Introduction to Psychology
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Lecture – 11
Basic Concepts of Learning

Having understood perception to a greater extent, we are now moving to our second concept that we would we trying to discuss at length and that is Learning.

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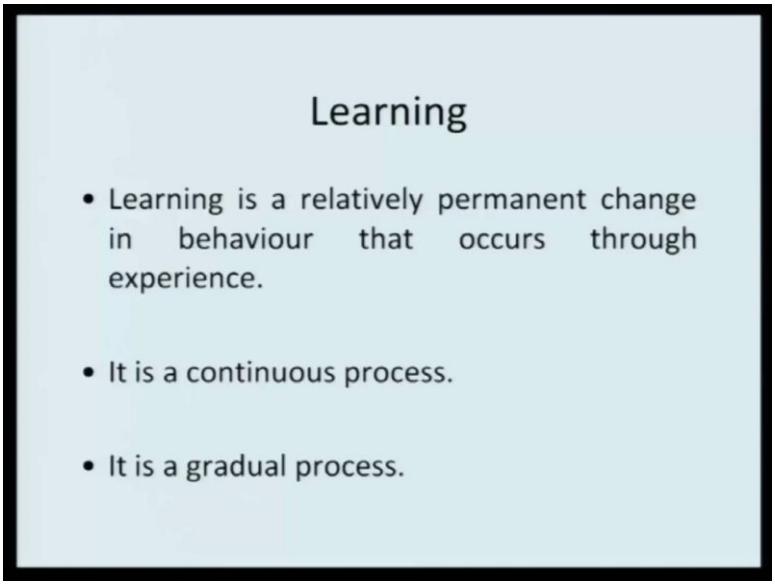

The way we are proceeding as part of this very course is that we have first try to understand how this stimulus how the sensation from the external world reaches us, how we try to assign meaning to it. There by trying to understand that how do we perceive things, how do we make out sense how the world is around us. Now that we have now understood how we perceive things, we are now moving a step ahead trying to understand that having sense the world having perceive the world around us how do we learn things.

So, let us understand what actually we mean by learning in psychology. Learning basically is relatively stable change relatively permanent change in the behavior which is basically a byproduct of experience, fine.

So, we have a our experience coming to us and those experience which makes us learn to the extent that certain degree of stable change come to us. So, that next time when similar experience comes the behavior is by enlarge guided by whatever has already been learnt, this is called learning. So, that put primarily mean that it is a continuous process because we always experience one thing or the other in life and depending on the validity of experience realizing the fact that the stimulus might take different term we do try to modify our behavior. So, depending on the external environment, depending on the incoming experience, depending on the entire synthesis, the relative change that takes place within us that will guide us that will facilitate us towards situation where we yield a response, but we take minimum time to arrive that very decision this is most appropriate response in this given situation. Remember, we are repetitively saying this fact that as biological creature we have to basically economize our effort, so a relatively permanent change, a continuous process and also its gradual process - gradual process because any change that you see in the behavior will not come overnight.

So, gradually you learn certain things recollect your own past experience when you try to learn how to ride a bicycle it was not at overnight you started now riding a bicycle and driving it (Refer Time: 03:22) it with a full skill that is not true for any one of us. So, how did we require it? It is a very gradual process and now comes a time when know even though you do not ride a bicycle very frequently tomorrow if you are given an opportunity to do, so you can very conveniently do that. So, the change that has come to us is a relatively stable change.

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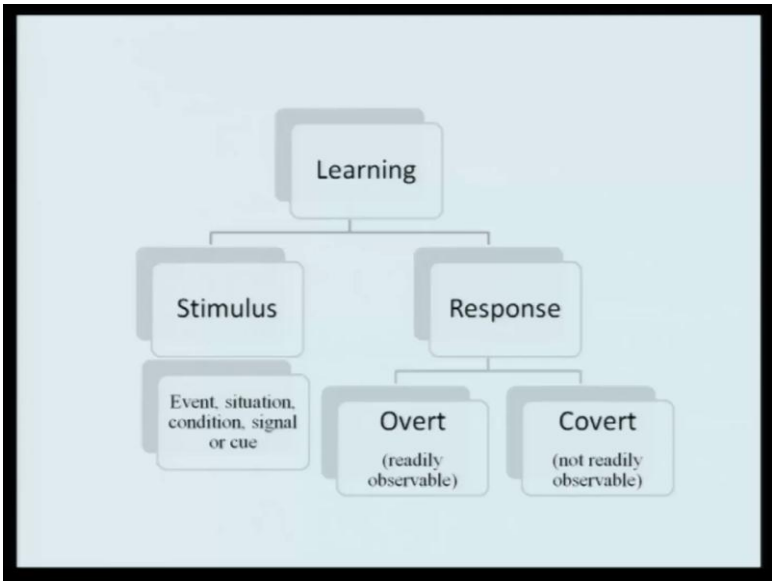

Now, let us understand one thing from a behaviorist point of view, we would be looking at the stimulus and the response that is elicited one that stimulus is presented to the organism. So, we always talk of SOR paradigm psychology, this stimulus organism response paradigm. Now stimulus is basically any event, any situation, any condition, any signal, and any cue that triggers you to give a response that is the stimulus. Response you understand the output come the resulting behavior that we show that is our response, but there could be two types of responses - the overt response and the covert response.

Overt responses are those responses which are very readily observable I am speaking to you right now; this is a readily observable behavior. But there could be another type of latent thinking going on which you are not able to observe those are called covert behavior, for instance what I am I thinking right now or for instance when I am right now recording this lecture which is readily observable behavior, an overt behavior what is going on in the mind of the camera man who stands behind the camera that is the covert behavior.

So, when we look at learning we are basically trying to look at stimulus responses association and when we say that we are looking at stimulus response association organism of course has his own importance when at the same time response means overt

as well as the covert response. Now learning basically involves associations, relationships.

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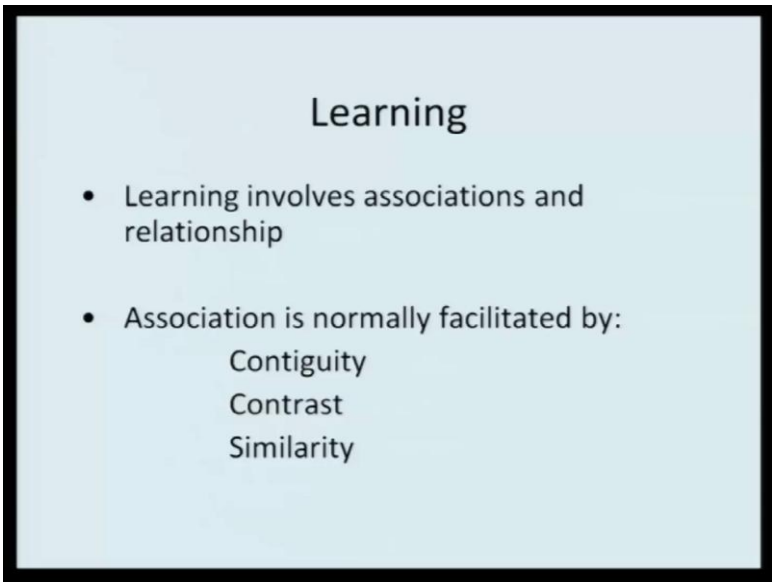

So, we try to make the association, develop this association, evolve this association between the stimulus in the response. So, if this is the stimulus this is supposed to be the response, if that is stimulus that is supposed to be the response. Now for instance recollect your school days a teacher enters into the classroom and as a what you call new comer who is being exposed to formal education for the first time you see that everybody else has stood up - wishing good morning teacher, and then you realize that once teacher enters room what you have to do is to leave your seat, stand (Refer Time: 06:22) and wish to the teacher. This is now learn, this is in (Refer Time: 06:28) and next time onwards whenever teacher enters your room you first thing you do is that religiously leave your seat and wish the teacher - good morning and association has been found between the stimulus and the response.

Now, how does this association form? Basically three factors governed a formation of this association – contiguity, contrast and similarity; just these three features. What is contiguity? Contiguity is a now the nearness. So, you have this stimulus and you have response, what is the temporal difference between the two? I am sure you must have hard

this popular joke which perhaps does not make you laugh any more but now somebody had cut a joke and then all other animals in the zoo laughed at the time in joke was cut; one animal started laughing a day later. Now there is a temporal delay between the stimulus in the response.

Now, associate it with one thing, you answer a question ask by a teacher in the class and the teacher now looks at you with admiration, the teacher uses certain words now in order to admire the appropriateness of the response that you have given in the class. The question asked, the answer given the correctness of the answer and the now pressure by the teacher, there is a know contiguity between them. So, the moment the correct response is given, immediately you are given a positive feedback by the teacher and this positive feedback does not now differ too much in terms of time difference from the answer that you would have given.

So, what happens in the case of learning? More and more there is a contiguity between the stimulus and the response higher is the association, you learn exactly this is what is doable and this is what is not. And therefore, in terms of a making the social norms learn contiguity plays a very important role. As one of the dominant you know pattern of parenting in our culture, parents will not hesitate scolding the children - many parents will not even hesitate slapping the child. Now you committee an error and if the magnitude of the error considered by your parents to be able to trigger punishment you are immediately scolded; is not that you for instance use a slang right now and after two days your father calls you and then punishes you, scold you, that does not happen. The movement you use the slang the next movement you receive an adverse remark by your father - he scolds you, may be slaps you and this is how we learn find, although this word exist in the culture, all these would exist in the dictionary this is a non usable type of a terminology that do's of the society has been learnt by you. So, contiguity pays an extremely important role in learning.

The second is the contrast factor, contrasts you understand know. So, the higher is the contrast the better is the learning know because you can distinguish two things. So, the same example if I take the appropriateness of the response, the correctness of the word that is being used and the positive or the negative feedback that given back to you, you

give the correct answer to the teacher and teacher now precise you; use slang and your father punishes you. Now you very easily understand the contrast between the two situation and this helps you understand that if this constitutes the do's then you can understand what the don'ts constitute of.

So, similarly if you know what are the doable things, the prescribed things you by default understand what is prescribed, so do's, don’ts, prescribed proscribed, this association can very easily we formed by contrast. And third we would like to now go ahead with now the experience because learning by default is suppose to be a relatively a permanent change. So, if it is a relatively stable change what should it lead to it? It lead you to a point where if there is a similar situation that you are experiencing for the second time or for n number of times you just extend your previous experience and based on the similarity between the two situations you decide last time this was the appropriate response therefore, this time also this is the appropriate response. Take the example of the teacher entering the class, teacher enters the class the students leaves the chair and wishes good morning sir, good morning ma'am, first day, second day and every time you repeat this behavior because there is a similarity in the situation; you know that you are in a classroom set up and you also know that now the one period is over and now the next teacher enters the room and therefore, even though the period vary, the date vary, the teachers vary, but every time the behavior remains the same and this is governed basically by similarity.

So, remember one thing, learning basically means formation of association and association primarily guided by just three factors contiguity, contrast and similarity.

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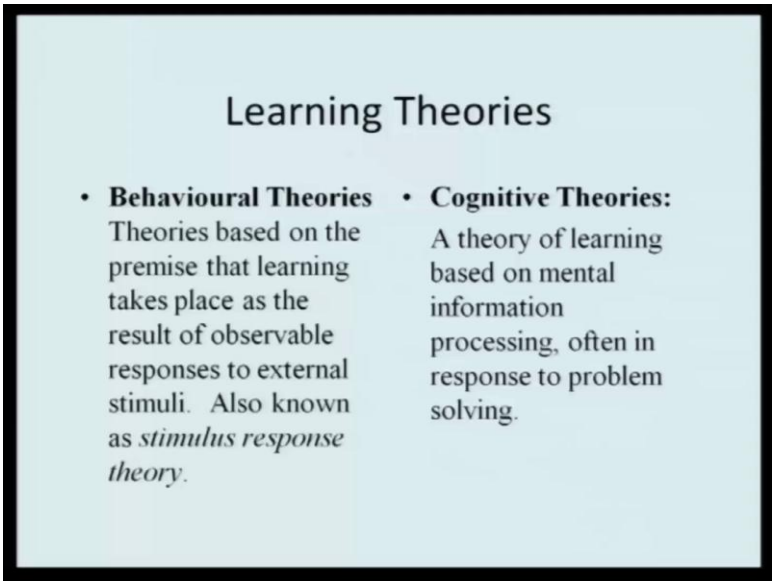

Now, let us understand learning from that the point of view of various theories that has been (Refer Time: 12:28), you can by enlarge divide the theories into two groups - the behavioral theories and the cognitive theories. Now basically the behavioral theories are based on the premise that learning takes place as the result of observable responses to any external stimuli and therefore, it is also known as stimulus response theory.

So, what would happen you have an externally stimulus, you observe the behavior and based on the observation you try to calibrate and this calibration helps you form the stimulus response association.

The second sets of theories are called cognitive theories. Now cognitive theories basically say that learning is based on mental information processing which is often in response to a problem situation. So, you are in a problem situation, you try to solve the problem and now based on the solution that you have arrived in that very situation you look back and you look at the information processing that has taken place, information processing basically would require that you have an input, you have an output and between the input and the output there is a process of transformation. It is this transformation that you revisit and that is helps that is something that helps you learn the situation.

Now, that we have talked about the two sets of theories - the behavioral theories and the cognitive theories. Let us look at a few things I am right now looking at those examples where animals who have been trained by human beings and have been made to learn and behave in a particular way - deliberately I am talking example of animals the reason being that in the next lecture we will come to various theories of a learning and there we would be looking at the theory being actually based on experimentation done on animals. So, look at these videos.

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