motor neurons.

Structure of neurons-----

1. Dendrit—it looks like branch of trees. Its main function is to send the nerve impulses from neurons to cell body.