

Hello and welcome to the T.Y.B.Sc module in Home science. Today

will be looking at the subject Theories of Human Development

and we will be studying about the behavioral theorist BF Skinner.

In this presentation we will cover the biosketch of BF

Skinner, his theory of operant

conditioning, the types of reinforcement, and education

and commercial application of the same.

At the end of this, the student will be able to understand the

theory and the experiments of BF

Skinner, identify positive and negative reinforcement and

reflect on the application of this theory in the field

of education and marketing.

Burrhus Frederick Skinner, popularly known as B.F. Skinner,

was born on 20th of March 1904 in Pennsylvania, and he

also grew up in the same town. His father was a lawyer and his

mother stayed home to care for Skinner and his younger brother.

At an early age, Skinner showed an interest in building

different types of gadgets, different types of contraptions,

from the things available in his

house. When he went to college, he developed a

passion for writing and he always thought that he would

be a writer. He tried also to become a professional writer,

but he did not succeed. Two years later he changed his

stream and pursued a new direction, enrolling in

Harvard University to study psychology.

At Harvard BF. Skinner developed what became known popularly as

the Skinner box.

With this device Skinner would study how an animal interacted

with its environment.

He first studied rats in his experiment. Seeing how the rats

discovered and used a lever or a button in the box which gave

them food at various intervals.

From these studies, Skinner came to the conclusion that

there was some form of reinforcement or encouragement

which was crucial in learning new behaviors. His work then

revolved around this theory of learned responses to an

environment rather than involuntary responses to

stimuli which Ivan Pavlov before him had proved in

relation to classical conditioning.

Theory of Skinner is popularly known as operant conditioning,

as opposed to Ivan Pavlov's theory, which was called

classical conditioning. Skinner believed that Ivan Pavlov's

classical conditioning theory was putting things too simply, and could not be a complete explanation of complex human behaviors. He believed that the best way to understand behavior is to look at the causes of an action and its consequences. He proved through his experiments that behavior which is followed by a pleasant consequence is likely to be repeated and behavior followed by an unpleasant consequence is less likely to be repeated. And this was what he called operant conditioning.

As part of operant conditioning, he talked about behaviors being reinforced and there were different types of reinforcement that Skinner talked about.

Positive reinforcement according to him was strengthening behavior by providing a reward or a consequence that the individual found rewarding. Skinner showed how positive reinforcement worked when he placed a hungry rat in what he called his Skinner box. The box contained a lever on one side and as the rat moved around the box by accident, it knocked the lever. As soon as it did so, a pellet of food would drop into a small container next to the lever as a result of this, the rat learned that it should go and press the lever quickly and

it would get food. So after a little time of being in the box, the rat could go straight away and press the lever and get the food. So the positive consequences of receiving the food if they press the lever ensured that the rat is repeating the action of pressing the lever again and again.

The other type of reinforcement which Skinner talked about was negative reinforcement. Now

negative reinforcement is the removal of some stimulus which the rat does not like, for example, electric shock by pressing of a lever so that itself works as a reward. So

Skinner proved this by showing how this negative reinforcement worked when he put the rat in the box which delivered an electric current. In order to avoid this electric current or escape from it, because it caused some discomfort, the rat started looking all around the box.

Suddenly the rat discovered by accident that if it touched a particular button or a lever, the electric current would go away. Now the electric current was the negative part that the rat did not want, so the rat quickly learned as soon as it entered that box to go straight to the lever, press it, and the electric current would stop.

This is what he called negative reinforcement and he also termed it escape learning or avoidance learning learning in order to avoid a bad situation.

Now the principles of reinforcement, are used many a times by teachers and various other people involved in the field of education. In the conventional learning situation, operant conditioning applies largely to issues of class control and student management. A simple way of shaping behavior is to provide feedback on the learners performance. For example, if a child scores very well on a test, the teacher can provide the child with compliments, approval or encouragement in front of the class, affirmation, or speak to the child of what they did correct and tell them what the teacher appreciated. Therefore, this phenomenon of working well is going to be repeated by the child. If a teacher wants to encourage students in class to answer questions, then the students should be praised or rewarded tangible or intangible for every attempt that is made to answer a question not bothering about whether the response is correct or not correct. That will encourage the students to answer questions.

Now, how is operant conditioning or the system of reinforcement used in advertising and the field of marketing? Many of the advertisements you see today will illustrate an application of BF Skinner's principles of operant conditioning. For example, when we see a commercial on television or hear an ad on the radio or read an ad in the newspaper, we often find that there is someone or the other who has got some reinforcement, either positively or negative, from using that particular product. For example, somebody who has pimples,, the advertisement that promises to remove that negative part of their face, the part which leaves scars. So to avoid or to evade the scars of acne, some people will repeat the behavior of buying an acne removal cream. This is to avoid dry skin or the acne spots on the skin. Similarly with shampoos, shampoos that promise to take away your dry and dull hair. Would be bought more by people who wanted to avoid these consequences, that being a form of negative reinforcement. Positive reinforcement used in marketing. For example, when a child is encouraged to buy more than one packet of biscuits, the child needs only one packet of biscuits, but is told by the advertiser. If you buy two packets of biscuits you get a

tattoo sticker free with this. So in order to get the reward, the child buys more in order to collect more tattoo stickers of different types. The child will continue buying two packets of these biscuits and hence the advertiser is positively reinforcing the child by providing them with that reward and also ensuring that his product remains on the shelves. Whether explicitly or implicitly through words or images, the purpose of all these ads is to communicate. If you do this, then this will happen. If you use the product, you will receive the specified benefit, or if you use the product, some negative thing from your life will be removed. Many ads promise an outcome and we may think if we buy this, this will happen, but sometimes a product does not realistically deliver. Still people keep buying. For example, if a shampoo ad promises that you will look like Aishwarya Rai or have the sex appeal of a model, but the shampoo fails to deliver on this promise. Still the shampoo cleans your hair and makes it look better than before at a reasonable price. Hence this latter reinforcement even though it is not what was promised, will make you buy the product again and again. Ads that imply, for example, a fixed

schedule of reinforcement by ten of these, or collect ten of these, and then you will get reward they suggest to the viewer that if you use this product certain number of times or for a certain length of time, then you will get the reinforcement. So this is how BFSkinner's theory is used also in the field of marketing. To learn more about BF. Skinner's experiments, you can refer to these relevant videos on YouTube which show very clearly how his original experiments were done. To know more, you could also refer to these books.

Thank you.