

**Consumer Psychology**  
**Dr. Naveen Kashyap**  
**Department of Humanities & Social Sciences**  
**Indian Institute of Technology, Guwahati**

**Lecture - 13**  
**Memory and Learning - II**

Hello friends, welcome to this lecture number 13 on the course on Consumer Psychology. Now, this is session 2 of course on consumer psychology. And as how I keep on telling you that section 1 dealt with basic consumer behavior and consumer decision making process. So, in session 2 we are looking at psychological factors and how they modify or modulate the behavior of consumers into the marketplace. Not only from the consumer point of view we also look at this psychological factors, how the effect marketers perspective or how they affect the marketer behavior in the market place, so that is what is of interest.

Now, in the first two lectures in this section we looked at perception, how perception affects behavior of consumer and behavior of marketers. They started out by defining product related features, stimuli related features, example color, taste, feel, smell all those kind of things packaging, how does it affect consumer behavior? And then we looked at consumer related factors which are not limited to the idea what the threshold is, what is labors law, how do we define stimulus generalization and stimulus discrimination and other basic psychophysical concepts which are inherent in to the consumer how those factors actually effect consumer behavior.

Further to it in the next lecture we looked at things like perception of price, perception of quality, perception of service quality and other kind of perceptions which are prevalent into the marketplace and how do they modify or modulate the behavior of consumers as well as the marketers into the marketplace.

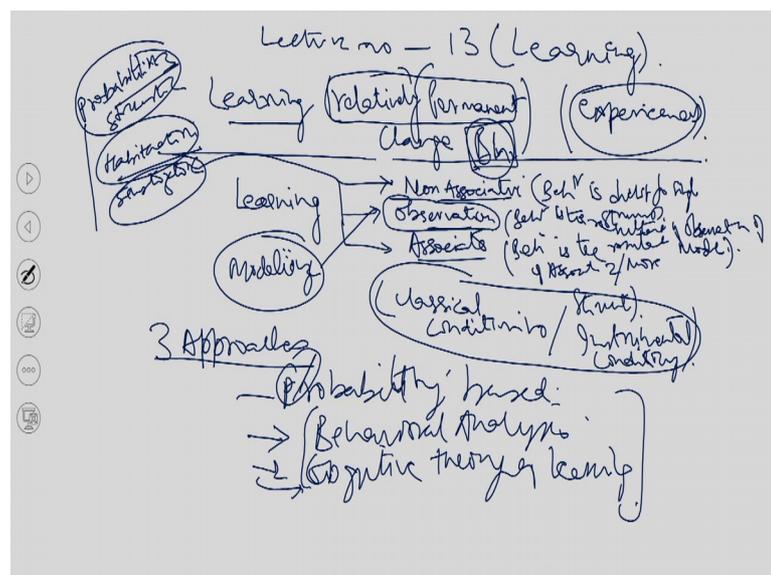
Next we looked at a basic process of human cognition which is memory. So, we defined what is memory, in terms of what is long term memory. So, what is the semantic part of it what is the episodic part of it, how is the organization semantic part done, how is the organization of episodic part done. And what is the meaning of all this storage for the actual consumer behavior then we looked at how this organization of memory helps consumers to retain information, to perceive information and to recall information. So,

we looked at these 3 processes one by one starting with how encoding different factors affect encoding of information marketplace information.

We also looked at how do consumers retain this marketplace information and how do they organize this marketplace information into the associative network using either an attribute based organization or something called a product base or brand base organization. Further to it we also looked at how this information is recalled. So, we looked at the idea of retrieval cues and we looked at how some psychological factors example consumer motivation and others to name a few actually help consumers remember this information. We also looked at certain factors which are necessary for the marketers to understand in terms of consumer memory, so that their product is of some used to the consumers.

Now, the next part of this lecture which is today's lecture which will be focusing on something called learning. So, how does learning affect consumer behavior and also how does learning affect the behavior of the marketer. Let us start with defining what learning is. So, learning as explained in psychology is a relatively permanent change in behavior which is caused by experience, right. So, basically this lecture what will do is we look at what is learning. So, this is our lecture number 13 which is focused on learning.

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And so as I define learning it is a relatively permanent change of behavior, I defined behavior as b h r, which is caused by what experiences.

Now, what is relatively permanent change? Why I am defining relatively permanent change? The reason why I am defining relatively permanent change is because if not reinforced if not rewarded in some way learning tends to go to unlearning and, so that is why the idea of relatively permanent change sorry. So, if not rewarded enough if no positive feedback is achieved by the subject after learning, the learning is unlearned. So, first thing is relatively permanent change. And what is permanent change of what; of permanent change of behavior.

The next thing that we will have to look at is something called experiences. So, how is this learning caused? This learning is caused by experiences into the marketplace in terms of consumer psychology. Now, in terms of general psychology it is caused by experiences that the person have, right. So, interactions the person have and so this experiences could be internal experience our external experiences. So, all kind of experiences are there. And, so that is what is learning and so what we do in the present lecture in today's lecture is we look at how consumers they learn about and develop habits regarding goods and services using information in memory.

So, up till now, we have looked at that information is stored in memory, right. So, by looking at product information if the market place the consumers, encodes it, retains it into memory and uses it for a later point of time at a later point of time. But what she does with this information is interesting and that is called learning.

So, what happens is this information is used by consumers to learn certain behaviors, to learn and develop certain kind of habits regarding certain products. For example, developing brand loyalty, developing brand searching and that kind of thing.

To start with this idea of learning let us first get some idea about what learning is. And as you move along I will also give you a little bit about the psychology of learning or psychology or different learning methods and what kind of approaches that we will use in this lecture to understand the effect of learning into consumer behavior. So, then this is a basic definition of learning.

Now, learning can be of two different forms, one is called the non associative form and the other is called the associative form. Of course, there is a third form of learning which is called observation learning and so we will be using all these 3 kinds of learning in the in the present context.

So, we will be looking at the observation kind of learning, the non associative kind of learning, as well as the associative kind of learning in the present lecture. What is the difference? In non associative kind of learning behavior is developed for single stimulus and so in non associative the 2 forms are habituation which is formation of habits and sensitization.

So, when behavior decreases for innocuous stimulus for a horn. So, if a horn is played again and again and then your startle reflex decreases this is called habituation, you become habituated with it. And in terms of sensitization what happens is a behavior is increased for an intense stimulus. For example, the horn is placed in a dark alley, the startle reflex that the horn will cause will increase and that is called sensitization. So, habituation and sensitization two forms of non associative behavior. And as you can see the behavior is caused for a single stimulus and that is why it is called non associative form of learning.

In the associative form of learning behavior is the resultant of associating two or more stimuli and so the types of associative learning are classical conditioning and instrumental conditioning. And so classical conditioning and instrumental conditioning are two forms of learning that are of the non associative form. What are they? In this the behavior is the resultant of integrating two stimulus or bringing two stimulus together and this link between the two stimulus is, two or more stimulus is causes learning and that is called the non associative form sorry associative form of learning.

And there is a third kind of learning which is called observation learning. And so the observation learning has a form which is called modeling and within the habituation sensitization you call these kind of learning as probabilistic, probabilistic or stochastic form of learning. So, stochastic form of learning, classical conditioning and instrumental conditioning and modeling are the 3 forms of learning which are available. And so as I said in observational learning what happens is behavior is the resultant of observation. So, behavior is the result resultant of observation of models who are doing that kind of a behavior.

So, this kind of learning is basically happening when somebody sees a model or a person demonstrate that behavior and if that behavior is rewarded in a particular way, right. So, this is the distinction of 3 kinds of learning. And so in the present lecture what we are

going to do is you are going to look at 3 different approaches. So, we will use 3 approaches. What are these approaches? We will use the probability based approach, we will use the behavioral analysis and we will use cognitive theory of learning to demonstrate how learning affects consumer behavior. So, 3 different kinds of approaches we are going to use. We are going to use a non probabilistic method sorry a probabilistic method which is a habit non associative form and an associative form plus a modeling form of learning.

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Learning: Probability Theory

- **Probability theory** treats learning as the *formation of habits* whose strength depends on *reinforcement*
- Brand loyalty (*frequent purchasers-brand loyal*)
- Brand acceptance (*high volume user-difficult to win*)
- Brand switching (*low brand loyal high switching*)
- New product forecasting (*based on new user*)

So, let us start our class. So, the first form of learning that we are going to look at is probability theory. Now, as I define what we are going to do in this in this section is we looking at consumers learning and developing brand choices through information into memory and that is what is called learning, so how does the consumer use the information in memory that is what is learning all about.

So, the first kind of learning is called the probabilistic learning or the probability learning theory. And what does it say? It treats learning as the formation of habits and so what probability theory actually deals is that it believes that learning is a formation of habits. So, when a consumer uses a particular kind of a product and he gets benefited out of it, he gets positive satisfaction out of it, he develops brand loyalty and habit formation or habit of using that product is strengthened. Now, for low involvement product it is more

of a habit because then consumers do not go for brand choice or other kind of features and for high involvement products it is brand loyalty.

So, basically this formation of habit for sticking to your own brand and not allowing brand switching or going from one brand to another is what is called probabilistic form of learning. And so what is this formation of habit dependent on? How is this formation of habit actually influenced? This formation of habit is actually influenced by the strength of the reinforcement. What reinforcement are you getting? So, the more satisfaction that you get after buying a particular product, the more positive you feel after buying a product, the more amount of benefit that you get or the more need arousal satisfaction you get after using a product the higher the habit formation and the higher the chances of you being brand loyal to that product and not switching the product and that is something which happened because of learning. So, you will learn that. If I use this product what is going to happen the probability of you doing that behavior and again and again increases because the more you do that behavior the probability of success increases and so people want higher probability.

And so there are 4 different cases or 4 different ideas that can be studied here, the first is regarding brand loyalty. And so frequent purchasers are often brand loyal those people who actually buy a brand and again and again and they get satisfied with it again and again they become more brand loyal. So, brand loyalty is actually development of habit or formation of habit. And this formation of habit how does it happen? The formation of habit happens because each time you buy a product each time you buy the product that you have been using the probability of you getting satisfied, your need increases and so people who have making or who are making frequent purchases of a particular brand they become more and more brand loyal. So, brand loyalty is an output of probabilistic theory of learning. The more you buy the higher the probability of chance of satisfaction and the higher brand loyalty is.

The second factor has to do with something called brand acceptance. And so what is brand acceptance? Higher volume users are difficult to win. What does it really mean? People who use a particular brand in very high volume are very highly satisfied with it and they become brand loyal and it is very difficult to shift the loyalty of these people. The only way that you can do the shifting of brand loyalty is by making them try new brands or new similar brands which offer similar benefits. And so when they try new

brands which are very similar offers them similar kind of benefits they think of brand switching, otherwise they have or they think of having the new brand acceptance. Otherwise these people who have high volume usage of a particular brand they are very difficult to win over, they are very difficult to made to switch the original brand into another brand.

The reason being that high usage leads to higher probability of success because it has it has that is what his memory says that he has got said he has got satisfaction for that particular product and that is the reason that since high probability of success with the part with his initial brand is the higher brand acceptance of his usual brand would be.

The third factor or the third output is called brand switching. So, low brand loyalty leads to higher switching, those people who are very low on brand loyalty, those people who are not acceptable of a particular brand, who do not [bra/brand] buy a brand very frequently or there is enough time lapse between buying two different occasions of buying those people have very high brand switching. So, more the time gap between two purchases less of the satisfaction from a product the higher the brand switching. And that is what I have said. So, low brand loyalty will generally lead to high brand switching. Also if you make a brand loyal person try a brand which is similar offering similar benefits and he gets satisfied with it the higher the chances of brand switching.

And the fourth factor that we can have a look at or we can be aware of here is something called new product forecasting and so probabilities theory or probability the probabilistic theories also predict something called new brand or the success of a new brand and that is based on the on the new user. So, what we what we can do is suppose a new brand comes in the more number of people, the more number of new users to that brand will actually give you a probabilistic forecasting of how the brand is going to perform in future.

So, how many people flock to them and how many people keep with them initially that will give some idea that will forecast some idea about how many people in future will stick to that brand. And so probabilistic theories the probabilistic theory of learning say is that because since more people are staying, so they are this brand is more of a habit forming brand and so people are similar ties to stick with it and, so that will predict how

many people will actually stay with a brand over the period of time. And so, this is about the probability theory of learning.

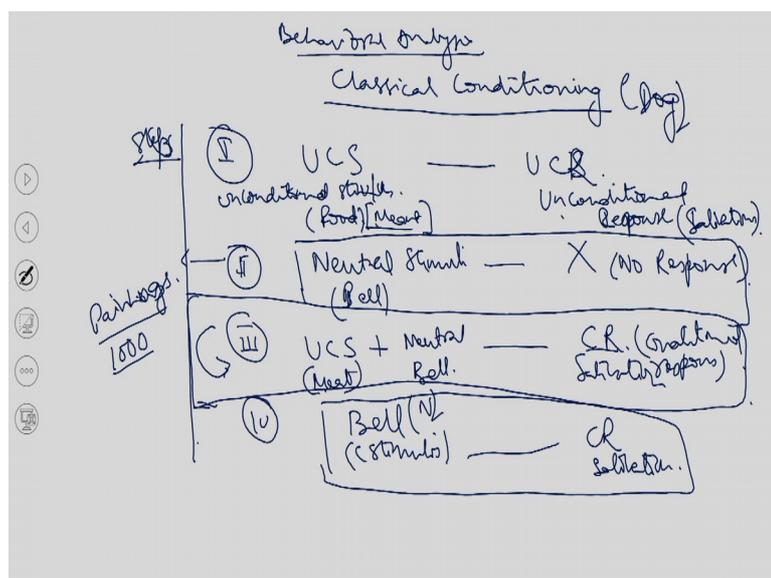
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I. Some Applications of Respondent Conditioning Principles		
<b>A. Conditioning Responses to New Stimuli</b>		
<b>Unconditioned or Previously Conditioned Stimulus</b>	<b>Conditioned Stimulus</b>	<b>Example</b>
Patriotic events or music	A product or person	Patriotic music as background in political commercial
<b>B. Use of Familiar Stimuli to Elicit Responses</b>		
<b>Conditioned Stimulus</b>	<b>Conditioned Response(s)</b>	<b>Example</b>
Familiar music	Relaxation, excitement, goodwill	Christmas music in retail store
Familiar social cues	Excitement, attention, anxiety	Sirens sounding or telephones ringing in a commercial
<b>II. Some Applications of Operant Conditioning Principles</b>		
<b>A. Rewards for Desired Behavior (Continuous Schedules)</b>		
<b>Desired Behavior</b>	<b>Reward Given Following Behavior</b>	
Product purchase	Trading stamps, cash bonus or rebate, prizes, coupons	
<b>B. Rewards for Desired Behavior (Partial Schedules)</b>		
<b>Desired Behavior</b>	<b>Reward Given (Sometimes)</b>	
Product purchase	Prize for every second, or third, etc., purchase	
<b>C. Shaping</b>		
<b>Approximation of Desired Response</b>	<b>Consequence Following Approximation</b>	<b>Final Response Desired</b>
Opening a charge account	Prizes, etc., for opening account	Expenditure of funds
Trip to point-of-purchase	Entertainment at store	Purchase of products
Entry into store	Door prize	Purchase of products
Product trial	Free product and/or some bonus for using	Purchase of products
<b>D. Discriminative Stimuli</b>		
<b>Desired Behavior</b>	<b>Reward Signal</b>	<b>Example</b>
Entry into store	Store signs	50%-off sale

**Applications of the Behavior Modification Principles in Marketing**

The next theory of learning is basically the behavior analysis theory and so here I have some applications of respondent conditioning and operant conditioning. And so these are examples that I have given. So, we will go into this in a while to their example. Let us first understand what is this behavior analysis method.

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So, there are two kinds of behavior analysis method the first is called the classical conditioning. Now, what is classical conditioning? It is a form of associative learning. So, two or more stimuluses are associated together to form learning and this is called the associated form of learning.

So, in the beginning there are some steps to this classical conditioning. Step number 1, I have something called the unconditioned stimulus and this unconditioned stimulus will be let us say, food, the classic I am using the classic example of Ivan Pavlov. So, Ivan Pavlov was a physiologist and a psychologist as well. And so what he was trying to see he developed this idea of classical conditioning and what he was trying to do? He was trying to study the rate of salivation in dogs after presenting meat powder. So meat powder is something which or meat is something which makes a dog salivate and what he was interested in is it was interested in finding out or studying how does this meat powder or meat lead to salivation, what is the relationship between them. And in this particular juncture in this particular in this particular work he developed this theory of classical conditioning.

So, how does this theory move about? So, in the start, the step 1 we have something called an unconditioned stimulus which leads to something called a unconditioned response and so unconditioned and in this case unconditioned responses salivation. So, present of food or presence of meat leads to salivation and this relationship is natural, right, it is unconditioned stimulus leading to unconditioned response. This is a direct relation no amount of learning has gone into it no amount of conditioning, conditioning means artificial learning conditioning which teaching someone to do something. And so the dog has not been taught to salivate the dog normally salivates in terms of the unconditioned stimulus.

In step 2, a neutral stimulus is taken and this neutral stimulus could be maybe a bell, right. And so this neutral stimulus is taken and then it is pad with some kind of a response. So, the meat when it is presented to the dog, so here I am doing on the dog and studying what is the learning in dog and so when I present the meat powder to the dog he salivates, but when I present the bell to the dog there is no response. What is the trick here? The trick here is to make the dog salivate for the bell not for the meat powder and if I can do that if I can make the dog salivate for the bell and not for the meat powder what I have achieved is called classical conditioning. What I have done is I have

associated two stimuli which were not paired together which were not together to start with and I have made through my process of learning the stimuli through which the dog was not reacting which is the bell he starts reacting to that he starts showing sign to that.

Now, in terms of my consumer behavior research this is a very good example is the word free, the idea of giving something free and so free basically has the power of because free attracts consumers and so when I add free to something it can make things sell basically. So, let us first look into this. So, this is the second step.

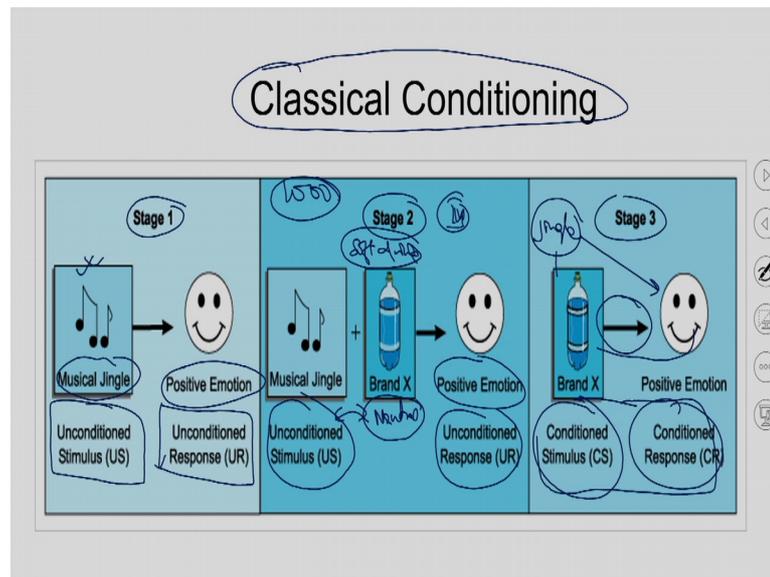
In my third step what I do? Something called pairings. And in pairings I present my unconditioned stimulus and then I present my bell with it. And then I have something called the conditioned response. So, unconditioned stimulus plus the neutral stimulus leads to something called the conditioned response and so this conditioned response is basically salivation. So, here celebration is the conditioned response bell, sound is the neutral stimulus and meat powder is the unconditioned stimulus, right.

And so what has happened is I will do let us say 1000 pairings which means that 1000 times I will repeat this step. So, this step has to be repeated for 1000 steps. Now, if I do that I will come to a stage a stage 4, where I just present the bell which now is called the conditioned stimulus and that will lead to the conditioned response which is salivation, right.

So, here what has happened is I will present the neutral stimulus and the neutral stimulus leads to conditioned response and that happens only after 1000 of these pairings. And now what I have achieved from this is that although look at point 2 or equation 2 where the neutral stimulus was not producing any response, but after 1000 pairing what has happened is the neutral stimulus which was not producing any response produces the response of salivation. And this is the simplest form of classical conditioning and this is what is used generally in most of the consumer behavior research classical conditioning.

So, what do I do is that a neutral stimulus is added to unconditioned stimulus and the unconditioned power of the unconditional stimulus is basically extended on to the neutral stimulus. And the neutral stimulus acquires this power of eliciting response and that is what is the idea basic idea of classical conditioning, right. So, I hope you understood this.

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We will see variations of it and so one good example of classical conditioning is this, so, very effective demonstration in terms of marketplace. There are 3 stages what I do is I place a musical jingle this is my conditioned stimulus and this musical jingle leads to unconditioned response.

So, favorite tunes the Kingfisher tune, the Harley Davidson tune, the Audi tune, the Pink Panther tune, some of these tunes or most of these tunes had create positive emotions on you. For example, the kingfisher tune creates a positive emotion on to you. So, this is natural this has been pre learned, right. Kingfisher tune is so good that it creates this kind of or the tune of certain series person of interest for example, that creates a different mood altogether of different positive mood altogether, right. So, this jingle creates, the musical jingle creates a positive emotion into person. What I can do is I can associate this musical jingle with my product and the positivity the positive emotion which is caused by the physical jingle is transferred onto the product.

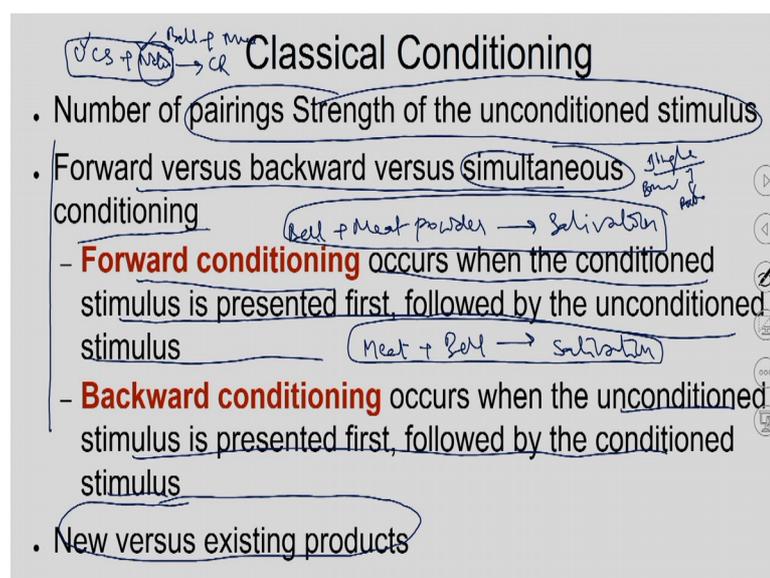
So, that is what I do I do pairings I put the musical jingle and this is my neutral stimulus this brand of soft drink which initially was not causing any positive emotion because the more positive emotion of consumer feels in the process of buying the higher the chances of you becoming brand loyal and using it again and again and so this was not causing any positive emotions. So, I relate these two to together and these deeds to positive emotion and condition response. So, this is 1000 pairings maybe or number of pairings is

this is stage 3. Stage 2 is not depicted here because alone this is not this brand is not giving any kind of an effect.

And so what later happens is if I do it 1000 times at stage 3 this brand X leads to positive emotion this is called the conditioned stimulus, this is called the conditioned response and this brand has acquired it has acquired the power of what; the power of jingle. Because jingle was the one which was causing positive emotion and now this brand X of soft drink now makes the consumers feel positive and this is simple example of classical conditioning into the marketplace. This is how classical conditioning actually works into the marketplace simple example of classical conditioning into the marketplace.

Another thing to remember is that since this relation is artificially caused it will not stay for long and so what has to be done is you have to recondition, which basically means that this step has to be done over and over again at points of time. But if you do not do this step again and again reconditioning is not happening then this conditioning will be lost this learning will be lost which means that you each time jingle has to be associated or even after some time the consumer will learn that its causing positive emotion. So, if something goes wrong the jingle has to be used at times because what will happen is the behavior will become extinct after a period of time, this kind of behavior will extinct.

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**Classical Conditioning**

$CS + UCS \rightarrow CR$  (Bell + meat)

- Number of pairings Strength of the unconditioned stimulus
- Forward versus backward versus simultaneous conditioning
  - **Forward conditioning** occurs when the conditioned stimulus is presented first, followed by the unconditioned stimulus  
(Bell + Meat powder  $\rightarrow$  Salivation)
  - **Backward conditioning** occurs when the unconditioned stimulus is presented first, followed by the conditioned stimulus  
(Meat + Bell  $\rightarrow$  Salivation)
- New versus existing products

So, some interesting facts the number of pairings strength of the unconditioned stimulus is dependent on the number of pairings. As I said the more number of stage 3 happens, the more number of times stage 3 is happening which means that the conditions the neutral stimulus is matched with the unconditioned stimulus. The more number of times this presentation happens the higher the chances of neutral stimulus eliciting the type of response that you that you are buying which means that the more the habit the more the increase in behavior. So, more number of pairings as the more number of pairings is there the strength of unconditioned stimulus the higher the chance of the behavior happening.

Now, within this concept of pairing is the idea of forward versus backward versus simultaneous conditioning. Now, remember I said that the unconditioned stimulus is paired with the neutral stimulus to give something called the conditioned response. Now, the way these pairing happens when should the unconditioned stimulus come, when should the neutral stimulus come that sequence is what is forward and backward conditioning, right. So, what is forward conditioning? Forward conditioning occurs when the conditioned stimulus is presented first followed by the unconditioned stimulus.

So, if I have my neutral stimulus which if I have a bell presented before the meat powder. So, bell plus meat powder leads to salivation this is called forward conditioning. What happened is a forward conditioning has happened. There is something called backward conditioning the one process that we use is called backward conditioning and in backward conditioning what happens is when the unconditioned stimulus is presented first followed by conditioned stimulus. And so if my meat powder comes first followed by the bell which leads to salivation is what is backward conditioning.

Now, generally speaking this forward conditioning is very easy. Now, in terms of consumer research or in terms of the consumer problem if the brand of soft drink comes before the jingle this is called for in positive emotion results, this is called forward conditioning, but if the jingle comes before and the brand comes afterwards this is called backward conditioning. Now, generally speaking in terms of this conditioning sequences forward conditioning is for simultaneous forward conditioning. There are two kinds of forward conditioning we are simultaneous conditioning and we have called delayed conditioning, who trace conditioning and delays conditioning. And so within the trace forward trace conditioning sometimes also called simultaneous conditioning the

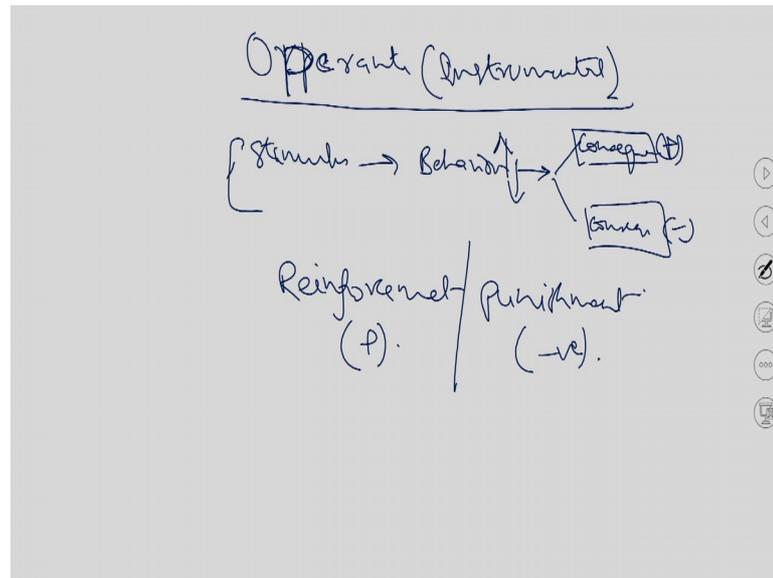
conditioning is very high which means that the chances of the behavior occurring chances the required behavior that you want occurring is very high whereas, in backward conditioning it is of some type.

And so new versus existing products this is how behavior is explained for new versus existing products if a new product is there any existing product is that this kind of conditioning principles can be used to established behavior towards this new a new products x an existing products. There is also something called that we did not discuss is something called simultaneous conditioning. And so what happens in simultaneous conditioning is the jingle and the brand are presented together which leads to the positive emotion. So, if the jingle and the brand are presented at the same point of time. So, it is basically time based thing. In one case the jingle comes first followed by the brand and the positive emotion, in the other case the brand comes first followed by the jingle and positive emotion, in the third case both come together and the positive emotion and so this is called simultaneous conditioned.

Simultaneous conditioning is generally very weak, because it is very difficult for people to understand what is causing the response the to understand that, because these are all this conditioning the these conditioning can be explained in terms of expectations or certain kind of reward expectation from doing a particular behavior. So, this is how classical conditioning this is what is classical conditioning and this is the use of classical conditioning in terms of consumer behavior.

Now, there is another kind of conditioning that we called up or that we thought is called operant or instrumental conditioning.

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And so what is this instrumental conditioning all about? The instrumental conditioning what happens is whereas, in classical conditioning a stimulus is followed by a reward a stimulus is associated with a reward which leads to the positive behavior in class in operant conditioning behavior leads to the reward, behavior leads to the reinforcement. So, there in classical conditioning the reinforcement was meat powder, right

So, reinforcement is followed or reinforcement precedes the presentation of the neutral stimulus that leads to the positive behavior the desirable behavior. In this case a stimulus leads to a particular behavior and this behavior have consequences. Now, if the consequence is positive the behavior is increased, if the consequence is negative the behavior is decreased. So, a stimulus leads to a behavior a person does something a person brings a particular kind of brand, uses the brand is satisfied with it he will buy it, not satisfied with it not buy it. Remember the jingle I forgot the name of that, but it says [FL] kind of a thing.

So, first use and then trust and turn form the belief and this is that kind of learning. So, first use it and then believe it. So, you do that behavior if the behavior is positive, behavior is leading to positive consequences you actually will do that behavior again and again you will get satisfied with the brand and you will lead to this will lead to increase buying, but or increase manually. But if there is a negative consequence to it what will happen is it will lead to decrease in the in the in the desired behavior and so the behavior

will not be there. And so these reward these consequences are of two types we have punishment and reinforcement and so in operant conditioning these consequences can be either reinforcement for positive consequences or punishment for negative consequences.

So, basically what is the idea here? The idea in classical conditioning the reward was presented upfront, the reward was given to you upfront, the reinforcement was up front, first the reinforcement is presented and then you do the behavior. So, chocolate is given to the kid, the kid does some work this is basically classical conditioning. A kid does something good and because of that he gets a chocolate this is instrumental conditioning. Behavior leads to consequences, positive consequences increases behavior, negative consequences decreases behavior operant conditioning. Reward leads to behavior, this is classical conditioning and so this is the definition of operant conditioning.

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### Operant Conditioning

- **Operant** or **instrumental conditioning** is “a process in which the frequency of occurrence of a bit of behavior is modified by the consequences of the behavior”
- Operant conditioning is especially relevant to low-involvement purchases
- Behavior is most easily modified when little thought is necessary for adequate decision making

So, what is the role of operant conditioning in consumer behavior? Operant conditioning or instrumental conditioning is a process in which the frequency of occurrence the key word is frequency of occurrence of a bit of behavior is modified by the consequences of that behavior. As I said if a behavior is done if you buy a particular product and the product gives you positive satisfaction, gives you the kind of satisfaction that you are looking for gives you positive feeling you will do that behavior, you will do those acts to

increase that behavior, but if it causes negative consequences you will not repeat that behavior and that is the basic of operant conditioning.

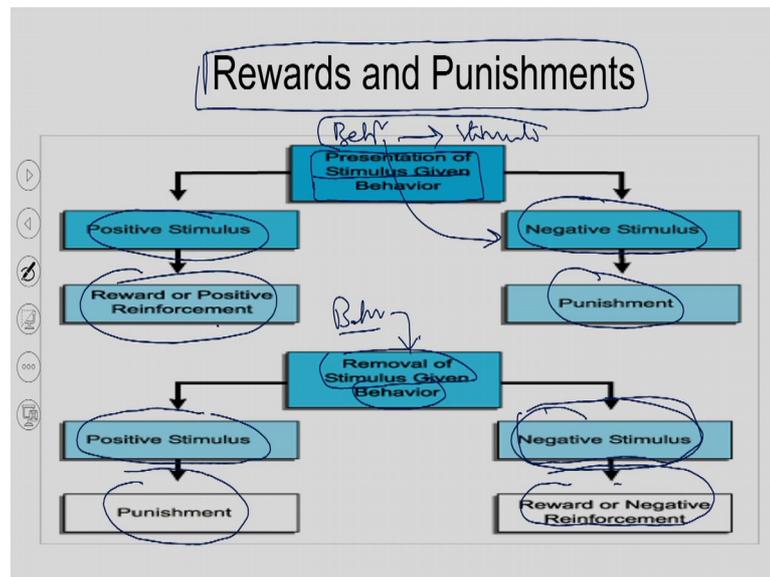
Now, operant conditioning is especially relevant to low involvement purchases and so where the involvement is very low in those kind of cases operant conditioning is very high, because you do what behavior it gives you positivity so you do not think about too much and it sort of becomes habit. So, lowering as I explained in the starting of it, low involvement products leads to high habit formation.

So, people are not brand loyal, but they are more habit oriented and so they buy it out of habit because the product is satisfying all their needs, right and there is no need to and because it is satisfying the need they do not need to think about do evaluation do, get into this whole idea of consumer decision making and that relieves their stress in certain way and, so that is they are doing what they are doing. So, operant conditioning is basically is involved low involvement purchases.

Now, behavior is most easily modified when little thought is necessary for adequate decision making. When you have a lot of thought when you start giving lot of thought for behavior analysis for understanding the results of any or understand the consequences then modification of behavior is very difficult. But when little thought is required modification can actually happen.

So, if you go to a particular store you do not find your particular brand it will be high on brand switching you will actually switch the brand because that requires does because the similar brand or brand which you are moving from your to the other one the one you are searching is not there. So, you are looking at a brand which is very similar to your brand offering similar features. Here in this case the brand switching will be very high, behave modification will be very high where the thought process is very low, where little thought is required for adequate decision making in those cases brand switching is very high. So, your behavior is easily modified.

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Now, there are 4 kinds of outputs or consequences, right. So, as I said rewards and punishment our consequences from operant conditioning. So, there are two kinds of rewards and two kinds of punishments. So, particular behavior leads to a particular kind of response and what is the relation between them I am going to explain it to you.

So, presentation of a stimulus given the behavior, now if a positive stimulus is presented, so after a behavior what kind of stimuli is presented that is what we explaining here. So, if a behavior has happened and because of the behavior happen a positive stimulus follows with it this is called reward or positive reinforcement. So, you go to the market, you buy a particular product, something extra is given to you a coupon is given to you a mug is given to after buying a coffee set or a buying a coffee hotel; this is called. So, you this is called the positive punish, this is called positive reinforcement. So, positive reinforcement, negative reinforcement, positive punishment and negative punishment, 4 kind of behaviors. This is called positive reinforcement.

In this case you do something good and you do a particular behavior and because of that you are rewarded in a particular way you do that behavior and again and again and that is what is called reward or positive reinforcement. If you do a particular behavior and a negative stimulus follows, right. So, you go to a shop you buy something and when you do that that particular thing gives you a shock after using it or that is something after buying something you realize that it is broken. This is called negative or this is called

punishment, right. So, you do a behavior and because of this behavior and negative stimulus comes in this is called punishment. You brought us a product you bought a toaster from the market and when you used it gives you shock, this is called punishment and so you will not do that behavior and again and again and so doing the behavior leads to a negative consequences and that that you will not do this behavior because presentation the stimulus that you get after it is basically a punishment.

There are two more things to look at; so, presentation of a stimulus given a behavior and removal of a stimulus given a behavior. So, do you do a behavior and because of that a particular stimulus is either presented or given removed. Now, if you do behavior and particular stimulus is removed, how does that share into? So, you do a particular behavior and a positive stimulus is taken away from you it is called punishment. So, you go to hotel to leave in that hotel and since you did not leave in that hotel for a longer period of time your membership is taken away.

Some kind of upgrading is taken away. A positive stimulus is taken away you go to a hotel leave in that hotel, but as a result a positive stimulus is taken away from you, a positive negative behavior happens a positive stimulus is taken away from you something that you desirable is taken away from you. You did not stay in that hotel for a longer period of time and that is the behavior that you did and because of that you are not given club membership or yours taken away some prestige membership that is what is happening here.

And so this is called negative punishment and then there is something called positive punishment. This is negative punishment basically and this is positive punishment. In this case you do a particular behavior and because of that behavior something negative, something that you will not want is taken from you for example, you do exercises and because of doing exercises something that you do not want is taken away from you your weight losses. So, you do not want the weight and it gets lost and that is called positive punishment, right.

And so there are 4 things that can happen, you can have a positive, positive reinforcement, you can have a negative reinforcement, you can have a positive punishment and you can have a negative punishment. So, the difference is in one case the something that you desire is taken away from you and something that you do not desire

is taken away from you and because of that you feel good is called negative reinforcement. But something that you desire is taken away from you as a punishment and because of that you suffer is what is called negative punishment and so these are the 4 different kinds of consequences that can happen into the marketplace.

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## How Rewards and Punishments Influence Consumer Behavior

- Reward and punishment schedule
  - A **reinforcement schedule** is a schedule of **rewards or punishments** used for learning
  - An **intermittent reinforcement** schedule rewards or punishes **at least some responses** on a fairly **regular basis**
  - With **continuous reinforcement** the response **occurs frequently**

Handwritten notes: "Reinforcement", "Punishment", "Reward", "Punishment", "Regular basis", "at least some responses", "occurs frequently".

So, how rewards and punishments influences consumer behavior what is the way in which rewards and punishments actually influences consumer behavior. So, rewards and punishment actually influences consumer behavior through something called rewards and punishment schedule. Now, what is the are rewards and punishment schedule? How often a reward of punishment is given to people determines what kind of behavior that you tend to do, right.

So, the more number of chances since this is operant conditioning a behavior leads to a consequence, from the more frequency of this consequence coming after behavior for each unit of behavior done. If you have one unit of consequence this is called continuous reinforcement, right and so there are several reinforcement schedule. Now, reinforcement schedule is a schedule of rewards or punishments used for learning. So, how do how do what happens is a kind of reward how many times the reward is given to you or how much the reward is given to you. So, it is time versus ratio is called ratio versus time frequency and ratio that is the two terms which is used.

So, how much reward is given to you and how many times that is given to you that defines a schedule in operant conditioning, because operant conditioning behavior leads to the consequence. And so the number of times that you are rewarded the behavior keeps on increasing and so generally we never use something called constant reinforcement. For each behavior we do not generally keep on giving you constant rewards or punishment. We use something called intermittent schedule. So, you have fixed ratio, fixed interval, variable ratio and variable interval 4 different kind of schedules.

Now, generally the schedules of reinforcement are and so you can look in look it up the fixed interval, the fixed ratio type, the variable interval type and the variable ratio type, 4 type of behavior or reinforcement schedule which is there. In fixed intervals after fixed period of time the reward will come to you, in fixed ratio after fixed period of time a fixed amount of reward is given to you. In variable interval after variable periods of time or reward comes to you and in variable ratio after variable period after variable time or not time variable amounts of different amounts or rewards are given to you that is the 4 schedule which is used and this is called the intermittent schedule.

Now, in intermittent reinforcement schedule rewards or punish punishes rewards or punishes at least some responses on a fairly regular basis. So, one of these the variable ratio the variable interval, the fixed ratio and fixed interval are any are intermittent reinforcement schedules. So, what happens here is that you are not given constant reinforcements or punishments the consequences that occur are not constant with the behavior, but some behaviors or some occurrences of behaviors either rewarded or punished and that is called the intermittent schedule.

So, generally speaking in most companies or in most marketers what generally happens is we start with something called continuous schedule. So, initially we give you punishment or we give you generally it is not punishment is only reward. So, we give you rewards for whatever behavior you do in a continuous basis and then at a later point of time when the behavior has sustained itself what we do is we change from continuous to intermittent form of reinforcement. So, in intermediate form some of the occurrence of behavior is reinforced either in a fixed manner or in a variable manner and either after a time based or ratio based.

Now, with continuous reinforcement schedule, so one kind of reinforcement schedule is intermittent type the other kind of reinforcement schedule is the continuous type where there in response occurs frequently. So, this can be used in your general consumer behavior research or in general can the statuses what would happen is that in intermediate schedule so you go buy something and you are rewarded sometimes you are rewarded sometimes you are not and so the consumer gets attached with it, but you have to actually look at that breakaway point. There is a breakaway point, if you do not if you are using a variable interval schedule or variable ratio schedule for giving consumers some benefit for buying your product then you have to be very sure or something called a breakaway point.

Now, there is a breakaway point, if you do not give them reinforcements, if you do not give them something good to think about after a period of time they will break away from you. So, you have to be very vary of that. But if you keep on if you constantly give them rewards they will not stick to your brand, right they will think about that this brand is giving me too many rewards and why should I switch to you and that is why you have these sales coming in.

So, at period of time you have this sale and this sale is actually a variable kind of a reinforcement schedule. So, you buy that behavior, the buying behavior in the sale gives you certain rewards or buying during certain season off seasons sales and all those things are basically a schedule of reinforcement. So, two schedules which are there one is the intermediate schedule where some behavior occurring is always rewarded or punished and the other one is all behavior occurring are rewarded and punished, so continuous versus intermittent.

(Refer Slide Time: 52:28)

## How Rewards and Punishments Influence Consumer Behavior

- Shaping responses through rewards and punishments
  - **Shaping** is a form of operant conditioning in which consumers are gradually trained to produce a desired response
- Quality and quantity of rewards and punishments

Now, our rewards and punishments influences consumer behavior. How does this reward and punishment influences consumer behavior? One is shaping responses through rewards and punishments. One way of this rewards and punishments influences consumer behavior is not only in terms of schedules of reinforcement it is also in terms of shaping.

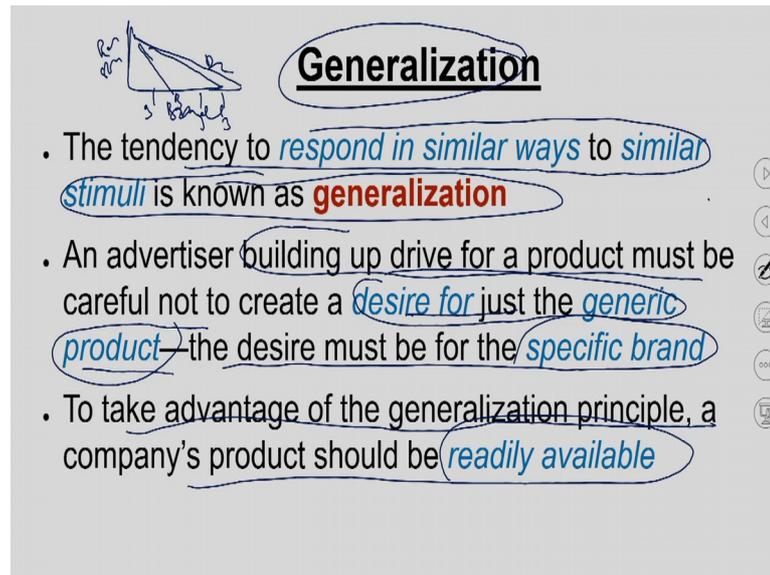
So, what is shaping? Shaping is basically a process through which you give some good consequences you give some positive things to consumers, so that they start liking your product or they, so that they start liking your brand. Now, what is shaping? Shaping is a form of operant conditioning in which consumers are gradually trained to produce a desired behavior. So, they are given benefits some benefits or an equal amount of benefits, so that the consumers start liking the product.

Small benefits are given or they are trained to like that product. So, sometimes they are given benefits and sometimes they are given this benefit that benefit kind of a thing coupons, price discounts this that and different kind of benefits are given to them, so that they are trained to like your particular brand and, so that is what is shaping.

And the quality and quantity of rewards are also and punishment has also a role to play in consumer behavior. And what is this quality and quantity of what, how much amount that you are giving. So, how much rebate that you are giving, what is the quality of reward that you are getting giving you are you living coupons or you are giving

something immediately free to them bigger thing. So, China, maybe China ball or dinner set with something which is free. So, the quality of the dinner set its lao pail maybe. So, you like it and you buy it its Eagle, Milton that kind of a thing which is free. So, how much quality you are giving free and that quality and quantity has a good role to play with rewards and punishments.

(Refer Slide Time: 54:11)



**Generalization**

- The tendency to *respond in similar ways to similar stimuli* is known as **generalization**
- An advertiser building up drive for a product must be careful not to create a *desire for just the generic product*—the desire must be for the *specific brand*
- To take advantage of the generalization principle, a company's product should be *readily available*

Two interesting factors to look at in operant conditioning one is the process of generalization. So, what is the process of generalization? The process of generalization suggests that what consumers will actually do is that they will generalize product benefits or their favorite product to other similar products when the favorite product is not available. Even if their favorite product is available the higher the drive of buying that class of product the higher they will lead to generalization.

So, if you want soft drink and there is a higher soft drink drive for a soft drink what will happen is given the fact that your initial soft drink is not available you will generalize you will buy a soft drink which is similar to your soft drink. And that is called product generalization, where you generalize features of your brand generalized features of the brand that you like to other brands competing brands that is called generalization or when you equate them together. So, the tendency to respond in similar ways to stimulus stimuli is called generalization. If two products are similar and your responses towards them the feeling that you have towards them are similar this is called generalization.

Now, I wrote and an advertising, advertiser building up drive from a product must be careful not to create desire for just generic brand because if they create this if a producer if an advertiser advertised in such a way that the desire for a generic brand desire for cola increases, but not Coca-Cola, not Pepsi. If he is promoting the add such a way that consumers understand that there is a drive or consumers get the drive for a particular class of brand then what will happen is then it is not a good add, but then what they should do is that the desire for the specific brand should increase.

The advertisement is should be made in such a way that the consumer craze for that particular brand not the product class not for all colas, he should not the advertisement should not be made in such a way that the drive for cola increases rather it should be made in such a way they drive for a particular cola increases, right. So, it is basically it should be highlighting the product. So, advertiser should be careful for that because what would happen is if a desire for the product class is increased then what will happen is high generalization will happen any cola will be accepted for that matter and not that particular cola.

Now, to take advantage of the generalization principle a company's product should be readily available. Now, if you want to use generalization principle if you are a product which is similar to any other product which people are using and you want other people to buy your product the first thing that you need to do is understand the process of generalization.

So, advertise your product in such a way that it is competing to the already using product. And given the given that fact you should also make sure that your product is readily available. If your product is not available at all what is going to happen is that when people think of switching, people think of going to your product because the unavailability of the first product or because the tiredness from the first product then they will not go to your product, they will not show any kind of response to your product. And so product generalization take any advantage you to product generalization essential principle is that the readiness of availability of your product, right.

So, generally speaking what happens is that there is a graph of response strength and number of brand choice here. So, number of brand let us say we have brand b 1, b 2, b 3, b4 and this is the response strength the more the number of brand that you have the

higher the desire the higher the generalization. So, more drive if the more drive that you have the response strength the higher drive. So, this is drive 1, this is the drive and this is drive 2. So, the more they drive the more the angle of this drive because this response strength reflex drive, the higher the drive you have for a particular brand the higher the generalization that is going to happen because as the time increases the angle increases if the angle increases it is going to more. So, if the drive is low only few brands will be generalized to if the high drive is very high more number of brands will actually be generalized to.

So, this principle has to be understood this principle has to be taken in. So, this response strength or drive versus brand, so more the drive higher the drive higher the chances of generalization, lower the drive for a particular product or product class lower the chances of generalization that is the principle to be looked at. And with generalization there is another factor which is called discrimination.

(Refer Slide Time: 58:50)

### Discrimination

- **Discrimination** training involves teaching a person who instinctively responds identically to two stimuli to respond to each differently
- Discrimination is a process through which consumers restrict their range of responses and attach themselves to a particular brand
- When products are generically equal and undifferentiated, the challenge is to encourage consumers to perceive one brand as different from the others

So, discrimination training involves teaching a person who instantly responds identically to two stimuli to respond to each differently and so this is very necessary. It is necessary for marketers to use this principle of stimulus discrimination because if discrimination cannot happen if the consumer is not able to discriminate between the brand that he likes or some other brand what is going to happen is that in those cases the consumer will not stick to his own brand he cannot discriminate between two brands.

Now, discrimination is a process through which consumers restrict the range of responses and attach themselves to a particular brand. So, discrimination is taught to consumers through advertisements. They are these highlight the product benefits are highlighted it is made sure that the marketer has to made sure that their product is discriminated because if then discrimination is not high stimulus generalization will take place and so product loyalties is will not be there or brand loyalties will not be there. And so this discrimination training is very important the marketer has to make sure that or the, so that the consumer learns to discriminate between his brand and other brand.

Now, when a products are generically equal and undifferentiated the challenge is to encourage consumers to perceive one brand as different from others. As I said when a generic brand is there or when two products are genetically equal it is really a challenge for marketers to differentiate from their brand from their brand to some other brand.

For example, two brands of chips. Now, it is very it becomes very difficult on the part of the consumer or on the part of the marketer to make the consumer learn the two brands are different, right and, so that is what, it is not. So, I have discussed somewhere along these lectures the case where two brands of cola were there it was and it was found out they do not terms of taste people are not able to differentiate the colas, but then when given the brand names when given the brands they were able to differentiate which basically proves that product differentiation product discrimination is a tough task to achieve.

(Refer Slide Time: 60:48)

**Modeling**

- **Modeling** is the process through which an individual *learns a behavior* by *observing the behavior of others* and the *consequences* of this behavior
- Characteristics of the *model*
- Characteristics of the *modeled behavior*
- Characteristics of the *observers*
- Characteristics of the *modeled behavior consequence*

The next learning theory is called modeling. And what is this? So, modeling is a process through which an individual learns a behavior by observing the behavior of others in the consequences with that behavior.

So, in the marketplace if somebody sees someone using a particular brand and getting rewarded out of it that person uses or models that behavior or learns this behavior through modeling that is called modeling. So, learning through seeing others doing a particular behavior and actually looking at the consequence that is happening out of it. Now, this modeling depends on 4 things, characteristic of the model. How good the model is, if the model is not able to demonstrate the whole process of learning and the consequence out of it the learning is very slow to happen. So, the better the model, the better the model demonstrates this learning process, the better the model demonstrate what happens after doing something and what is the consequence of it the better the learning is going to happen.

Characteristic of the model behavior, how well the person whose who is learning from somebody who was actually showing the behavior somebody, who is actually demonstrating the behavior how well this model behavior is, the more complex the model behavior the more difficult for person to learn this model behavior. So, easier the behavior is the easier that you explained that this behavior is or you understand that behavior the better the learning would be.

Characteristic of the observers, the observer also has to be good enough or motivated enough to actually learn. If the observer is not motivated enough is not capable of understanding the behavior that is going on and the consequence that is happening out of the behavior he is not going to understand the behavior and so modeling is also dependent on the observer the characteristic of the observer and the consequence of the model behavior. So, if you do a particular behavior what is the consequence out of it? If the consequence is positive the chances are that you learn the behavior if the consequence is negative the chances are that you will not like that behavior.

For example, going to a movie somebody see someone going into the movie and then he sees that person coming out with a positive after seeing the 3D movie he feels positive he comes out and so you learn the behavior that going to movies a good thing its entertaining thing, right and, so that kind of a thing. So, first of first the first thing is whether the model behavior or I give a good example of using the pull along shoot suitcases. Now, the thing is that the pull along the pull along suitcases initially you have to actually use by pulling it.

Now, the thing is if you are pulling it then you have to realize at what angle you are it has to be pulled, but the fact is that this model behavior the better this model is showing you how this pull along is or what angle it is there if the better way it is the model is demonstrating it the better the chances for the person to learn. So, somebody doing a particular behavior in the marketplace and getting rewarded out of it if you can learn that and if you can learn how the behavior is done or how the model how the behavior what the behavior is which led to the consequence the positive consequence that he has got and also well if you have the capability to understand plus also understand the consequences the better the thing is.

So, if somebody helps someone in the marketplace or somebody does something in the marketplace that because of that he get a free coupon, somebody purchased something and because of purchase of 25,000 and above you get a coupon you have to learn this behavior. And when you learn this behavior, you have the ability to understand this behavior and the consequence out of it this is called modeling or this is called model learning in consumer psychology.

(Refer Slide Time: 64:24)

### Cognitive Theory

- **Cognitive theory** is an alternative to behavior analysis that *emphasizes* the *thinking* rather than the *doing* aspects of learning
- Formulation of hypotheses
- Exposure
- Encoding
- Integration

The image contains two hand-drawn flowcharts. The top flowchart shows a sequence of boxes: PB, PH, EA, EM, T, with arrows connecting them from left to right. A feedback arrow points from T back to PB. The bottom flowchart shows a sequence of boxes: Ana, H, M, I, R, with arrows connecting them from left to right. A feedback arrow points from R back to Ana. In the center, there is a box containing the letters 'M', 'P', and 'C' arranged in a circle.

And the last theory that we are going to discuss is called the cognitive theory. And what is the cognitive theory? So, the cognitive theory is an alternate to behavior analysis theory that emphasizes that thinking rather than doing aspect of learning. And so here we do not do as we saw in behavior analysis in classical conditioning and instrumental conditioning what we saw is that we did something, we pad a neutral stimulus to an to conditioned stimulus and behavior occurs or we did a particular behavior and because of that something happened something a consequence happened; so, all these where doing theory.

Even for the probabilistic theory or the modeling theory we learn something by looking at, we did something, we repeated that behavior again and the same consequence has happened to the worse or not. And if that happened only then we said the learning has proceeded. When cognitive theory that is what we do not do, we emphasize on thinking rather than doing aspect.

And so what the consumer does here is he actually does he learns in the way that he first he forms a certain kind of a belief. So, it works in this way some prior believes are there for the consumer and this prior belief leads to formulation of certain hypothesis. This certain hypotheses are then exposed to market stimuli which leads to encoding of new information and then if this is positive it integrates and forms new belief.

So, let us say I believe that analgesic cause remedies to headache that is what my belief is, right and so a new brand of or analgesic has come which has antipyretic use also. So, it is basically you can treat your not only relieve you from headache, but also can treat let us say temperatures differences or can lead to lowering or fever, right and so my prior believe is that analgesics only pain delivers, right.

So, new brand has come in which has analgesic and antipyretic use which basically means that it can also lower temperatures. So, what I will do is I will formulate hypothesis, formulate hypothesis saying that how this analgesic this new brand of analgesic is also lowering for the behavior. So, I will have to first look at hypothesis that what is the combination of weight and what is the kind of drugs which are into this into that kind of a thing.

Then, with this hypothesis that this new brand of drug X both lowers fever and also relieves pain, with this belief, with this hypothesis I go into the market place and get my say exposed to information relating to the new drug and I find out that it has both these properties it has compounds which has both of these properties and then it is supposed to do that. So, I encode this information I found this information into the market place I encode this information into this market place the market place information into my memory and integrate into the already stored information.

o, already stored information was analgesic is pain reliever. Now, a new brand has come which has analgesic properties plus antipyretic properties which means that it lowers fever as well as lowers pain and so I form a hypothesis about that whether this happens or not goes into the market place. And from there I collect information about what is the compound here and what is the molecule here and what molecule does what based on that I encode this information to my earlier information that analgesics can only cause pain relieve and then integrate it with my prior beliefs and form a new belief. And new believe is that analgesic cannot only call the reduction in pain, but also called reduction in fever and a new brand of analgesic is there which can do a super drug is there which can do that. And that is basically how this learning happens through this cognitive theory of learning.

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### How Consumers Turn Hypotheses into Beliefs

- *Familiarity* with a product or service affects *consumer learning* by making the consumer *less likely* to be *influenced by new or conflicting* information in the marketplace
- When *experience is clear* (low in ambiguity), the consumer *learns quickly* and *information* in the marketplace plays only a *secondary role*
- If *experience is unclear* (high in ambiguity), however, *information* in the marketplace becomes a *primary source* of *influence*.

So, how consumers turn these hypotheses into beliefs? The hypothesis that they create about a particular brand, a particular product which is out there how do they convert this into some belief which is there. The first thing is familiarity with a product or service affect consumers learning by making the consumers less likely to be influenced by new in conflicting information in the marketplace. So, the more familiar a consumer is with a product or service the less likely he is to be influenced by new or conflicting information. If you are very familiar with analgesic and you know that in no way new compound can be there which can do this the higher the chances of you resisting to this information.

Now, when experience is clear, low in ambiguity, when your experience of this using this product is very clear the consumer learns quickly and information in the marketplace only plays a secondary role. So, when you have high end enough experience, when you have enough experiences and the product experience or the product knowledge if you are very high in those cases you learn additional things about the product very quickly and you do not trust on market information you do it kind of a thing happens. And so your hypothesis whatever you are made about the product it turns into quickly turns into some kind of integration some kind of encoding into integration and formation of new beliefs.

But when you do not have any experience about the product if your product experience is unclear high in ambiguity, if you if your experiences are very high you do not have any

experience about the product or you do not have any information about the product you are not an expert on it what you do is that in those cases the market place information becomes the primary source of information and in this case it is very easy to influence you. So, these are the brand oil people, these are the brand switching people. If you have very high clarity about what a product is and what is the influence of it in those cases you will have it is very difficult for people to of this type to switch. But if you have very low brand information or experiences with the product it is very low. Then in those cases information in the market place contrary into information into the market place and actually be used for shifting your brand loyalty, ok.

So, in today's lecture what we did was we looked at what is learning and what are the types of learning which goes on in to consumer in to modulating consumer behavior into the marketplace and modulating consumer behavior of marketers into the market place. We started with explaining classical conditioning a form of learning which is associated form and even before that we use something called habitual learning which is the probability based learning.

Then we moved on to something called observe learning and from there to modeling and from there to cognitive theories. So, 3 or 4 theories and these theories what they do is they use information from memory to make you learn develop new product choices or understand new products or form new product beliefs and behave in the in the marketplace or complete your transaction in the marketplace through information in your memory.

So, this learning actually helps you in doing your behavior or helps you in modulating your behavior in shaping your behavior into the marketplace, so that you get the best benefit from the best product into the market and have a positive experience into the marketplace.

In the next lecture we look into two more psychological factors which are mood, emotion and involvement and how these mood emotions; mood and emotions actually shape consumer behavior into the marketplace and what role does it have in terms of consumer behavior or consumer psychology.

Thank you.