(Honors-semester1) Psy CC101

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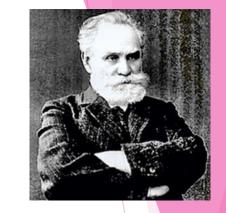
Learning

"Learning is defined any relatively permanent change in behavior that occurs as a result of practice and experience."-Morgan, King 1986.

The relatively permanent refers to the facts that when people learn any thing some part of the brain is physically changed.

- 1. Learning is change in behaviour.
- 2. The change in behaviour occurs as a function of practices or experience.
- 3. Learning can result from vicarious as well as from direct experiences.
- 4. It does not refer to change resulting from maturation.
- 5. the changes produced by learning are not always positive in nature.

Theories of learning



Classical conditioning- I.Pavlov (1849-1936)

His reserched focused on the process of digestion in dogs. Normally food is placed in the mouth of any animal, the salivary glands automatically starts releasing saliva.

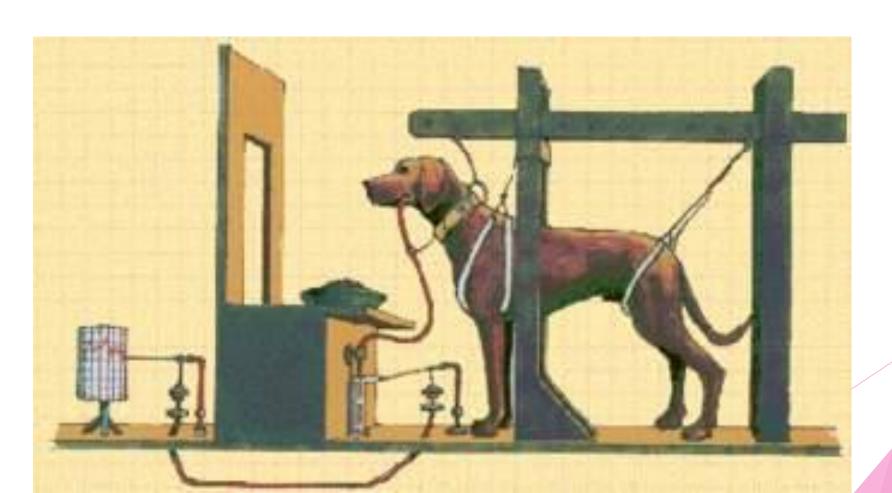
Stimulus:- Any object event or experience that cause a response-the reaction of an oraganism.

Elements of Classical conditioning

- 1. Unconditioned Stimulus:- It is unlearned naturally occurring .Leads to reflex, in voluntary response(UCS)E.g:- Food
- 2. Unconditioned response:- The reflex response to the uncd- stimulus is called (UCR) E.g:- Saliva

- 3. Condition Stimulus:- Neutral stimulus food being paired with unconditions stimulus begins to cause same kind of reflex response.
- 4. Conditioned Response:- Learned reflax response to C.S.

E.g:-Without seeing food saliva coming bell sound.



- 1.Stimulus Generalization:-The tendency to respond to a stimulus that is only similar to the original conditioned stimulus with the conditioned response.
- 2.Stimulus discrimination:- The tendency to stop making a generalized to a stimulus that is similar to the original conditioned stimulus because the similar stimulus is never paired with the unconditioned stimulus.
- 3.Extinction and Spontaneous recovery: Disappearance of a learned response following the removal or absence of uncd or removal of a reinforcer. The reappearance of learned response after extinction has occurred.
- 4. Higher order conditioning: Occurs when a strong conditioned stimulus is paired with a neutral stimulus to become a second conditioned stimulus.
- 5. Reinforcer: Any or object that when following a response increases the likely food of that response occurring again.

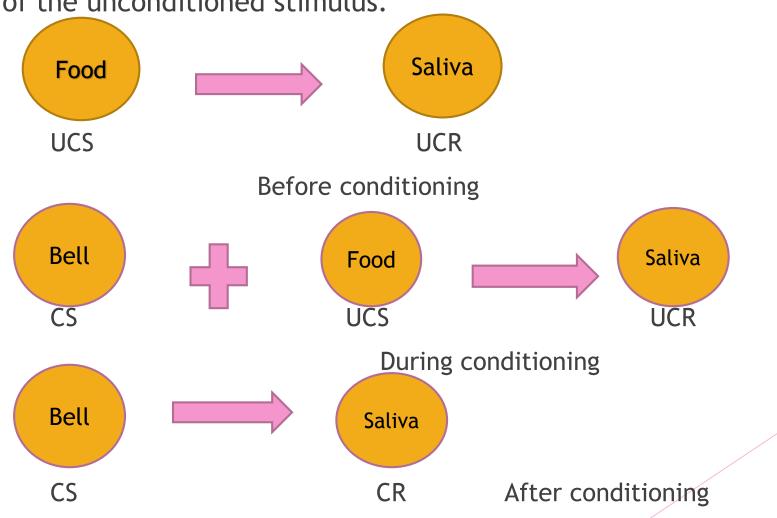
- 5. Spontaneous recovery: The reappearance of learned responded after extinction as occurred.
- 6.Conditioned Emotional Responsed:- Emotional response that has become classically conditioned to occour to learned stimuli such as fear of dogs or the emotional reaction when seeing attracting person.
- Experiment of John B. Watson with "little Albert" white rat was demonastration of learning phobia.
- 7. Vicarious conditioning: Classical conditioning reflax response or emotion by watching the reaction of another person.

OTHER CONDITIONED RESPONSES IN HUMANS

8. Conditioned taste aversion: Development of a nausea or aversive response to a particular teste because that teste was followed by a nausea reaction occurring after only one association.

9. Biological preparedness:-Referring to the tendency of animals to learn certain associations, such as teste and nausea, with only one or few paring due to the survival value of the learning.

10. Cognitive perspective:-mordern theory in which classical conditioning is seeing to occour because the condition stimulus provide information or an expectancy about the coming of the unconditioned stimulus.



THEORY OF CONNECTIONISM(TRIAL AND ERROR) Edward I. Thorndike(1874-1949)

1st researcher to explore the law of learning voluntary responses. When any stimulus is given an correct response is given there is connection with that particular stimulus.

Experiment with hungry cat inside a puzzle box from which the only escape was to press a lever located on the floor of the box with food.

Laws of learning

Law of effect:- law stating that if a response is followed by a pleasurable consequence it will tend not to be repeated in case of cat in box pushing the lever was followed by a pleasurable consequence, getting out and getting food. So pushing the lever became a repeated response

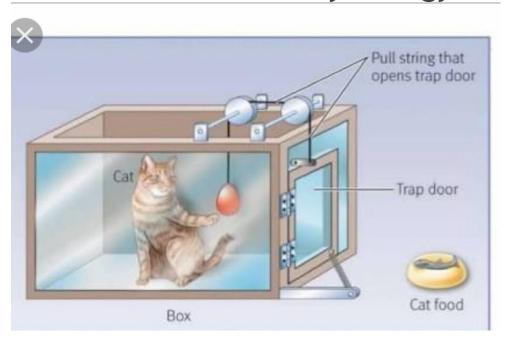
Law of exercise:-Based on that practice makes man perfact. We remember things which are in practice and for get that we don't.

Law of readiness:-individual voluntary does any work feel satisfy feel annoyed when forced do any task.

Books Referred:- Introduction to psychology "Morgan and king"

"Ciccarelli and Mayer"

Psychology "Baron"



Operant conditioning: B.F.Skinner [1904-1990]

Operant conditioning is a process through which organism learn to repeat behaviour that yield positive outcomes or permit them to avoid or escape from negative outcomes.any behaviour which is voluntary is operant.

The concept of operant conditioning:-

Reinforcement: any event or stimulus that when following a response increases the probability that the response will occur again. there are two types of reinforcement:

Positive: it strengthen the behaviour as food when u r hungry

Negative: removal, escape from unpleasant stimuli eg: scolding.

Positive and negative punishment: In positive punishment behaviour are followed by aversive stimulus event eg: driving a car and speeding which you pay and then obey the speed limit your speed in future decreases. In negative punishment the rate of behaviour is decreased because the behaviour is linked to the loss of potential reinforcement example: if you are caught speeding the car and the judge gave you choice to attend a month class for driving or loose your driving license to avoid loosing you attend classes. Negative punishment is referred as timeout.

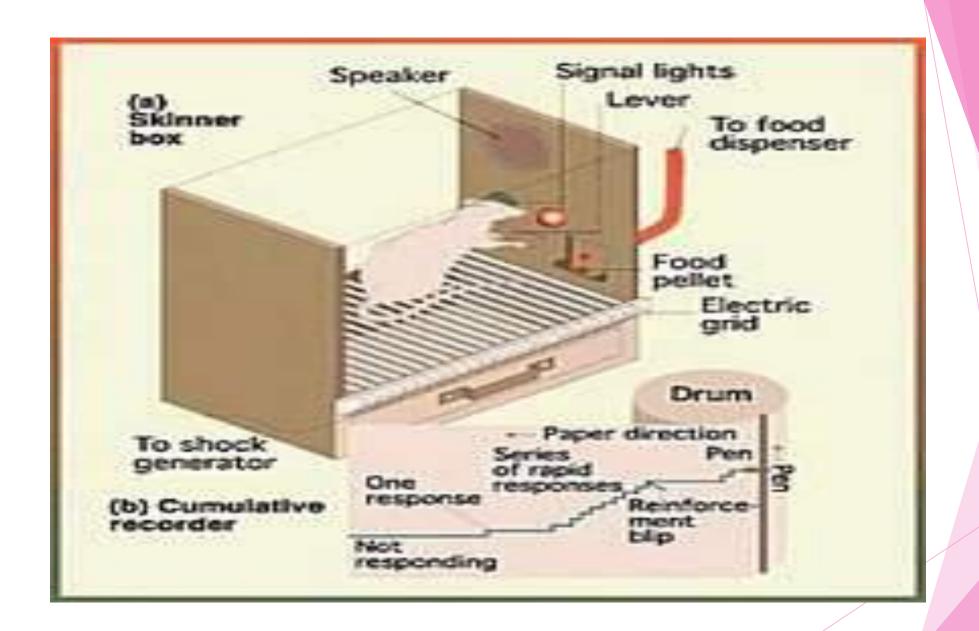
Primary reinforcer: Basic biological need eg: hunger, thurst

Secondary reinforcer: Praise, token

- Shaping: The reinforcer of simple steps in behaviour that lead to desired more complexed behaviour. Two components of shaping.
- 1. Successive approximation: It helps organism to acquire construct new more complexed behaviour from simple behaviour.
- 2. Differential reinforcement: Process where some response are reinforced and some are not.
- Extinsion: When reinforcement is removed. Eg: to stop the tantrum of children parent give no attention no candy.
- Discriminative stimulus: Learns to discriminate between stimulus.
- Spontaneous recovery: The recurrence of conditioned response after extension.
- ► Generelization: The response to other stimuli will also be there with original stimuli but less.

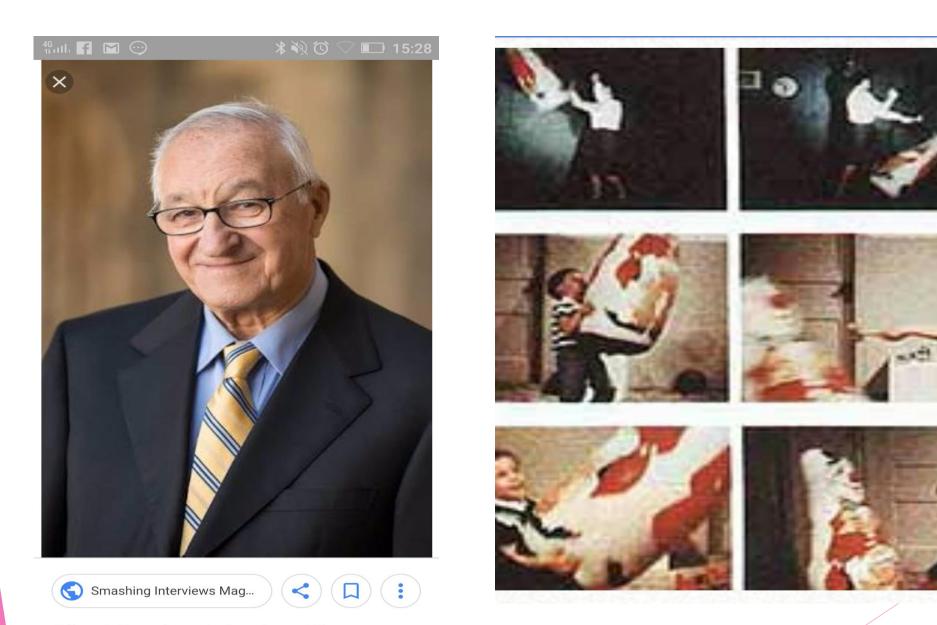
- Chaining: A procedure that establishes a sequence of response which leads to a reward following the final response in the chain.
- Schedule of reinforcement: The simplest is called the continuous reinforcement eg: rat recieveds a food plate each time it presses a liver.
- Continuous reinforcement for each and every response.
- Partial reinforcement effect: The tendency for response that is reinforcement are after some but not all correct responses. It is of two types
- 1. Ratio reinforcement schedule : a) Fixed ratio b) Variable ratio
- 2. Interval ratio: a) Fixed interval b) Variable interval
- Behaviour modification: It includes the use of reinforcement and shaping to alter behaviour
- ► Token economy: Desired behaviour is required with secondary reinforcement as token, goldstars etc.

- ▶ Applied behaviour analysis: ABA: Modern term for behaviour modification and that uses shaping technique to mould respone or desired behaviour Skinner and Lovaas 1964 used candy as reinforcement to teach social skills and language to children with autism.
- Neuro feedback: New and modified version of biofeedback using brain scanning devices to provide feedback about brain activity. A person is connected to EEG to record brain electrical activity.
- Cognitive Perspective of Operent Conditioning: Learned helplessness feeling of helplessness that develop after exposur to situation in which no effort succeed in affecting outcome.
- Hypohedonia: A genitically inherited in the ability to experience a pleasure. It is a kind of physcopathology impared but not absent capacity to experience pleasure (anhedonia).



Observational learning:Bandura 1961

- Learning new behaviour by watching a model perform that behaviour. Albert bandura famous bobo doll was used to demonstrate the impact of observing an adult model performing aggressive behaviour on the later aggressive behaviour of children.
- Learning performance distinction:referring to the observation that learning can take place without actual performance of the learned behaviour.
- ► Four elements observational learning:-
- 1]Attention:to learn anything through observation the learner must first pay attention to the model
- 2]memory:the learner must also be able to retain the memory of what was done such as remembering the steps in preparing a dish that was seen on a cooking show.
- 3]Imitation: the learner must be capable of reproducing or imitating the actions of the model.
- 4]motivation: the learner must have the desire to perform the action .



Albert Bandura Interview: The