Psychology of Personality and Individual Differences: Theory and Applications
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Week 8
Lecture 17: Bandura's social-cognitive theory

I welcome you all to Module 8 of this course - the cognitive and social cognitive perspective on personality. This is the second lecture of Module 8, and overall, it is Lecture Number 17. Today's lecture is titled 'Bandura's Social Cognitive Theory' or 'Social Learning Theory.' Before discussing today's lecture, let me briefly recap the last lecture.

So, the last lecture was Lecture Number 16, the first lecture of this module. In the previous lecture, we discussed George Kelly's cognitive theory of personality. We discussed the various concepts associated with Kelly's theory. We discussed his idea of personal constructs, the mental models, and the framework we use to interpret the world and the people around us. There are different characteristics associated with the personal constructs that human beings use.

We discussed all the characteristics. We discussed the significant postulates derived from the constructs' characteristics and different corollaries associated with these particular fundamental postulates. We also discussed some possible criticisms of the theory. Today, we will discuss Albert Bandura's social learning or cognitive theory and some of the central ideas behind this theory.

We will be talking about reciprocal determinism, personal proxy and collective agency, observational learning or modelling, and we will also be talking about self-efficacy, the concept of self-efficacy as proposed by Albert Bandura. So, let us start today's lecture.

Albert Bandura proposed his theory, which is called social learning theory or social cognitive theory. This theory integrates the various aspects of learning theories and the social aspect of our behaviour, which was not included in the typical learning theories in behaviourism.

It also has cognitive factors in terms of how people interpret situations. So, it integrates specific dimensions of different aspects. It can explain complex human behaviour and also explain human personality. One of the significant questions in personality theory is - what is the most critical determinant of human behaviour, whether inner or outer forces?

Some theories focus more on the inner forces in determining theory, such as psychoanalysis, which talks mostly about human behaviour being determined by unconscious instincts and motivations. On the other hand, the behaviourist school of thought mainly focuses on outside factors or environmental factors in determining human behaviour. Albert Bandura challenged both ideas. He said both ideas are invalid because, according to him, individuals are active agents responding to internal and external stimuli.

So somewhere, we forget the individual in this whole debate of whether the outside factors are essential in determining behaviour or the inside factors. But there is an individual who is responding to both factors. That should also be taken care of, both internal and external stimuli. In a dynamic system, he argues that people significantly influence their motivation, development, and behaviour through a process he calls reciprocal determinism. So, this whole idea of integrating diverse factors in the determination of human behaviour he called reciprocal determinism. What is this reciprocal determinism? According to this concept, a constant interaction between the person, the environment, and the behaviour emerges from the person. So, there is a personal factor inside the person.

Then, the person does some behaviour in an environmental situation. So, there is an environment, there is a behaviour, and there is a person. These three factors constantly interact with each other in determining behaviour. That is called reciprocal determinism. So here, personal behaviour and environmental factors influence each other, shaping individual behaviour.

All of these three factors interact with each other in determining behaviour. So, it is not entirely inside or outside factors; there is a constant interaction between these three factors. A person is also involved in it who is actively interpreting the situation. Bandura says human behaviour is determined in this reciprocal determinism, where all these factors play a vital role and are a product of the interaction of all these factors. Let us see the possible personal factors in determining behaviour.

It includes human cognition, like what kind of thought processes you have. So, there is a cognitive element in a person: knowledge, expectations, and attitudes all determine human behaviour. What kind of belief system and what kind of attitudes do you have? When you talk about personal factors, it includes thoughts. Cognitive factors include affective factors, meaning emotions and feelings also play a critical role in determining behaviour.

For example, an employee's high anxiety affects the employee's behaviour by causing them to procrastinate on tasks. So, what kind of emotions we have also influences our behaviour.

If you have high anxiety, you would like to avoid certain situations. It will affect your behaviour and the kind of environment that you avoid or interact with.

Within the person, there are cognitive factors, thought processes, belief systems, and affective emotional factors, and there could also be biological factors. These innate physiological factors, such as temperament and health status, can influence behaviour. What are the biological statuses? What is the health status? What kind of temperament is influenced by biological and genetic factors?

This also influences human behaviour. We have already discussed the whole module on biological factors determining personality. So, I will not go into more information in this particular module. When we talk about personal factors, they include cognitive, affective, and biological factors that can influence human behaviour. When we talk about behaviour, an action one performs is both a result and a cause within reciprocal determinism.

So, sometimes, behaviour can be the cause of further behaviour. In reciprocal determinism, behaviour can be the cause sometimes, and sometimes it is the result. Other factors, like cognitive or emotional factors, lead to behaviour, or sometimes behaviour leads to other factors, like influencing behaviour, thought processes, environment, etc. Behaviour can alter the environment, creating new situations that require further behavioural adjustment. So, behaviour can be causal factors, resultant factors, and so on.

For example, a person feels anxious about a social situation, let us say. This anxiety is a personal factor. This is the experience that the person is feeling. So, it is an effective factor. As a result, the person avoids attending social gatherings.

Now, because of this anxiety, the person avoids social situations. So, it is influencing the behaviour. Hence, personal factors influence the behaviour of that person. This avoidance further reinforces the belief that social conditions are overwhelming. The more the person avoids, the more he finds interacting or going to social situations difficult.

It influences what kind of situation the person is creating in his life, leading to increased anxiety and social isolation. It could lead to social isolation, further impacting that person's future behaviour. There can be multiple ways in which behaviour can influence and become causal or resultant factors. When discussing environmental factors, it may include things like the physical environment, which can determine human behaviour.

Physical settings and resources available can influence an individual's behaviour. For example, a supportive or unsupportive workplace. What kind of workplace you are in,

whether people are supportive or unsupportive. What is the nature of the physical environment that you are placed in? Whether the environment is hygienic or not hygienic.

All these things can influence your behaviour. So, there can be a social environment also—interactions with others, social norms, and cultural context all shape behaviour. Social support, modelling, and reinforcement from others can guide how a person acts in various situations. So, what kind of social situation you are in, what type of interaction you are having with other people, what are the norms in which you are working, and so on, all these things can influence human behaviour. These are the three critical factors. Now, according to reciprocal determinism, these three factors interact with each other all the time.

So, there is a bidirectional influence of all these three factors: person, environment, and behaviour. Each of these factors influences and is influenced by the other two. That is why the arrows, both directional arrows, are shown in the diagram. For instance, a person's behaviour, like practising a skill, can affect their factors, such as self-confidence. The more you practice, which is the behaviour, it can influence your factor, like it will increase your self-confidence, which can then affect the environment.

You will get more positive feedback and opportunities in your environment. So, it will also influence your environment. This is how each factor can influence each other. This interaction is a continuous process, not a one-time interaction, but a constant and ongoing process.

All the time it interacts, all these factors interact with each other. Personal characteristics, behaviour, and environmental factors constantly interact, leading to ongoing changes and adaptations. So, it is continually happening in our lives. This is just an example of reciprocal determinism, considering all the factors. Let us consider a case of a student in a classroom setting.

This is a typical case of a student in a classroom. Let us say there are personal factors, some personal characteristics of the student. The student has, let us say, a high level of self-efficacy or confidence that he can succeed. Let us say this person has high confidence and a high level of self-efficacy. So, it is a personal factor.

Now, when the student is confident in terms of their abilities, then the behaviour, the resultant behaviour of the student in the classroom will be that the student will actively participate in the class, complete assignments diligently, and seek help when needed. When you are confident, have self-efficacy, and have a certain confidence about your abilities,

which is a personal factor. Your behaviour will change. You will actively participate in the class.

You will try to complete the assignments and whatever is needed to perform better. This factor influences behaviour. Now, this can further affect your environmental factors. The positive behaviour. So, this positive student behaviour will lead to recognition and support from teachers and peers.

Creating a supportive learning environment. Because of his behaviour, which is positive behaviour in the classroom setting, it will attract the teacher's and their peers' attention, and they will have positive feedback from others. This supportive environment, in turn, will further reinforce and reward the student's belief in his abilities. So, this environment will further influence other factors.

First, this one was influencing this environment. And now, this can further affect this and this. That is reciprocal determinism. So, this supportive environment, in turn, can reward the student's belief in their abilities. The more positive feedback they get, the more confidence they build, which will validate their self-confidence and encourage continuous engagement, promoting further positive behaviour. So, there is a constant interaction; this will interact with this, and that will further interact with other factors. Thus, according to Bandura, people do not simply react to environmental events; they actively create their environment and act to change them. That is an essential factor that differentiates Bandura's theory from learning theories like classical conditioning and, to some extent, operant conditioning.

So, that cognitive element, that active interpretation, is an essential factor in Bandura's theory. Cognitive events determine which environmental events will be perceived and how they will be interpreted, organised, and acted upon. Positive or negative feedback from behaviour, in turn, influences people's thinking and so on. All can affect the other factors.

So, that is reciprocal determinism, which is one of the fundamental aspects of Bandura's theory. Bandura also talked about personal proxy and collective agency regarding human behaviour. When we talk about personal agency, that means Bandura believes that individuals process free will and are not entirely controlled by drives and reinforcement schedules in their learning environment. So, humans have specific free will to determine their behaviour. If you look at learning theories like classical conditioning or operant conditioning, reinforcement is needed in a particular behaviour.

So here Bandura is saying that people can act entirely, actively, and from their free will, even if there is no reinforcement. So, according to Bandura, cognitive processes enable individuals to select, create, or transform situations. Bandura termed this personal agency. The belief is that one can affect change to improve circumstances for themselves and others. There is an individual agency where people believe they can change the environment and circumstances according to their needs.

So that's personal agency. So, that is an essential component of Bandura's theory. For example, someone may choose a particular career path, pursue hobbies that bring them joy, or work to improve their workplace environment. We do many things out of our free will to change our environment. So that's called personal agency.

A proxy agency, according to Bandura, is a personal agency that can expand to the proxy agency, where individuals seek help from others to change certain aspects of their lives. Now, many times, we cannot do everything on our own, so we take help from other people to change our lives or to make a particular impact in our lives. Because we are social animals, we take support from other people. So that is called proxy agency when we seek help from other people to make specific changes in one's life.

This is necessary when an individual cannot do something individually. For example, they may lack the means, knowledge, or power to achieve specific goals independently. So, a proxy agency is beneficial when one cannot carry out certain activities. Bandura warns that a potential downside of over-reliance on others can lead to a loss of personal control. But when you become overly dependent on others that has a negative impact.

You will always depend on others to carry out certain activities, impacting your sense of autonomy and freedom. So, it is necessary. Sometimes, people also use proxy agencies, but over-dependence can hurt one's sense of independence. Independence and freedom, so here, one example is given. For example, a parent might ask a family member or some other member to take care of the child to pursue a job because they are going to work, so they cannot take care of the child all the time. They may seek someone else's help from the family, so that's a proxy agency. But if from whom they are taking support, some family members, if their intentions or actions are not aligned with the parent's values, then it leads to complications.

Let us say the kind of support they wanted or the kind of care they wanted for their child, probably that person cannot provide. So, it will not help the purpose they sought support from that person. All these complications can happen in the case of a proxy agency. The

last one is collective agency, which means collectively as a group we often try to do something. So that is called collective agency, where a group of people collaborates, believing they can collectively improve their circumstances.

Collective agency is powerful in creating social change and addressing community and organisational issues—more significant changes in our lives. In our society, in our community, we need collective agency. An individual alone cannot do so. We need support from many people. For example, the rise of farmer markets where farmers band together to sell their products directly to consumers at fair prices. Without basically bypassing third parties or government agencies. Collectively, they decide to do something and take specific actions for their well-being to get fair prices. That could be an example of collective agency. One of the central ideas in Bandura's theory is observational learning, which is also called modelling.

Bandura proposed that a significant portion of our learning, whatever we learn in our life, happens through observations of other people or by imitating the behaviour of different people. So we look at other people, and then we learn how certain things are done from our childhood, and many times, we imitate different people's behaviour. That is how we learn significant portions of learning that occur in our lives, especially in human life. Observational learning plays a vital role.

According to Bandura, more of our learning occurs through observational learning than classical and operant conditioning. Bandura says we also learn through classical conditioning sometimes and sometimes through operant conditioning, as discussed in an earlier module. But he said that in human life, the majority of the learning that happens, the central portion, is actually through observational learning, not through classical and operant conditioning.

Now, in this context, some experiments were conducted, including one of the famous studies conducted by Walters and Bandura in 1963. What did they do? They were experimenting with observational learning. So, what did they do? They took children and divided them into two groups.

One is called the experimental group, and one is called the control group. So, in the experimental group, these two groups of children exist. In the experimental group, what was the task of the children? The children observed an adult displaying aggressive behaviour towards a plastic doll named Bobo doll, hitting and kicking it while shouting commands like, 'Throw him in the air.' So, they observed the behaviour.

Children in this condition observed the behaviour of an adult playing with a plastic doll. The name of that doll is Bobo doll. They observed that this person was hitting, kicking, and aggressively behaving with that doll. So, the children just observed it. This is the condition of one group of children.

In the control group, the children did not witness such acts. So, in the control group, they were not shown such aggressive behaviour. They were shown something neutral or behaviour like that. This is the difference between these two groups of children in the task they were given. Later, both groups of children were allowed to play with the same doll.

So, initially, they observed—an adult playing with the doll. They observed that the adult aggressively behaved with the doll in the experimental condition. Very aggressively kicking, shouting, and all kinds of things.

In the control group, they just observed neutral behaviour. Later, these two groups of children were allowed to play. They were given the doll to play with. Now, what was the result? The result showed that children in the experimental group, where they observed the aggressive behaviour of an adult with the doll, displayed twice as much aggressive behaviour towards the doll as those in the control group. So, when they were allowed to play with the same doll, the group that observed the aggressive behaviour displayed twice as much aggression as the group of children who did not observe such aggressive behaviour, so that means they learned by observing that particular model who was behaving aggressively, so they just imitated that behaviour. So, they displayed twice as much aggression towards the doll as the control group. This study demonstrated the power of observational learning, where children imitate the aggressive behaviour observed in the adult model.

So they just learned by observing another person. This is an experiment that shows how we learn by observation. So these are some of the images from that experiment, showing how children played and displayed aggression when they were allowed to play. This was the adult model they observed, and here is how they behaved when allowed to play in this particular experiment. Now, when we talk about observational learning, there are many things we also need to consider.

We do not just learn everything that we observe. So, there have to be many essential factors that we need to take care of. So, some of the critical factors that Bandura found are when we model somebody's behaviour or learn by observation. So, in this modeling process, at first glance, it appeared simple. It seems like a straightforward thing.

There is an observer. There is a model. But the question is whether the observer will imitate this model's action. Do we imitate or learn everything that we observe all the time? The answer is not very straightforward.

It depends on many factors. In various versions of the study, Bandura concluded that three factors are essential in modelling or observational learning. Whether we learn behaviour by observing depends on three factors. All of these factors came from Many versions of this study that we talked about, so they did multiple ways of studying in terms of observational learning and tried to find what factors facilitate and hinder the process.

Out of these factors, the first one is the characteristics of the model, which also determine whether we learn by observing or not. What are the characteristics of the model that we are observing? So, if the model has a similarity with the observer. If I am observing someone else's behaviour, and if that person is very similar to me, then I am more likely to imitate their actions. The more I perceive similarities with another person, the more likely I am to mimic their behaviour.

This is one thing: similarity to the observer. The more similar the model is to the observer, the more likely imitation occurs. Second is the complexity of the behaviour. Simple behaviours are more likely to be imitated than complex ones. When behaviour is more straightforward, people are more likely to imitate it than complex behaviour because learning a complex action is difficult.

Simple behaviours are imitated much more frequently compared to complex behaviours. Then, the type of behaviour. Hostile and aggressive behaviours are more likely to be modelled. People are more likely to model or imitate negative behaviours, like hostile and aggressive behaviour. As compared to, let us say, positive behaviour. So, it has many implications for the media and the things shown on TV and social media. It can significantly influence us in terms of what we learn.

So we will be talking about that later. Typically, we are more likely to model or emit hostile and aggressive behaviour. These are about the characteristics of the model. Second is attributes of the observer, meaning characteristics of the observer who is observing. What are his characteristics? One is then what his confidence level will determine. Individuals with lower confidence are more prone to imitation. It has been found that less confident people. They are likelier to imitate others' behaviour because they are unsatisfied doing things themselves. They are more likely to imitate someone else's behaviour and do it.

Confidence level could be one of the critical factors. The second is self-esteem. Those with low self-esteem are more likely to imitate, which is connected to self-confidence. So, if you have a low sense of self-worth, you are more likely to imitate other people. Competence and feelings of incompetence in a situation increase the likelihood of imitation.

If you are more competent in doing something, you will be doing your own thing. But if you are not skilled in certain behaviours, you will likely imitate someone else because you do not know yourself. Learning history, individuals rewarded for conforming behaviours are more inclined to imitate. So, if, in the past, after imitating certain behaviours, you are rewarded, then you are more likely to do similar behaviour in the future by mimicking the same behaviour because you were rewarded earlier—and then dependency.

Highly dependent individuals are more prone to modelling. The very dependent people, you know, do not have much of their thought processes. They are more likely to imitate other people's behaviour or modelling. So, what are the characteristics of the person who is observing also determine whether observational learning will happen or not. The third factor is the consequences of the behaviour.

Now, when we observe someone else's behaviour, there is a consequence to that behaviour. What happens when that person does specific actions? What is the result of that action? That will also determine whether someone will imitate or not.

The consequence of behaviour could be either positive or negative. If individuals believe that imitating a behaviour will lead to a positive outcome, they are likelier to do so. According to Bandura, this is a very influential fact. If a person believes that if I imitate or model a particular behaviour, I will get a positive result, they are more likely to model that behaviour. So, in the study of the Bobo doll, they did many versions of that study.

In another version, in this Bobo doll study, some children watched as the model who hit the doll was given praise and candy. So, it is another version of the experiment where When the children observed that the adult person who was hitting and engaged in aggressive behaviour with the doll, they were rewarded by giving candy or praise. And another group of children saw the model receiving verbal abuse and punishment. So, one group observed that after the behaviour was punished, another group observed that the behaviour was rewarded.

When they were allowed to play with the doll, the children who observed the punishment displayed significantly less aggression. Because they have seen aggressive behaviour is punished. So they were less likely to engage in the behaviour.

Compared to when children observed that their aggression was reinforced or rewarded, what is the consequence of the behaviour is also kind of person. Things about that and accordingly whether decide to model or not to model. Bandura demonstrated that while reinforcement or reward is essential in learning, in much learning, like classical conditioning and operant conditioning, consequences are often unnecessary in social learning. Sometimes, without reward, people still learn.

But in operant conditioning or classical conditioning consequence is essential. Without that, the behaviour will not happen. But in observational learning or modelling, we can often learn a lot of this behaviour just by observing and without getting any reward or reinforcement. Attention-grabbing stimuli like vivid billboards, advertisements, and loud noises can sometimes influence our learning process. Even though we don't get any reward directly, but something theatrical and attention-grabbing.

The moment we observe them, we learn about them because it registers in our minds. So, although we may not consciously process this information then, we can recall it later, such as recognising a product from a billboard when at the supermarket and so on. So, any immediate or obvious reward may not be essential in observational learning. Bandura also says individuals can sometimes reward themselves. So that is called self-reward or self-reinforcement by evaluating our actions, stopping certain behaviours from providing no pleasure or judging something harmful.

So many times, we also reward ourselves based on specific behavioural consequences. So, what is the process of this observational learning? How do we learn something by observation? So, the mechanism Bandura proposed details the factors responsible for observational learning. So, he analysed observational learning and said observational learning depends on four mechanisms, four related mechanisms.

One is observation depends on attentional processes, then retentional processes, production processes, and the last one is incentive or motivational processes. Let us see what these factors are. The attentional process means what? To learn something, we need to pay attention. To learn anything in life, attention is essential.

Without attention, we will not be able to register anything. To register something in our mind or memory, we must pay attention. Attention is more fundamental for any learning. So, attention is the initial stage where the observer focuses on the model.

If you want to learn, I am learning something from someone else. So, you have to pay attention to that behaviour. Then only you will be able to register something. So, for effective learning, that is very important. Bandura identified various factors that influence attentional processes.

So many things influence attention, and environmental factors can affect our attention. One is the characteristics of the model, whether the model catches our attention or not. The observer may be more likely to pay attention if the model arises. Models who are similar to us in terms of age, status, sex, and appearance, so similarity attracts more attention. Suppose you see somebody very similar to you and think somebody is technically advanced and wildly different. In that case, you may think that person is very different and has some special knowledge. Probably, you will not pay much attention because you believe you will not be able to perform those actions. But if you think of someone similar, you will pay more attention to learning. Celebrity models, experts, and those perceived as confident or attractive often command greater attention.

If the model is more attractive, people like celebrities are used in the advertisement. One of the reasons is that you pay more attention to them. People who are experts, who are perceived as more confident and attractive, are more likely to attract attention. In attention, cognitive and perceptual skills also play a vital role. So, observers with highly developed mental and perceptual skills, meaning the more developed thought processes and perceptual skills one has, and a good understanding of the behaviour being modelled, are more likely to pay closer attention.

The more you understand, the more you are likely to pay attention. If you do not understand something, you will get bored and not pay attention. So, cognitive abilities and perceptual skills are critical. The relevance of the behaviour that you are observing also attracts your attention. Observers tend to pay greater attention to model behaviours perceived as relevant to their lives.

If you think specific behaviour is relevant to your life, you are more likely to pay attention. You may not pay much attention if you believe this is unimportant and irrelevant to my life. When the model behaviour is personally relevant or has implications for the observer, they are likelier to focus and pay attention to it. Observers pay close attention to behaviours

they expect to perform themselves. So when they think that I need to perform it in my life also, because it is essential for my life, probably they will pay more attention.

So, the first process is the attentional process. So, to learn any behaviour, we must pay attention first through modelling or observation. We discussed the factors that can influence attention. Retention is the second most crucial aspect of social learning or observational learning.

Once you pay attention, the next thing is that you have to remember it. Retention involves remembering a significant aspect of the modelled behaviour to repeat it. So, if you pay attention and forget about it, you will not be able to perform the behaviour because you forgot. We see many things around us but don't learn everything because we forget many things. So, to learn something after paying attention, we must remember it all.

So, that is called the retentional process. So, to retain observed behaviour, the information must be encoded and represented symbolically. So, it has to be encoded in your brain and the memory. So, this can be achieved through two primary systems: the imaginal internal representation system and the verbal system. So, this is talking about how you encode it in the memory process.

One way is that you can encode it in the imaginal system representation. In this system, basically, what happens? Imaginal internal representation. You can represent it as an image form, put it, or memorise it as an image form of what you have observed with specific images, whatever you have seen. So, in this system, individuals form vivid and easily retrievable mental images while observing the model. You remember the image of how the person has done something. So, the picture is encoded in the memory. This mental imagery serves as the basis for imitation later. Whenever later you want to perform that, you remember that image of how that person has done it. That is called the imaginal internal representation system.

We often learn things by verbal encoding, like a verbal representation system. This involves encoding observed behaviour through verbal description. So, many things that we remember are that, you know, you talk to yourself and say, I will do this first, and then I will do this, then I will do that. So, in the verbal form, one is in the mental images, another is verbal form. This is how it is represented or encoded in the memory.

So, individuals describe to themselves what the model is doing and how it is doing, and that description is encoded in the memory. When they later want to perform it, they try to

remember those descriptions that they tried to remember. So the third process, first is attention, then retention, and then the third is the production process. Production means practice. You have to practice.

You cannot just learn anything simply by remembering something. We often remember many things but cannot perform until and unless we practice them correctly. So, the production process includes practising. Despite attending or giving attention or retaining or remembering something, without rehearsing, individuals may still struggle to perform the behaviour correctly, exceptionally skilled actions, if that is not appropriately rehearsed or practised properly. You may remember, but to produce that behaviour, if it is a competent action, you must practice it repeatedly.

Practice, or the production process, is necessary to translate symbolic representation into actual behaviour. Because you may remember it as a symbolic form, but to produce it in your action, you need to practice it. This involves the physical performance of the action repeatedly to achieve proficiency. So that is something also significant. For example, consider the process of learning how to drive a car.

So, you cannot learn to drive a car just by observing someone else. You can see what kind of action the person is doing. You can also remember how they have done it and everything, but you will still not be able to drive a car until and unless you practice driving it. So that is where the production process is essential. Practising the proper physical movement and feedback on their accuracy is necessary to produce smooth and skilled performance.

Until and unless you perform correctly, you will not be able to become confident in producing that action. The fourth process is the incentive or motivational process. So, no matter how well individuals attend to retain the observed behaviour or if they can perform it, they will not. People often will not produce or get involved in the action until and unless they have a specific motivation or reward for doing it. So that is called the last process, the intentional or motivational process.

If incentives are available, observation is more quickly translated into action. When you see an incentive to do an action, you are immediately more likely to do it. You may often know the action correctly, remember it, have paid attention, and have all the abilities to do it. But still, you will not do it because you think, what is the point of doing it? I may not get any reward out of it.

So that is a significant place. Do you have the motivation to do it? Do you have the incentive to do it? So that incentive also influences the attentional and retentional processes. Individuals may not pay much attention without an incentive, resulting in less retention and observational behaviour.

This motivational process can influence all the other factors as well. If your motivation is low, you may pay less attention. If your motivation is low, you may not remember it correctly either, and so on. That is also a very important factor in terms of whether we learn an action or not.

So, the anticipation of reinforcement is significant in the incentive factor we are discussing. Our incentive is to learn by the anticipation of reinforcement or punishment. Seeing that a model's behaviour produces a reward and avoids punishment can strongly incentivise the action to pay attention, remember, and correctly make it. If you think you will get a reward after doing this behaviour, you are more likely to do that behaviour. Compared to when you think you will be punished after doing this, you are less likely to do it.

However, in social learning, reward is not always necessary. Reward and punishment may not always be required to learn something. It may facilitate understanding, but knowing something by observing is not always an essential requirement. Factors other than behaviour reward determine what individuals attempt to retain and rehearse. For example, loud sounds, bright lights, and exciting videos may capture interest without immediate reinforcement.

Something that is very loud, very intense visually or auditorily automatically catches our attention. Even though we may not get any reward after listening to or watching that, without any immediate reward, sometimes we can also learn many things simply because of the exclusive characteristics of what we observe. Bandura's research demonstrated that children imitate a model's behaviour observed on television or video games regardless of whether they have been promised a reward or not.

Bandura often found through experiments that children imitate or learn many model behaviours from television or video games even though they may not get any reward because of that; they learn by observing. So, reinforcement can assist and facilitate, but it is unnecessary for social or observational learning. Another crucial concept of Bandura's theory is self-efficacy, which came out of this observational learning and can be connected to that also. Self-efficacy refers to an individual's belief in their capacity to produce

behaviour necessary for specific performance. What is your or one's belief about their capacity to do particular actions?

Do they believe that they can act? Or do they think they will be unable to act? That belief plays a vital role in many outcomes in our lives. What is your belief about your capacity to produce specific actions? That is called self-efficacy.

That is your level of self-efficacy. Higher self-efficacy means you have the belief that you can do specific actions. If your self-efficacy is low, you believe you cannot perform that action. Albert Bandura has placed the cognitive mechanism of self-efficacy in a central role in the theory of personality functioning and change. So, he says mental factors play a vital role in the concept of self-efficacy.

While modelling remains a significant part of his framework, it is primarily viewed as a method to cultivate the necessary level of self-efficacy. What influences human behaviour is the concept of self-efficacy. To effectively act, we need self-efficacy. According to Bandura, individuals who perform effectively possess high and realistic self-efficacy and have expectations that direct their actions.

The performance should be backed by realistic self-efficacy. You cannot perform if you do not know anything; if you think you can do everything, that is not real self-efficacy because your actions will not back that. Because you will not be able to perform, then self-efficacy will go down. So, being supported by realistic self-efficacy is very important.

Conversely, for those who struggle to perform, their self-efficacy will decrease if they cannot perform or face failure repeatedly. It will impact your performance negatively. The concept of self-efficacy is central to Bandura's social cognitive theory. It influences our thinking, our feelings, our motivation, etc. Now, it is not just about having skills.

If I have skills, I can perform. People may often have the skills to do something, but their self-efficacy is low. Their confidence in performing that action is low, even though they may have high skills, but because of low self-efficacy, they cannot perform to the best of their abilities. That happens when self-efficacy can be influenced by many other things, not just skills. So, if you have high skills, it doesn't mean it will automatically convert into high self-efficacy.

So having skill is different from having high self-efficacy. Bandura emphasised that knowing what to do and having the required skills does not guarantee effective performance if individuals have significant self-doubt in their abilities. So many people are

very good and skilled but cannot perform to the best of their abilities because of self-doubt and low self-efficacy.

Consequently, people with the same skills or the same person at different times may perform very differently. When he has high self-efficacy, the same person will perform very differently than in another situation with low self-efficacy. Even though the skill is the same, so, with the same skill, two people may perform differently because of their level of self-efficacy. So, competent functioning requires...

Both skills and a sense of self-efficacy to utilise those skills effectively. So, to perform effectively requires both things: skills are needed, as well as self-efficacy. So, that is why mental factors play a vital role. Additionally, even if people have the necessary skills and a strong sense of efficacy, they may not perform the activities without sufficient incentive. So, incentive always plays an important role.

People may often have high skill and high self-efficacy, but they will ignore something and not get into action merely because they feel they have nothing to gain from it. If a reward is there, then they will perform. So, the incentive will play a vital role anyway. So, according to Bandura, efficacy expectations shape individual choices of activities and environmental settings. So, efficacy is significant in determining your behaviour, what kind of things you choose in your life, what kind of actions you take, and what kind of environmental setting you prefer, and your self-efficacy will determine all sorts of things.

So, this self-efficacy judgment also dictates how much effort people will invest and how much effort they will put in. You are more likely to put in high effort if you have high self-efficacy. As compared to when you have low self-efficacy, you will tend to run away and so on. So, these are some of the characteristics. According to Bandura, people with low self-efficacy expectations generally avoid situations they perceive as threatening and beyond their coping skills.

In any situation where there is a challenging or threatening situation, they will immediately run away if they have low self-efficacy. When they must engage in such situations, their low self-efficacy leads to minimal effort and quick resignation. So, their effort will be less; they will put in less effort. That is also another thing about people with low self-efficacy. For example, shy individuals may avoid social settings.

If they attend social functions, they exert little effort to interact, often remaining isolated. This, so let us say somebody is very shy and avoids social situations because they have low

self-efficacy. Even if they attend, they make little effort to connect with people. What happens? So, they isolate themselves.

The more they isolate, the more likely they will feel low confidence in interacting with people. So, this is how this whole cycle goes on. Because of shyness, they avoid, and the more they avoid, the more isolated they become. The more they isolate, the less confident they are in approaching people. So, low self-efficacy can lead to many of these behavioural cycles. On the other hand, people with high self-efficacy will choose more challenging tasks and seek opportunities to develop skills and so on.

They will exert more effort wherever required, persist in the face of difficulties, and engage in minimal self-criticism, increasing their chance of success. So, self-efficacy can lead to so many outcomes in our lives. Now, from where does this self-efficacy come? What is the source of this self-efficacy? Why do some people have low self-efficacy?

Why do some people have high self-efficacy? What is the source of this self-efficacy? According to Bandura, there are four sources from which self-efficacy emerges. One is your accomplishments in life. To what extent do you accomplish things in life?

Vicarious experience means learning by observing other people. Others' experiences also teach you something. Verbal persuasion is when people tell you to do something, verbally saying you can do something. That also influences your self-efficacy. Or when somebody says you are worthless, you cannot do it.

That can also influence your self-efficacy. States of physiological arousal, emotional arousal. When you perform something, what is your physiological arousal level? Do you feel much anxiety when doing something? So that's an indicator of

Physiology can also indicate or may not necessarily imply, but you take the cue from the body if you feel anxious that you cannot perform better. So we will talk about that. So, let us see each of these sources and how they influence self-efficacy. So, one is performance, accomplishment, or mastery experiences in life. What is your history in terms of accomplishment?

Mastery experiences are the most influential source of self-efficacy. They involve personal experiences of success and failure. So, what are your experiences of success and failure in your life in the past? That will determine in the future what your expectations are and what your self-efficacy level is. Successful experiences boost self-efficacy by reinforcing the

belief that one can achieve the desired outcome because we have already achieved and succeeded.

So you feel in the future also that you can do it. Conversely, repeated failure, especially early on, can undermine self-efficacy. But if somebody experiences repeated failure, again and again, their self-efficacy will be much lower. For example, students who successfully solve complex mathematical problems build confidence in their math skills. So, they think that they are perfect in math because they can

Solving complex problems while repeatedly failing this task might lead them to believe they are bad at math. What are your experiences in the past that will determine your self-efficacy level in a particular task? So, one strong self-efficacy expectation is created. Occasional failure may not impact you much, but repeated failures can affect you once you have strong self-efficacy in specific domains of life. Few failures here and there may not influence their judgment of efficacy much. Conversely, the opposite is also true. When you have very low self-efficacy because of repeated expectations, one or two successes may not suddenly increase your self-efficacy. However, low expectations can be changed.

By repeated and frequent successes fueled by determined effort on their part. So, individuals can change their self-efficacy, but history can play a vital role. What are your experiences in that domain of life in the past? The second important factor from which we generate our self-efficacy is typically related to vicarious experience: observing others. Seeing and visualising others performing successfully can affect our efficacy.

If you see people who are similar to us also able to perform something, it gives us more confidence that we will be able to accomplish it. So, looking at other people doing similar actions can instil a sense of self-efficacy. So, observing others succeed enhances observational belief in their abilities to master similar tasks. Conversely, watching people of similar competence fail despite high effort can also decrease self-efficacy. If you see someone identical to you putting in much effort and still failing, that can also lead to a negative experience in lowering your self-efficacy. Looking at others can also influence your self-efficacy.

The third source is verbal persuasion. Verbal persuasion is frequently employed to convince people that they possess specific necessary capabilities to achieve their goals. So many times, parents verbally persuade their kids.

You can do it. You can perform something. So, that is how you are trying to influence their self-efficacy verbally. On the other hand, if you tell somebody repeatedly, 'You are worthless, you cannot do it, you cannot do it,' that person will register that, decreasing their self-efficacy.

Verbal persuasion plays a vital role. So, many parents encourage their children to believe in their potential to succeed in various aspects of life. If sufficiently given direction and guidance, such encouragement can increase their self-efficacy. However, this verbal persuasion and motivation must be realistic. You cannot tell anybody, 'You can do anything.'

No, that is not possible. So, that has to be realistic persuasion, you know. If that child, with little effort, can do something, obviously, then it will work. If you ask that child to do something beyond their capacity, they will fail, your persuasion will not work, and they will not believe in your verbal whatever you say. So, if an individual fails to achieve their goal despite persuasion, it can result in low self-efficacy. That is why realistic persuasion is something significant.

The fourth factor is emotional arousal. When you perform something, what are your emotional experiences? Stressful and difficult situations often cause high arousal in most individuals, who then use this arousal to judge their capacity. Your body also gives specific physiological indicators like arousal when you perform something.

You feel highly anxious or stressed. Then, people may think this indicates that I am not doing well. They take physiological cues as their level of confidence or performance. So, high arousal typically impairs function. So physiologically, high arousal may impact one's performance, also leading to expectations of failure, and people mentally automatically conclude that I am not doing well, which may not necessarily be true all the time.

So, this typically impairs performance, leading individuals to expect failure and experience low self-efficacy expectations when they feel tense and physiologically aroused. Conversely, you feel more confident when you feel relaxed while performing actions. Physiological arousal can be very important in your sense of self-efficacy. So many questionnaires were developed to measure the self-efficacy of individuals. Some questionnaires were initially developed, which are called generalised self-efficacy.

These included questionnaires like the General Self-Efficacy Measure, the General Self-Efficacy Scale by these people, the General Perceived Self-Efficacy Scale, and so on.

Specific questionnaires are there to measure self-efficacy. Despite their utility, Bandura criticises some global scales that measure general self-efficacy. He argues that few people have confidence in every aspect of their lives. So, he said it is not very important or fruitful to measure self-efficacy, especially general self-efficacy.

Because people are not experts or have high confidence in every aspect of their lives, they may be good at something and have high self-efficacy in specific domains of life. So, measuring self-efficacy as a general thing may not be a fruitful exercise. He argued that we should measure self-efficacy more domain-wise. So, in that context, specific questionnaires were later developed.

For example, children's self-efficacy scales were developed to measure self-efficacy for academic achievement, self-regulated learning, and social self-efficacy. So, people may have self-efficacy in specific domains of life. Academic self-efficacy one may have very high may not necessarily mean they have high self-efficacy in other aspects like social self-efficacy may not be high. So, like that, it is more fruitful to measure self-efficacy domain-wise. So questionnaires are there for general and domain-wise, but Bandura says domain-wise measurement is much more productive.

Now at the end, let us talk about the implication of this whole model or theory of observational learning or how we learn many things by observation. In today's world, mainly, we see many negative things in the media, television, video games, and so on. Aggression and violence are prevalent everywhere. So, what will this implication be in terms of people's behaviours? How will it impact from this perspective?

So, violence and aggressive acts are prevalent in society everywhere. Especially in the media and television and so on. It plays a vital role in everybody's life. By the time an average child graduates from elementary school, this is much earlier than in 1998 data. This is likely that the number will be much higher in today's world.

By the time an average child graduates from elementary school, they will have witnessed over 8,000 murders and approximately 100,000 other acts of violence on television. Now, this is 1998 data. I am sure this number is much higher in today's scenario. So, we see a lot of aggression and negativity in the media, television, movies, video games, etc. This exposure extends to news programs, music videos, law and order shows, films, video games, and everywhere.

Violence and aggression are shown everywhere. Critics may argue many times that media violence does not have much impact. However, Bandura, from his perspective and research, shows that such portrayals of violence can have serious and harmful effects. While media violence is not a sufficient or necessary cause of aggression, it will not necessarily immediately cause aggressive behaviour. Still, it can facilitate aggressive behaviour in individuals, particularly those who are low in impulse control or high in hyper-masculinity. This may not immediately cause aggression for everybody. Still, people who are more prone to aggression, who have less self-control, or people with hyper-masculinity, those kinds of people are more likely to be influenced by those portrayals and are more likely to act on those aggressions.

Another common argument is that only disturbed individuals are affected by media violence. Bandura counters this by citing research that shows that under certain circumstances, even so-called normal individuals can be induced to act aggressively. People may act aggressively, even normal individuals, if sufficient stimulus is present in the environment. So some of the research evidence in this direction, I will discuss some of it. Bandura's research highlighted the profound impact of media violence on behaviour, demonstrating that viewers tend to imitate aggressive actions, especially when models are not punished.

When they see whoever is committing aggression and they are not punished, it will have a much more significant impact on children, particularly when they see such violence in the media. Observers who see models rewarded for aggressive behaviours are likely to repeat those behaviours. At the same time, those who see models being punished at least tend not to repeat them. However, even when models are punished, observers can still learn the disapproved behaviour and might repeat it when incentives arise in the future. If they see that a specific action is rewarded, they are likelier to do it than when it is punished. But even when punished, they learn those behaviours; they can exhibit them when incentives come. So, it has many implications in terms of the impact it can have. A study found that in more than 5000 hours of television programming, violence went unpunished 73% of the time. So, many programs show violence being glorified, and it is not punished.

So, people will learn that there is something good about it. And when something is rewarded, they will try to repeat those actions. Further research revealed that young observers imitate a model rewarded for aggression, even though they report disliking it. Even though they dislike something, when the model is rewarded for aggression, they are

likelier to perform those actions. This suggests that while they understood aggression was wrong, they still found it exciting.

Mentally, they may understand that something is wrong, but still, people feel like doing it because it excites them. This mirrors many television programs where the lousy guy is rewarded throughout but punished only at the end. Lead viewers to admire the character despite his wrongdoing. So, many characters are negative in so many films. They are highly glorified, and people appreciate the villain more than the hero.

So that is also how it is depicted in so many programs. So that can also have much impact on minds, particularly children. Research since the 1960s and 70s overwhelmingly supports Bandura's contention. Their exposure to media violence increases aggression. Studies show that repeated exposure to media violence during childhood correlates with higher aggression in young adults.

Those who are exposed to media violence during childhood are more likely to have their aggression positively correlated in their young adulthood. In the late 70s, the introduction of violent video games has also been linked to youth aggression. Critics note that shooters in many school killings Children just went to schools and killed so many other children. This happened many times in the USA.

Such as in many school situations, most of them were playing a lot of violent video games. Most of these perpetrators kind of just mass shoot in public. It has been found that a lot of them actually, this was in the 70s and recent scenarios also, so many such incidents happened that they also played very violent video games. Although the Connection is suggestive, it is not necessarily causal.

Rather than concluding, experimental evidence since the mid-80s indicates that violent video games may indeed increase aggression. So, at least, it has increased the potential to do that, even if everybody is not engaged. So this leads to Bandura's, which is the goal of his theory in terms of corrective actions, which develops his social cognitive theory to modify or change behaviour that society deems undesirable or abnormal. Like Skinner's approach, Bandura also tried to focus on external factors, particularly inappropriate or destructive behaviours, operating under the belief that they are learned.

Just like all behaviours, they are learned. So, they can also be changed using relearning processes. In his approach, he used three forms of behaviour therapy. One is modelling,

guided participation, and covert modelling, primarily used in therapeutic situations. Modelling is a way because most people learn by modelling.

So one way to change behaviour is using modelling to change the learning. So that is called relearning or changing behaviour. He applied the modelling technique to eliminate fears and other intense emotional reactions, which have been used in one of the classic studies of snake phobia, where people were afraid of snakes. Bandura and his associates successfully eliminated the intense fear of snakes in adults. The subjects watched a film in which individuals of different age groups made progressively closer contact with a snake, from handling a plastic snake to letting a more extensive snake crawl over their bodies.

So, by observing that, slowly, the fear was unlearned, and the phobia of snakes was removed. So, the modelling technique was used as therapy. Some techniques called guided participation are also used from this perspective, involving watching a live model and changing the behaviour. For example, subjects watched through an observational window as a live model handled a snake in the same instance of treating snake phobia.

In this guided participation, the actual model comes and handles a snake. Slowly, the person also learns that there is nothing to be afraid of in terms of snakes. So remove the excessive fear and so on. Covert modelling is done even without an observational model. So, directly, there is no model.

Subjects are instructed to imagine a model. Coping with a feared and threatening situation. By imagining that particular situation, they can cope with specific situations. Certain instruction structures are given, and like there, sometimes it can work. These are primarily based on observational learning techniques. If we evaluate Bandura's theory, this theory has been very successful in explaining complex behaviours.

Some critics argue that this theory neglects some of the inner aspects of behaviour, such as motivation and emotion, which the theory has focused on here and there but may not be exclusively here. Many argue that they compare this oversight to a physician treating patients with stomach pain solely addressing their outward expression of discomfort rather than diagnosing the underlying causes. Many say that he is not focusing on the underlying causes but mainly on the expressed phenomena.

Otherwise, his theory has been very successful with much empirical support, and he was able to use scientific laboratory evidence. Techniques objectively lend themselves well to laboratory investigation, aligning with the experimental psychology tradition. It has

empirical support and so on. This theory, by and large, has many applications, empirical support, and many applications. These are some of the significant ideas of Bandura's theory of social learning or social cognitive theory.

With this, I stop here. Thank you.