

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

Lecture - 18
Learning - Part 2

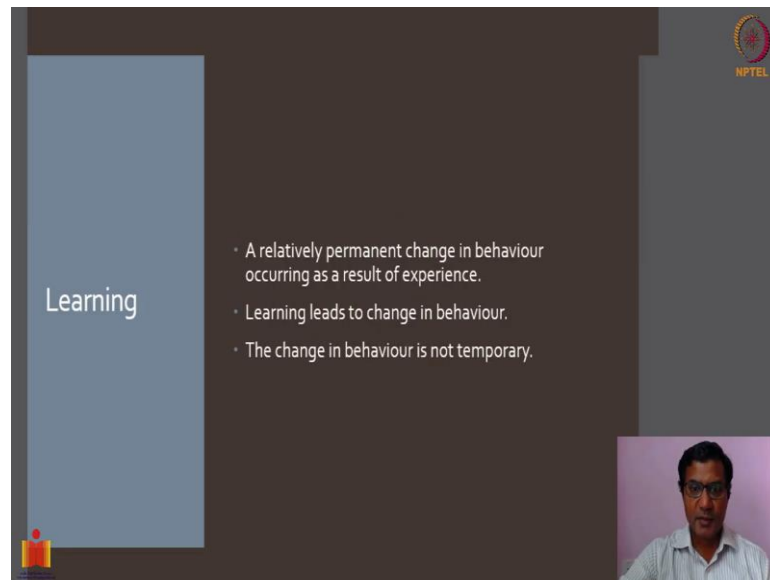
Warm welcome to this lecture series on Organizational Behaviour, we are in this chapter on learning this is our second video in this chapter.

Outline

- Definition
- Theories on Learning
 - Behaviouristic Theories
 - Cognitive theories
 - Social Learning Theory
- Using Learning Principles in Training

NPTEL


I will quickly summarize what happened in the previous lecture, we defined what is Learning. Learning is permanent change in behaviour which occurs because of experience.



Learning

- A relatively permanent change in behaviour occurring as a result of experience.
- Learning leads to change in behaviour.
- The change in behaviour is not temporary.

NPTEL



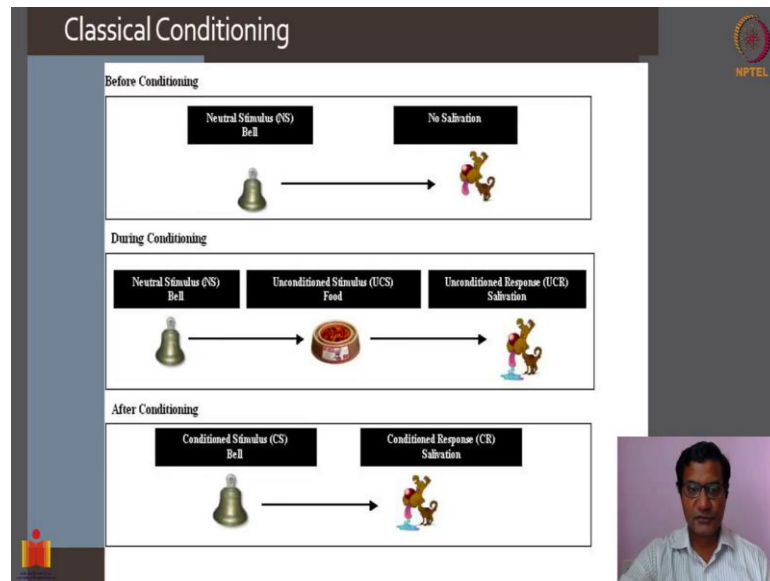
Theories on Learning

- Behaviouristic theories
 - Classical conditioning
 - Operant conditioning
- Cognitive theories
- Social learning theory

NPTEL



We also looked at some of the theories on learning first we looked at behaviouristic theories, in which we saw two different approaches or two different ways in which conditioning is done.



So, the first approach or the first way of learning is classical conditioning, in which a stimulus which is neutral is paired with a stimulus which is unconditional. So, by pairing this two after a certain time even without the unconditional stimulus the neutral stimulus leads to the behaviour, which otherwise the unconditional stimulus will only lead to that behaviour. So, the we saw this experiment with a dog and food and how you know even without food just by ringing the bell the dog salivated.

So, this experiment was done by Russian scientist called Pavlov and based on this experiment many new understanding on classical conditioning happened or many new understanding on classical conditioning came into existence.



The slide features a dark background with a light blue vertical bar on the left containing the title 'Operant Conditioning'. To the right, there are three bullet points. In the top right corner, there is a small circular logo with the text 'NPTEL' below it. In the bottom right corner, there is a small rectangular video inset showing a man with glasses and a light-colored shirt.

Operant Conditioning

- Also known as instrumental conditioning
- Antecedent → Behaviour → Consequence
- Law of effect (Thorndike): behaviours which are followed by desirable consequences will be strengthened and those leading to undesirable consequences will be weakened.

NPTEL

We also looked at the application of classical conditioning in real life behaviour, I was telling you about phobias fear of things or extreme fear of things which otherwise should not lead to fear.

So, how initially when a real threat was associated with the neutral stimuli over a period of time, people tend to get feared of the neutral stimuli also. Something like you know a soft toy can become a scary thing or an object of phobia for someone, because initially that object the soft toy was paired with something which was scary.

We also looked at operant conditioning; operant conditioning is based on behaviour and its consequence. So, according to operant conditioning theory if behaviour is followed by a desirable stimuli or desirable outcome that will lead to strengthening of that behaviour, in other words if a certain behaviour is rewarded that behaviour will repeat.

The operant Conditioning Process

- Positive reinforcement: the process by which people learn to perform behaviours that lead to the positive reinforcer (i.e. reward).
- Negative reinforcement (avoidance): process by which people learn to perform behaviours that will help them avoid undesirable consequences.
- Punishment: presenting an undesirable or aversive consequence in response to an unwanted behaviour.
- Extinction: the process through which responses that are no longer reinforced tend to gradually diminish in strength.

NPTEL

Small video inset showing a man speaking.

We looked at different types of reinforcement. So, reinforcement means something which strengthens the behaviour, we looked at positive reinforcement which is a reward negative reinforcement which is absence of a reward or absence of a stimuli which is rewarding for someone.

So, in other words in negative reinforcement we are withholding something which is desirable. So, a particular behaviour is not exhibited or a desirable behaviour is exhibited. Example is whenever the child shows mischievous behaviour the parents do not pay attention to it or they do not give attention, attention being a desirable thing.

So, the child understands if I do mischief parents will not talk to me or pay attention to me. So, it stops doing that particular behaviour and the desirable behaviour is exhibited. We also looked at the difference between punishment and negative reinforcement, punishment is causing harm. So, or in other words giving aversive consequence giving a consequence which harms or which creates a fear in the subject.

Extinction is what happens during this conditioning is after a certain point even without the reward or punishment or negative reinforcement, the behaviour is shown. Because there is an anticipation that it will follow by a positive reinforcement or negative reinforcement or punishment.

So, over a period of time when there is no reward punishment or negative reinforcement that particular behaviour stops, because the connection between behaviour and the outcome cease to exist. So, this is what is extinction.





Using Punishment

- Most used, least understood and badly administered.
- Punishment is a complex phenomenon.
- Should be carefully defined and used.
- Punishment can increase negative behaviour by paying attention to them.
- Punishment can lead to anxiety, aggression, depression, hatred etc.




We also looked at the problems in using punishment as a way to stop unwanted behavior.



Using Punishment...

- It's a lose-lose approach.
- Based on threat and fear.
- Use red-hot-stove approach
 - Warn
 - Prompt
 - Consistent
 - Impersonal



We also looked at only in the rarest of the condition punishment should be used because it is a lose-lose approach. And why it is a lose-lose approach? Because in long run punishment will lead to fear in the subject or people will start hating the one who administer the punishment or and in long run also it will not help strengthen a behaviour.

Because, when the punishment is not there, people will show that behaviour immediately, so we should make them understand why that particular behaviour is not correct or it is not desirable.

We also looked at if punishment has to be used it has to follow red-hot-stove approach. So, red-hot-stove approaches we should warn beforehand punishment should be prompt it should be consistent, which means whenever there is a behaviour which is not desirable there should be a punishment. And also it should be impersonal you should not you know if whoever exhibits that behaviour undesirable behaviour you should get punishment you cannot be partial.



The slide is titled "Schedules of Reinforcement" and features a list of reinforcement patterns. In the top right corner, there is a logo for NPTEL. In the bottom right corner, there is a small video inset showing a man speaking.

- Patterns of administering rewards.
- Continuous reinforcement: all desired behaviours are reinforced.
- Partial reinforcement:
 - Fixed interval schedules
 - Variable interval schedules
 - Fixed ratio schedules
 - Variable ratio schedules

So, this is what we saw in the previous class. So, like I said in conditioning especially in operant conditioning, you do not need to have the outcome every time when the behaviour is exhibited.

So, what I mean to say is after conditioning has happened after the subject or the person has understood this will be the consequence of my behaviour, even without the consequence they will exhibit that behaviour. So for example like I said couple of times you enter into our one way you know from the wrong side and you have got punished or you have got you know fined. So, you will know that I should not enter into this one way.

And third time even if there is no punishment or even if there is no police person there you will be cautious you will not do that thing is not it. So, we do not have to give the reinforcement every time the behaviour is exhibited. So, this is what is known as partial reinforcement. So, partial reinforcement can happen in fixed interval schedule which

means you fix a duration, so whenever in terms of time after that particular time interval we give reinforcement.

For example, once in every one hour if that particular behaviour is repeatedly shown there will be a reinforcement. This is like our annual or you know performance in organizations we have this performance evaluation exercises which happen. So, this is like annual performance evaluation exercises or it is like you know every end of the course you will have an examination.

So, what happens in fixed interval is especially time period close to the examination students start studying more, the amount of time people spend in studying increases only when the exam is near. So, that is the problem with fixed interval. Variable interval is you do not know when that particular reinforcement will happen this is like surprise quiz.

So, whenever surprise quiz is used surprise quiz is they do not announce when there will be an exam any day there can be a test. So, in surprise quiz what happens is people would be highly alert, you know they will study daily they will spend a good amount of time in studying every day. So, in terms of fixed interval and variable interval, variable interval is more effective in reinforcing a behaviour in sustaining a certain behaviour.

Fixed ratio is let us say if that particular behaviour is shown certain number of times, after certain number of times reinforcement is given. Variable ratio is you do not know when you will get the reinforcement, it can be after 10 times we exhibited the behaviour or 2 times we exhibited that behaviour. So, even 1 time if you fail you will not get that reward ok. So, this is like you know the traffic police example which I gave.

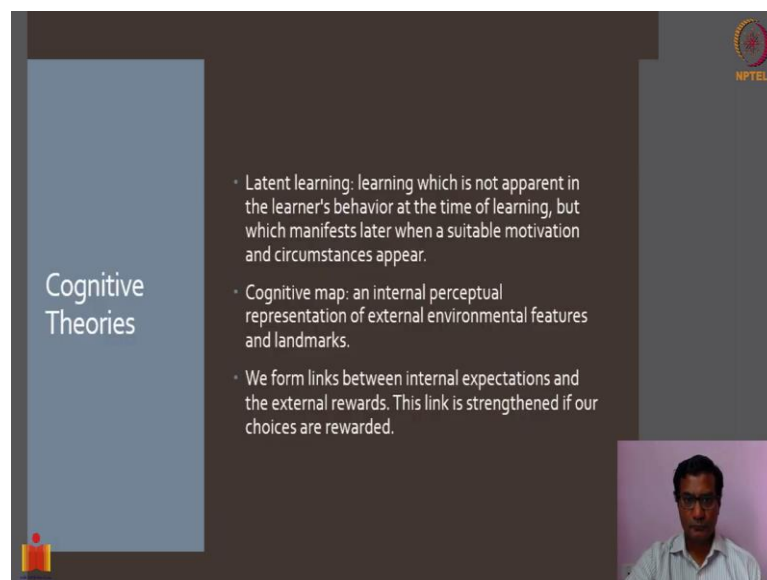
So, you have if you have sometimes they are there sometimes they are not there, you do not know when the police person will stand there ok. So, then you will be very sure about your traffic discipline. So, variable ratio is more effective than fixed ratio.

But the problem with partial reinforcement is let us say the reinforcement is not given at suitable time or ratio intervals, the connection between the expectation that there will be a reinforcement and the behaviour will lose its power in other words extinction will happen.

So, it is always better to have continuous reinforcement, which means every time that behaviour is shown it is either rewarded or negatively reinforced. So, one application of operant conditioning is clear cut reward of how reward can shape behaviour or how reinforcements can shape behaviour.

For example, many discipline related rules use reinforcement, you know if you want to reinforce certain discipline like you know people following traffic rules or encouraging people to prepare daily for their class. So, all those things we can use reinforcement shaping of a certain behaviour.

For example, you know making people put garbage in the dustbin instead of throwing in somewhere. So, if you have clear cut reinforcement methods people will follow the rules, they will know that if I do this will be the consequence. So, they will follow the rules.



The slide features a dark background with a light blue vertical bar on the left containing the text 'Cognitive Theories'. In the top right corner, there is a small circular logo with the text 'NPTEL' below it. The main content consists of three bullet points:

- Latent learning: learning which is not apparent in the learner's behavior at the time of learning, but which manifests later when a suitable motivation and circumstances appear.
- Cognitive map: an internal perceptual representation of external environmental features and landmarks.
- We form links between internal expectations and the external rewards. This link is strengthened if our choices are rewarded.

In the bottom right corner, there is a small video inset showing a man with glasses and a light-colored shirt.

So, the second theory we are going to look at is cognitive theories. So, the behaviouristic theories talk about specific behaviour and also you know it is like stimulus response kind of an approach. So, there is a stimulus or there is a consequence and that leads to a certain behaviour or if there is a reward and that leads to a certain behaviour. But many of these theories like I mentioned earlier is based on animal experiments.

Based on rats or based on you know dog and things like that. Their application is in humans also, but many of these experiments are based on animal behaviour. So, it does not take into consideration of the internal processes. So, stimulus response is a very

typical model there is a stimulus there is a response. But we forget that as humans there is also something which goes inside which is the process.

So, same stimulus not everybody reacts in the same way we are not like animals we are you know we think. So, cognitive processes talk about these internal thinking which happens or what happens within us between this stimulus and response. So, one important concept cognitive theories talk about is latent learning, latent learning means it is not like every time there is a stimulus or when there is a conditioning we should behave in a certain way.

So, we may not we may we would have learnt a certain thing, but we may not exhibit or we may not show it every time. So, many a times learning happens latently, latent means underline deep within. So, only when there is a suitable motivation or a condition we exhibit that behaviour.

For example, you know you would have learnt a word you know you would have seen it in some movie or you would have you know listen to that particular word when somebody was talking. You may not use the word are that learning happens very unconsciously you may not have paid attention, but you may use it when a particular situation arises you use it very naturally ok. So, this is what is latent learning.

Similarly, many skills which we learn we may not use it directly, at some point when situation arises or when there is a reason to use it we use or we exhibit that behaviour. So, latent learning is very common in many of our behaviours. Similarly, cognitive map, so cognitive map is we have a mental picture. So, many of these learning happens internally, you know stimulus response are consequences of a particular behaviour we do not actually you know we have to encounter it in real life and learn it.

Many a times we think and we form these connections ok, if this happens this will happen more like a you know. Example can be like a chess game you know we mentally itself we visualize the consequence of a behaviour and also the reality of the reality in this external world we also have internal framework of that external reality.

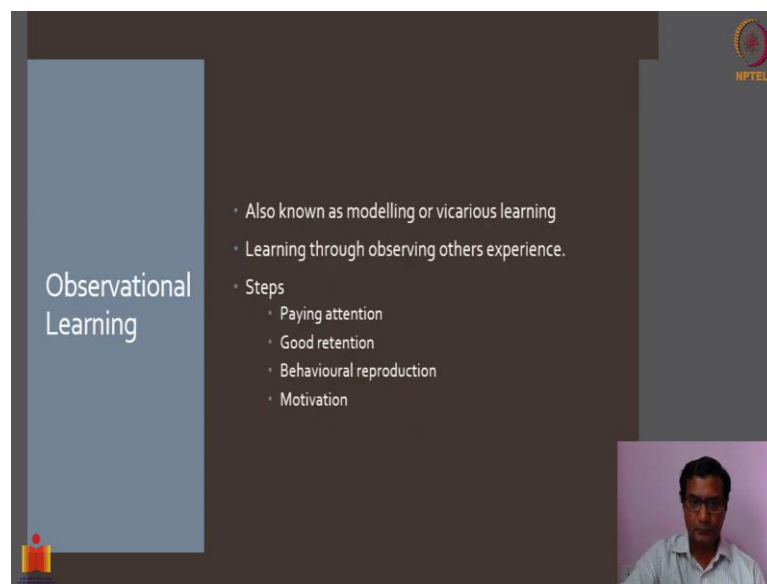
So, it is not like every time we have to encounter something to understand it, visually you know mentally also we visualize this external reward, so this is what is cognitive

map. Similarly, you know many situations like I said earlier we have internal expectations and what will happen if this particular behaviour is you know exhibited.

For example, we all have value systems, we think if I work hard I will get a reward or I will be rewarded there will be a positive outcome, if I study well I will get good marks. So, this is the connection we have in our mind.

So, if that really happens if it happens in real life that connection becomes stronger. For example, beliefs system about god or spirituality. So, we think you know if you do something wrong god will punish us or if we some do something good we will get reward god will reward us or karma you will get good things in return.

So, this is our belief system and many a times if something happens like that we our connection you know our belief system about karma or good deeds gets strengthened. So, this is these are some of the assumptions in cognitive theory ok.



The slide features a dark background with a light blue vertical bar on the left containing the title 'Observational Learning'. To the right, there is a bulleted list of points. In the bottom right corner, there is a small video inset showing a man with glasses speaking. The NPTEL logo is visible in the top right corner.

- Also known as modelling or vicarious learning
- Learning through observing others experience.
- Steps
 - Paying attention
 - Good retention
 - Behavioural reproduction
 - Motivation

Another theory which talks about learning is observational learning. So, like I said it is not like every time you need to encounter something in real life, many a times we observe others we observe what happens to others and then that becomes our learning is called vicarious learning.

In fact, in personality chapter we looked at this vicarious learning concept. So, this is called learning through observation, observing from others experience. So, the steps involved in observational learning is we need to pay attention it is not like whatever we

observe from others we will learn it, only when if it is relevant to us we will observe and will retain it and sometimes we reproduce it and that leads to a certain consequence. So, that particular behaviour is strengthened.

So, let us say you have seen you know certain behaviour exhibited by heroes in the movie, you know you are your favorite hero in the movie he does it and he gets a reward. So, you retain it and you pay attention because you like that hero in the movie and you retain that particular idea, if I help someone people will praise me like my hero or in a negative sense if I smoke everybody will think I am cool person and you reproduce also that behaviour sometimes.

And let us say the same kind of consequence happens that behaviour gets strengthened ok.

Using learning principles in training

- Motivate participation
- Periodical training programs
- Provide opportunities to transfer knowledge
- Provide feedback
- Role models and mentoring

NPTEL

So, these are some of the theories and learning. So, where is an application of learning in organizational context? one important application of learning in organizational context is motivation which we will look at it in the next chapter. Which means when people see connection between their behaviour and rewards or punishment, those behaviours get strengthened or they become less powerful.

Especially in training programs learning can be an important concept. So, how to create certain positive behaviour or how to train people in skills certain skills or how to inculcate behaviours which are helpful for the organization, so training programs can be conducted for these kind of situations.

So, one if you want to make people participate in the training programs for skill development or behavioural change, you need to motivate them they should know or they should understand participating in this workshop is important you know there is a reward in this particular learning. So, you should motivate people.

Similarly, if you want to exhibit or if you want to exert a certain kind of a skill set, if you want to train people in a particular skill set or create a certain knowledge that particular training should happen periodically. You know because people tend to forget also sometimes. So, periodic training programs are very effective instead of one training program.

Similarly, it is not just training programs are effective, once you give training programs and a particular skill set you should also make give them opportunities to use that particular skill.

So, this applies for language especially language skills. So, only when people have motivation to learn a language they will learn a language, similarly you know they should learn it continuously they should not like learn once and not use it. They should learn it continuously they should also have an opportunity to use that language skill, otherwise they will forget the language.

Similarly, they should get feedback. So, once they learnt a particular skill they apply it we should give them feedback about how they are performing. Similarly having a role model is also very effective role, model means having someone who exhibit that behaviour.

So, that you observe it and you also understand how to do it and also mentoring. Mentoring means having someone who can personally help them to use that particular skill set or a knowledge and the mentor will help this person to you know correct his or her mistakes.

So, these are some of the applications of learning principles in organizational behaviour. So, I will stop here I will quickly summarize what happened, we defined what is learning we looked at different theories and also we looked at what are the applications of learning in organizational behavioural context. I will stop here we will meet in the next lecture till then take care see you.