Hello and welcome to the T.Y.B.Sc. (Honors) Program in Home science.

We will be studying today about Theories of Human Development.

Particularly, we will be looking at module 8, which is the theory

of Ivan Pavlov.

In this you will learn about Ivan Pavlov, his theory of

classical conditioning, and the applications of his theory.

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

understand the theory of IvanPavlov and apply the theory to

everyday life and learning.

Ivan Petrovich Pavlov was a Russian physiologist, born on

14th of September in 1849 in Russia. He was the

eldest of 11 children. Hisfather was a priest and his

mother was a homemaker. Hejoined the seminary, but later

he left and pursued his studies in physics, maths, and natural

science at University at Saint

Petersburg. He won an award for his research in the University

and later went on to complete his PhD in Germany. During his

working years he was doing experiments on digestion,

particularly in dogs.

There was some research work which he did which led him to

the discovery of the theory,which we're going to study

about today.

Starting in 1901, Pavlov was nominated for successive years consecutively for theNobel Prize in Physiology or Medicine. However, he did not win this prize until 1904, and when he did, it was specified that he did so in recognition of his work on thePhysiology of digestion, which he studied, particularly in dogs. It was at this Institute of Experimental Medicine that Pavlov carried out these classical experiments investigating the gastric function of dogs or the stomach secretions in the dogs by trying to externalize this salivary glands so he could collect and could measure and analyze the amount of saliva that was produced in response to food under different conditions.

As a part of this experiment, he was led to the discovery that the dogs tended to get saliva in their mouth, sometimes before the fool was actually delivered to them, and then he set out to investigate what is the situation that is happening before they see the food.

This is a picture that you can look at which is part of what his experiment was, and this was the way he had connected the dogs to a particular place and he would measure the amount of

saliva for you to get a better view. The connection of the tubes to the salivary glands can be seen in this picture and then they were measured in a particular vessel in which the saliva was collected.

So by accident, Pavlov discovered something first. He predicted that the dogs would get saliva in their mouth when the food was placed in front of them.

However, he noticed that these dogs were beginning to salivate when they saw the assistant who was wearing a lab coat, who usually brought them the food.

So they're not salivating when the food comes to them, but rather, the expectation of the food seeing the person delivering the food also was making them salivate. So Pavlov discovered that any object or event which the dog had learned to associate with the food, such as the lab coat and the person wearing it would trigger the same response of a reflex that would happen when the food was presented and he was so intrigued by this discovery that he devoted the rest of his career to studying this type of associated learning. He termed this type of associated learning classical conditioning. So what is his theory of classical

conditioning? He said classical conditioning involves the learning of a new behavior or response with the process of association. So the dog initially was not celebrating because he saw the person bringing the food. But after some time started to expect the food from this person and started to salivate looking at the person itself. So in order to test this what Pavlov did was - he presented food to the dog on numerous occasions and notice that the dogs elevated in response to the food later on. Every time the dog saw the food,he rang a Bell. At the end of a certain number of times of this happening, the dog started salivating when the Bell was rung, even if the food was not presented.

To understand this better in Pavlov's terms, he called the food, the unconditioned stimulus. He called the Salvation in response to the food the unconditioned response, meaning this stimulus is presented without any conditioning and the response was without any training or conditioning. The conditioned stimulus later on became the Bell. In the second step, which Pavlov did, the stimulus is the Bell, but the dog does not respond to just the Bell being

rung. After a number of times of presenting the conditioned stimulus, that is the Bell with the unconditioned stimulus, the food, presenting them both together made the doc give the unconditioned response of salivating such that toward the end of this experiment only the conditioned stimulus of the Bell was rung and the dog produced the conditioned response, which is now the saliva in relation to the Bell.

So these are the important terms that we have introduced right now and have spoken to you about looking at this picture and the bell presented at different parts. You will understand the definitions of these important terms. The unconditioned stimulus is any feature of the environment which causes a natural reflex action, so the food caused a natural reflex action of the saliva in the dogs mouth. The unconditioned response is a natural response, which occurs when the stimulus is present. So this dog salivating to the food, is the unconditioned response. The neutral stimulus is the Bell because before conditioning, it did not evoke any response from the dog. The conditioned stimulus is the substitute stimulus, which triggers the same response as the unconditioned stimulus.

The unconditioned stimulus was the food and the conditioned stimulus now is the Bell, which is triggering the same response because it is given along with the food and the response, the conditioned response is the response that the dog has now learned to the earlier stimulus,which was neutral and not producing anything. So in that case it is the Bell.

A critical evaluation of the classical conditioning theory.

It emphasizes the extent of how much possibility is there in learning from the environment and therefore supports the claim that environment is also very responsible as much as other genes in the development of a person. One of the strengths of the classical conditioning theory is that it was very scientifically done because it was based on the empirical evidence come out from the controlled experiments conducted by. Ivan Pavlov. However, it is very limiting to describe behavior only in terms of nature only in terms of nurture and underestimating that human behavior can be very complex and caused due to interactions between these two paths.

Classical conditioning was also labeled as a very simplistic or reductionist explanation of behavior, because a complex behavior of salivating is broken down into just stimulus and

response. Also, Ivan Pavlov, did not go further to

study what exactly could be happening in the mind of the dog

and how this association was

learned. Classical Conditioning is also labeled

as being deterministic, that is, it does not address the

question of the free will within the individual, or in

this case, in the experiment, the will of the dog.

Accordingly, it may make a person believe that as you

are conditioned, so will you behave and you have no

control over the reactions that happen in your life.

For more information on this theory, you could refer to the

following websites. Thank you.