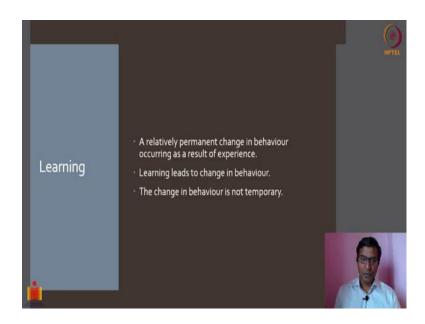
Organizational Behaviour - an Introduction Dr. M. P. Ganesh Department of Liberal Arts Indian Institute of Technology, Hyderabad

Lecture - 17 Learning - Part 1

Warm welcome to this lecture series on Organizational Behaviour. We are in our 4th chapter it is on Learning. And this is going to be the first lecture of this 4th chapter.



So, this is going to be the outline of the chapter. We are going to define what is learning and we also going to look at the theories on learning. Most specifically we are going to look at behaviouristic theories, cognitive theories, social learning theory and also at the end we are going to understand how learning principles can be used in organizational behaviour, especially in training programs, ok.



So, how do you define learning? In fact, this word learning is a very common word which we are used in our day to day conversation. In psychology also, the chapter on learning, if you have study introduction to psychology subject the chapter on learning is consider to be one of the most important chapters in psychology.

So, what is learning? In a very general term learning is change in behaviour. It is not just any change in behaviour, but it is a relatively permanent change in behaviour. And what causes this change? Experience we encounter causes this change.

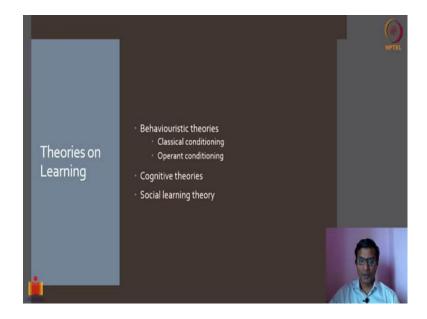
So, I will give an example. Let us say you are in a new city, and you do not know the traffic rules of that particular city. For example, you do not know which road is a one way, ok. So, let us say you drive your vehicle and enter into a one way, you do not know that it is a one way and suddenly the traffic police stops you and warns you, ok.

So, at that point you will learn that this particular road is a one-way road, ok. So, and you will not repeat the same mistake again. Why? You have experienced once that you cannot enter into this road and that understanding or that learning stays with you forever, ok.

So, learning applies to almost all the behaviours in our life. So, if you believe in behaviourstic theory which we saw in our earlier chapter on personality, you will know that almost all behaviours are learnt except few instinctual behaviours like probably coughing, sneezing, things like that.

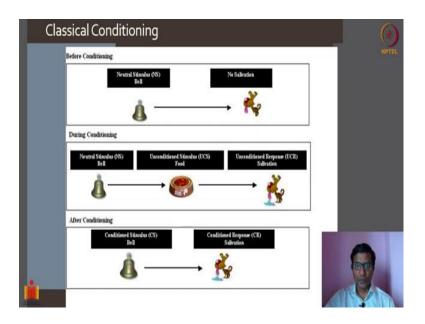
So, when we are born we are not, we are born as a clean slate. And whatever we acquire as attitudes, emotions, you know behaviours, social norms, everything is learnt. So, we through our experience we understand what is right, what is wrong, how we can behave, what will lead to success, what has to be valued in life, who are our friends everything.

So, like I mentioned learning leads to change in behaviour. So, our behaviour changes depending on what is consider to be desired and what is consider to be not desired. And this change in behaviour is not temporary you know it is not you know random change. So, if you have to call something as learning that has to be driven by or that should have some tangible experience, and that tangible experience will lead to change in behaviour which sustained for a longer period of time, ok.



There are many theories which explained learning as a behaviour. In fact, there are every theory in psychology tries to explain learning to some level. Today, in this lecture we are going to look at three important theories or three popular theories on learning. So, the first set of theories are called as behaviouristic theories under which we have classical conditioning theories and operant conditioning theories.

The second set of theories are called cognitive theories, and the third set of theories are called social learning theories. So, each of these theories look at learning from their own understanding of human behaviour and what causes human behaviour, ok.



Classical conditioning is a very popular way of explaining behavioural change which is learning. Classical conditioning is also a method which can be used in training or a method which can be used in eliciting learning in individuals. Many of you would have heard or you know seeing this video on how dog is trained by an experimenter called Pavlov. So, you would have heard of this term Pavlov, Ivan Pavlov.

So, this is an experiment which was done during late 1800. In fact, this was an accidental finding. The experiment was not done to done tool understand learning as a psychological aspect, but it was done on dogs to understand digestive system and things like that.

So, what happened in this experiment was which was conducted by Pavlov was a dog was kept in a laboratory to understand how much it salivates whenever a particular food is given. So, Ivan Pavlov, the Russian scientist what he used to do is he use to ring a bell so that the assistant the lab assistant the research assistant will give food to the or meat to the dog on the in the dog is tied to an experimental setting.

So, there will be like measurements of how much it salivates. So, whenever he Pavlov wants to make the research assistant give meat to the dog, he will ring the bell. So, the ring, the bell is not for the dog, the bell is the bell was ring to make the research assistant give the meat to the dog.

So, accidentally one day what happened was when Pavlov rang the bell the assistant did not give food to the dog, the assistant fail to give food to the dog. But even without

giving food to the dog, the dog salivated, you know the saliva starts at secreting from the dog. So, this was an interesting finding. Why? Because normally a bell should not make a dog salivate food will make the dog salivate, ok. So, this is where he came up he did more experiments on this phenomenon and proposed a theory called classical conditioning.

So, in classical conditioning there are three concepts we should know. The first concept, so according to this theory there is a stimulus and there is a response. Stimulus means something which causes a response.

So, in this dog experiment, what will cause a dog salivate? Food. So, the food is called as unconditional stimulus. So, unconditional stimulus means without any condition food or meat should make the dog salivate, ok. So, the response for an unconditional stimulus which is salivating is called unconditional response, because there is no condition. The condition is only the food, ok.

So, bell is also stimulus. In this experiment bell also led to salivating of the dog. The dog salivated for the bell also. But initially just by bell let us say first time when the experimenter rang the bell dog wont salivate, ok.

Only when it is paired, paired means when it is given in connection with food over a period of time the dog assumes that the bell causes the food to come, so it salivates. After certain time number of times of pairing where you pair the bell and the food, even without the food the bell causes this responds in anticipation for the dog because the dog anticipates because there is bell may be the food will come, ok.

So, during pairing or conditioning when you keep pairing these two things bell and food, food is an unconditional stimulus, bell initially was a neutral stimulus because per se bell should not create saliva, salivating in dogs.

But over a period of time when this conditioning happens, conditioning means pairing, something which causes behaviour something which does not cause behaviour. So, when you combine these two over a period of time something which does not cause behaviour also, without the presence of the unconditional stimulus it should cause the response which is called conditioned response.

So, over a period of time even without food bell causes saliva in the dog. So, in that stage it is called conditioned stimulus, the bell is called conditioned stimulus and the response is called condition response. So, because of conditioning a neutral response like bell becomes a conditioned response, ok.

So, this sounds like animal experiment. So, where is its application? Ok. In human beings. So, where can you associate or where can you use this understanding that you can pair neutral stimulus with the conditional stimulus, so that you can create response even without the condition stimulus? So, how where is it applied in human beings? One very important application of popular application is phobias. Phobias means fear. So, you would have extreme fear. So, you would have heard of phobia, fear of water, fear of sound, fear of insects and things like that.

So, many a times phobias are formed at a very early age, young age. So, probably you know let us say fear of water. Water per se you know not in like reservoirs, just a glass of water should not make you scared, but probably in early childhood water as a neutral stimulus would have associated with the unconditional stimulus. Probably during childhood, the child underwent some experiences where you know somebody got harm by slipping down with water or you know probably somebody drowned in water. So, that memory makes the child associate water with something dangerous.

So, even in future without obvious danger the person gets scared of water. So, this association happens because of early experience. And also other examples would be probably some rituals. Let us say the you know the person or learning of certain habits, the person you know started biting nails, and that led to reduction of you know let us say it was associated with something positive.

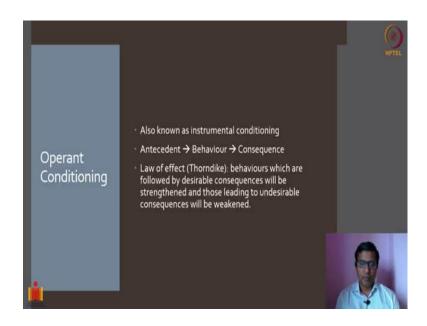
So, whenever you bite nails, your parents understood you know you are nervous and they asked you, why? What happened? You know do not get nervous and things like that. So, you got attention, ok. So, later in future even when your parents are not there to console you or support you, people may tend to bite nails just as a way to feel comfortable.

Another example. Let us say your father you know wears a certain kind of a colored dress, ok. So, his or your fathers uniform, work uniform. So, your father was like very strict and whenever he wears that uniform, he tends to get you know very stressed and he shows the stress on you.

So, you condition, your you know you condition your father's strictness with that particular color. So, may be in future even somebody else wear that color dress or that particular color you may feel upset or you may feel uncomfortable, ok. Since, your father was a strict person he was wearing that color that color becomes something which is unfavorable for you in future. So, even if anybody else wears that color you feels you feel you know anxious or stressed. So, this is how classical conditioning happens in human beings.

In workplace also let us say, you know certain behaviours are initially rewarded with material reward and also there is a verbal appreciation. So, everybody claps whenever you know you get first rank and they will also give you some sweet or something, or something which you like monitory reward. Later after many pairings like this, even if you do not get material rewards, even if you do not get a sweet or a money just a clap will make you happy, you know you will feel special. So, this is how stimuluses are paired, ok.

So, I hope you understood what is classical conditioning and its application in human beings, more specifically in organizational context.



The second form of conditioning, so conditioning means pairing, ok. In classical conditioning a neutral stimulus is conditioned with an unconditional stimulus. So, in operant conditioning operant conditioning is also form of behavioural shaping. So, it is also called as instrumental shaping, ok. So, what happens in operant conditioning is a

particular behaviour is exhibited because of some reason, and whenever that behaviour is exhibited there was a consequence. A consequence can be a rewarding consequence or a negative consequence.

So, whenever there is a consequence for a behaviour that particular behaviour is strengthened, ok. More, in most cases a desirable consequence is followed by the behaviour, that particular behaviour gets strengthened, ok. So, for example, you know you are in your work place, whenever you smile at your or let us say you are in a class, whenever you nod the teacher gives a good example, ok.

The teacher smiles back at you or the teacher looks at you, ok. So, you get attention from the teacher. Whenever you nod your head or whenever you lean back lean to the front in the class whenever the teacher says something the teacher looks at you and pace attention to you and smiles. So, you understand that whenever exhibit this behaviour I get attention from the teacher or I get positive response from the teacher. So, what you will do? You tend to repeat that behaviour more frequently, ok.

Similarly, whenever a particular behaviour leads to undesirable consequence that particular behaviour is exhibited less, ok. For example, whenever you yawn in the class the you know the teacher it does not pay attention to you the teacher turns away from you. So, you will control your yawning.

Let us say in work place whenever you wear a particular color dress your boss compliments you, and whenever you wear a certain perfume people you know they do not they give negative compliments. So, you stop wearing that perfume. Similarly, whenever you get reward for a particular you know attire you will wear more of that dress, ok. So, this is what is operant conditioning. So, the consequence of a particular behaviour either strengthens a behaviour or weakens than behaviour.



So, in operant conditioning there are certain concepts we should understand. The first concept is positive reinforcement. Positive reinforcement means something which strengthens the behaviour or the process by which you learn that my behaviour leads to a certain reward.

For example, you know like I said whenever the child gets good marks in school, the parent appreciates the child, ok. So, the child will know, ok, I should get good marks and it will try to get good marks in the examination. So, appreciation can be a positive reinforcement.

Negative reinforcement is in order to, so absence of a, absence of a positive behave positive consequence. So, whenever the child throws temper tantrum parents do not pay attention to it or the parents says I will not talk to you, ok. So, the child understands if I do this parents will stop liking me. So, I should not do this, ok.

Another example can be let us say the traffic rules say that if you break a or if you violate a traffic rule your license traffic license will be taken away, ok. So, having a traffic license is a reward, ok. It is a privilege.

So, if somebody says if you do this your traffic license will be taken away you will not do that, or whenever you break a traffic rule you get a negative point. So, beyond 3 negative points your traffic license will be taken away. So, you know that next time will be careful I do not want to lose my you know traffic license. So, I will not do this. So, this is negative reinforcement.

So, many people can get confused with negative reinforcement and punishment. Punishment is something which is harmful, which has an aversive consequence. So, let us say whenever you break a rule, traffic rule, you will there is a rule which says a you will be imprisoned you know you will be put in jail or you will be fined, or you will be given certain kind of a punishment you know punishment means something you do not like. So, that is punishment.

Extinction means; so, what happens is it is not that every time we should get a positive reinforcement it is not that you will follow traffic rules because there will be a police person standing in the road. So, we expect a policeperson to stand in the road and you exhibit a certain behaviour, ok.

So, even without a positive reinforcement or negative reinforcement we get conditioned by you know positive and negative reinforcements. So, let us say you have you have gone to that street or in that road for a 20 times, ok. It is not that every time there will be a policeman, policeperson.

So, may be 6, 7 times you have encountered the police person. So, you know you expect the police person to be there. So, what you will do? You will not break the rule, ok. But let us say 10 times you have gone there out of which 5 times you have seen a police person you follow the rule, ok. But after 10 times, next 10 times you gone, no police person there. So, you know that there are very less chances there will be a policeperson.

So, your connection with a policeperson will be there who will be reinforcing the rule that connection is broken. So, you do not see a connection between following the rule and getting a positive reinforcement or not following the rule in getting a negative reinforcement. So, your behaviour is extinct. So, no longer that learning continues, or the strength of the learning reduces.

Another example, whenever you know you help your coworker you get a appreciation in your work place, ok. It is not that every time you get a appreciation, but many times you get appreciation. But let us say after a certain point you do not get any appreciation. You know you always trying to be nice to your coworkers helpful to the coworkers, but you do not get any appreciation, then you understand that there is no connection there is no need to be nice or helpful to the coworker.

Again, I am talking from a very you know clear behaviour reward kind of a connection. So, people may feel I should help my coworker even without reward. Like I said in the previous chapter the reward gets internalized, you do not need someone to come and you know appreciate you. If you help someone you feel happy within, so you know you yourself feel happy that is a different story. But many a times is classical conditioning, operant conditioning is based on external rewards and external association between two stimuli.



So, which method is better in operant conditioning which method is better? Positive reinforcement is better? Negative reinforcement is better or punishment is better to shape someone's behaviour? Ok.

Punishment, in fact, is a very easy way to reinforce behaviour, but the problem with punishment is it may not be sustainable and many a times it leads to other harmful effects. So, ideally a particular behaviour can be shaped or should be shaped with positive reinforcement. So, if you want to raise a good child, it is always better to use rewards.

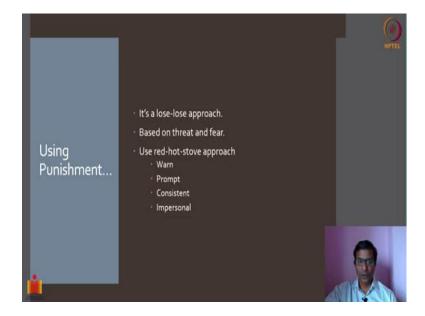
Next is negative reinforcement which is not punishing, but if undesirable behaviour is there you withdraw a positive reward or positive consequence. So, the child would know. Worst case scenario punishment will be used. But again punishment in long run is the worst method. So, positive reinforcement is a very sustainable method. Negative

reinforcement in some situations it will be very affective. Punishment, in a very long run it creates bad consequences.

So, like I said punishment is least understood and badly administered. So, if you do not you administered in a wise way, it will lead to negative consequences. And punishment is also very complex, which means when children are punished or if you want to reinforce a rule if we use punishment. In fact, people may break the rule to feel rebellious. So, you know if you see many a times people especially adult sons they break the rules because they feel you know they are you know they have done something big, ok.

So, punishment can in fact, create an opposite effect. And when you are giving punishment when there is no other option you should clearly define punishment, you know we should give prior warning. You should tell people see if you do this will be the punishment. Without prior warning if you give punishment it will be seen as a unfair thing.

You know people will feel I never knew there is a punishment for this behaviour. So, always warn people because if you do not warn people it will lead to sense of or perception of injustice especially in work place. And also punishment can lead to anxiety aggression, depression, hatred and things like that. So, people will start hating the one who administers the punishment, ok.



So, punishment is a lose-lose approach. You know you are not it in long run you are also in other person is also getting harm and it is not effective also. And if you are using punishment as a method, others will hate you also. And it is based on threat and fear, it is not based on human dignity, ok.

So, let us say if you do not have any other option then what should you do. First warn, like I said warn before giving punishment. 2, punishment should be prompt, which means if there is a negative behaviour you cannot give punishment after many years. So, whenever there is a wrong behaviour the punishment should follow immediately only then people will see the connection.

And also punishment should be consistent, which means if somebody does something wrong every time when they do it they will they should get the punishment, you know it is not like two times they did they got a punishment, third time they did not get punishment. So, if that happens people will see, there is a way to escape punishment.

4, it should be impersonal, which means whoever does it they will get the punishment. It is not like some people will get exemption, ok. So, this approach is called red hot stove approach, which means if there is a red hot stove whoever touches will get the heat, they will get burnt, their figures will get burnt. Similarly, they will know there is fire you know the fire will look red. And whenever you touch immediately you will get burnt and it will be consistent, whenever you touch your fingers will get burnt.

So, this is one way to use punishment as a method. But like I said punishment should be punishment of the least preferred method in reinforcing a particular behaviour, ok. So, I will stop here. In the next class, we will look at something called schedules of reinforcement which will talk about how to schedule reinforcement in operant conditioning.

So, till then stay safe. We will meet in the next lecture. See you then.