Organizational Behaviour - II
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Lecture - 41
Problem Solving-Concept, Types and Importance

Welcome back to the lecture sessions on Organizational Behavior. In our previous discussions we have understood about groups and teams. We have understood about different aspects of leadership. We have understood how cooperation and competition occurs in group and how it helps in the productivity of the group and the organization. Now of all things it is also very important part that we know how to solve problems effectively and creatively.

This week's lecture session will be dedicated to problem solving and creativity in groups. As a part of the first lecture in that session, we are going to discuss today on problem solving concepts, types and importance. In the next upcoming chapters, we will be discussing again on creativity, the link between problem solving and creativity and so on.

So let us begin today's discussion in understanding first what is the problem and how do we solve a problem and what are the like competencies required to solve problems.

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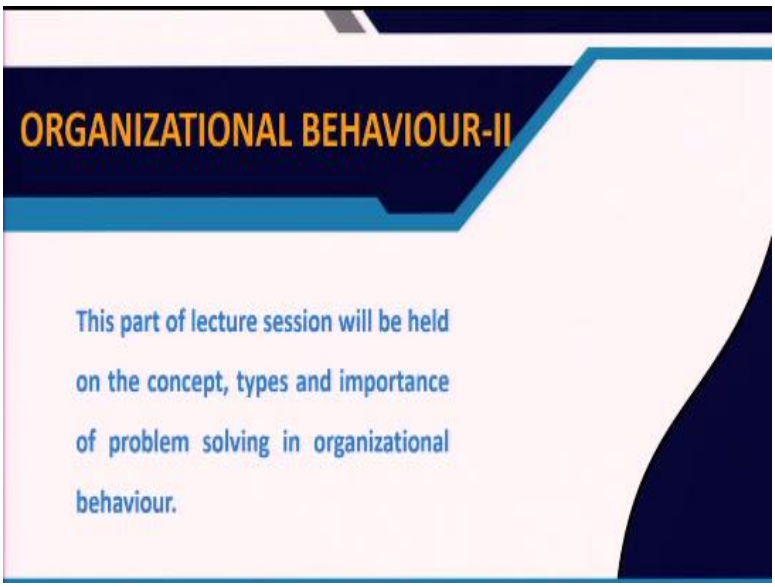

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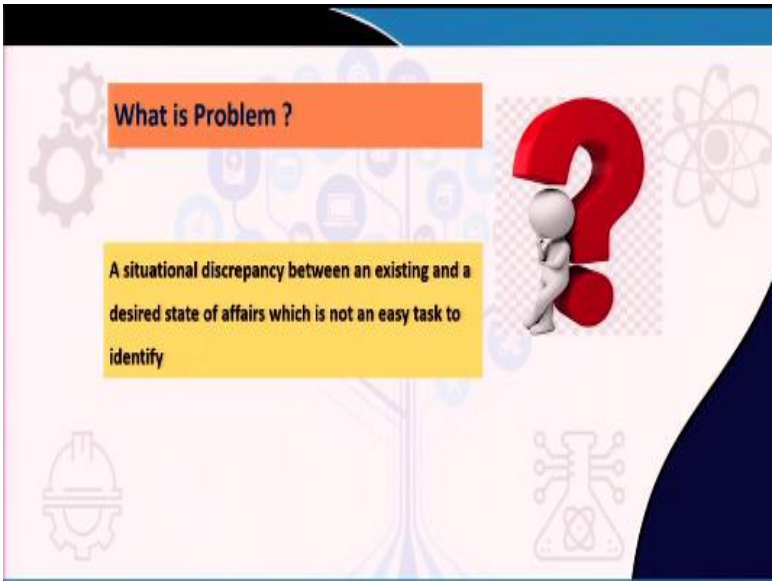

Now to begin with what is a problem? Problem is a situational discrepancy between an existing and a desired state of affairs, which is not an easy task to identify. So, when there is a desired state of affairs and where you want to reach as a part of your goal and you are presently here at your present state and then impact you do not know how to reach your goal or there could be many ways to reach a goal then it could be a problem.

Or wherever you want to go and whatever you have presently are maybe these two things are not matching, what others are expecting from you and what you expect to do are not matching, then a problem arises. So, it is a situational discrepancy between an existing and a desired state of affairs, which is not an easy task to identify.

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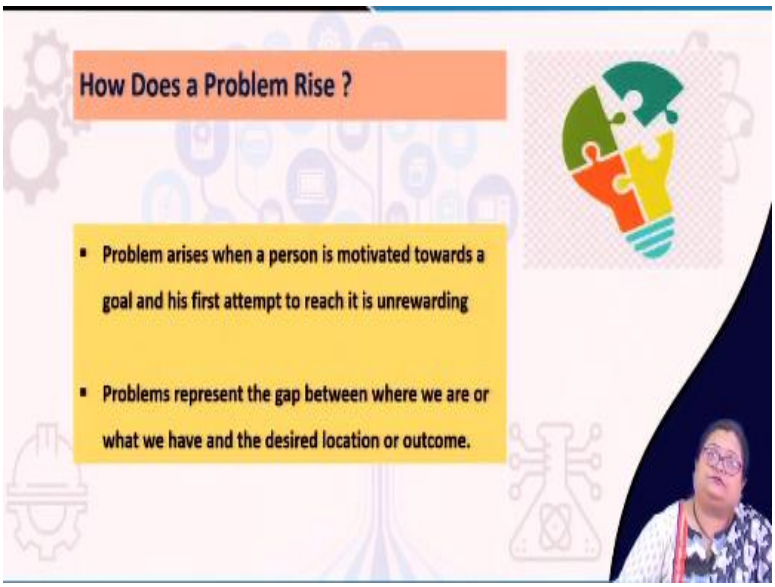

Now how does a problem rise? A problem arises when a person is motivated towards a goal and his first attempt to reach it is unrewarding. So, you want to reach a goal, but maybe if taken a wrong route, maybe you have done something, but it is not as per the expectations of the people who you are working with and you are efforts get not recognized. So, you do not get rewarded for it.

So, in that case, you do not understand like what has happened. So, a problem arises for the first time when a person is motivated towards a goal and his first attempt to reach it is unrewarding. The problems represent a gap between where we are or what we have and the desired location or outcome.

This we have already discussed like if you have a goal or you have certain expectations for your future or others are having expectations from you and what you are presently now or what you are doing now or what you expect from yourself are quite different from the whatever others are desiring or what you are expecting. So, when there is a mismatch between these two things, then a problem arises. And the problem represents this gap, this discrepancy.

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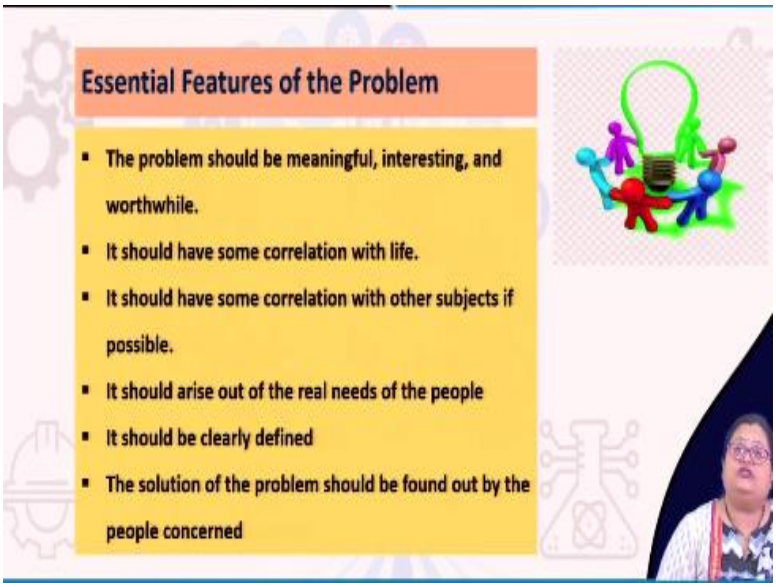

The essential features of the problem. The problem should be meaningful, interesting and worthwhile. It should have some correlation with life. If you are working on a problem, which is not related to your life, then maybe you are not able to relate to it properly or understand it properly. It should have some correlation with other subjects if possible.

So, like with other people that you are working with or other things that you have learnt in your life, with those things it must be related to it so that you can understand like, the depth of the problem or the nature of the problem or the spread of the scope of the problem also. It should arise out of the real needs of the people. It should be clearly defined.

The solution of the problem should be found out by the people concerned. So, the problem, its essential feature is it affects the people and they need to find out the solution about it.

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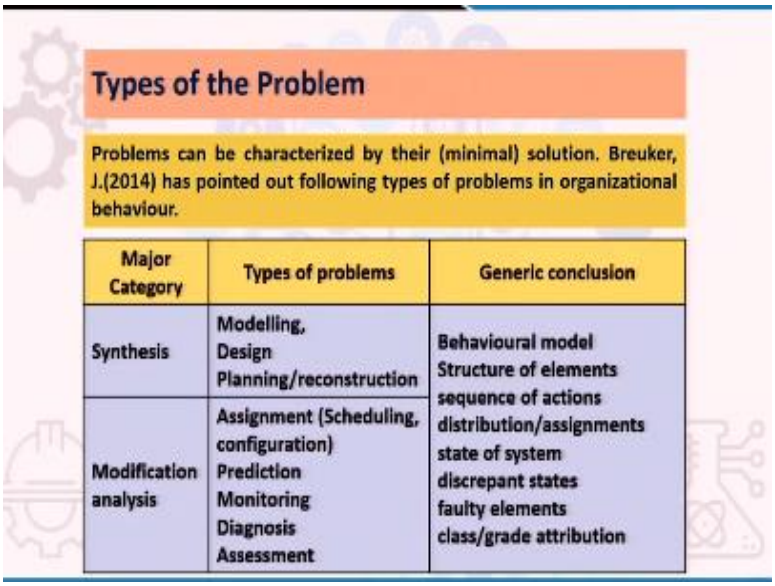

There could be various types of problems. So, problems can be characterized by their minimal solution. Breuker has pointed out the following types of problems in organizational behavior. First is a kind of major category being synthesis kind of problem. The types of problem are that of modeling, design, planning or reconstruction, where you want to redesign something, you have to plan for what like you are going to what structure you are going to give.

Or you have to bring in some changes or you have to represent some of your thought processes and you have to bring it together. So, these are called synthesis kind of problems. Modification analysis. So, in it the problem types are assignment, like scheduling, configuration, prediction, monitoring, diagnosis and assessment, where because you want to find out where the gap lies.

And you want to study it for some time to find out like how this discrepancy is, over time how it is happening, and how it is going to exist in what form in future. So, if because then on that you want to work on it, you have to modify it. So, the general conclusion that can be drawn about the types of problems are it could be a behavioral model, structure of elements, sequence of actions.

It could be distribution or assignments problems, state of the system, discrepant states, faulty elements and or class or grade attribution. This could be the nature of different problems that may exist.

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There could be other categories of problems related to the organization. These are as follows. Process oriented problem, technical problem, policy related problem, functional problem, cultural problem, structural problem, procedural problem, human resource related problem, materials problem, resistance to change problem.

So, if you go back over here, like whenever you are coming to the generic conclusion, when you see some discrepancy is happening, when you see like two states are not matching, there is certain gap, then you have to come to the WH question, what is the kind of gap? And there lies your acumen of understanding the nature of the problem and what is its source, where it lies?

Like is it in the structure of elements or is it in the sequence of actions that is happening or is it based on how the distribution has happened or it is in the because it is working with some elements which are not properly designed or the or it is a classification problem like the way that it has been classified, maybe it is not proper. So how, where lies the root of the problem.

That is where you have illustrated more in the slides where we are talking of the where lies the problem and its nature.

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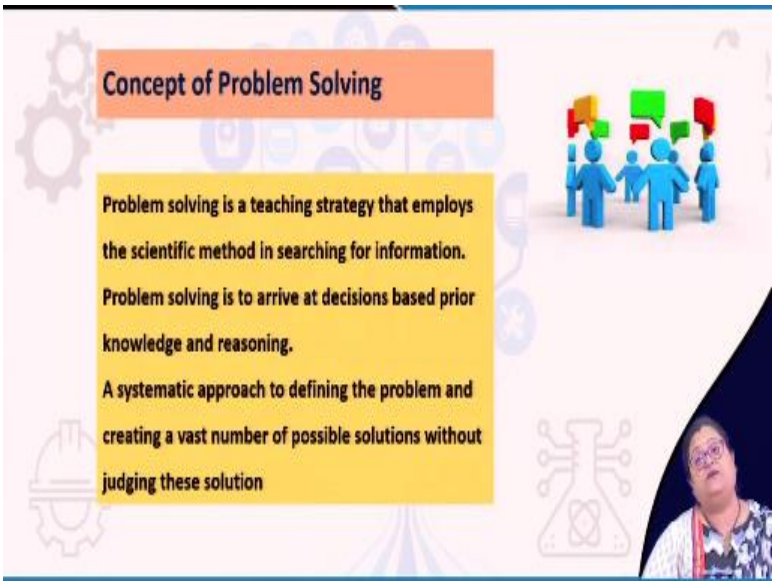

It is very important in organization that we define the nature of the problem properly, before we embark into problem solving. We can solve a problem only when we get to understand the nature and characteristics of a particular problem. So, after understanding that, we can come to problem solving, because problem solving is the application of certain strategies.

But before you apply those strategies, you have to understand the problem first. Now what is problem solving? Problem solving is a teaching strategy that employs the scientific method in searching for information. Problem solving is to arrive at decisions based on prior knowledge and reasoning.

A systematic approach to defining the problem and creating a vast number of possible solutions without judging these solutions. So, it is very important for solving a particular problem like we define the problem properly and we create possible

alternatives, possible solutions, based on certain like conditions like if this is happening, then what we do? If we are getting all resources what we do?

If we do not get all resources, what do we do? If there is an uncertainty in the environment what we do? If there is a complexity in the environment, what we do? So, we need to like think about different kinds of solutions to a particular problem.

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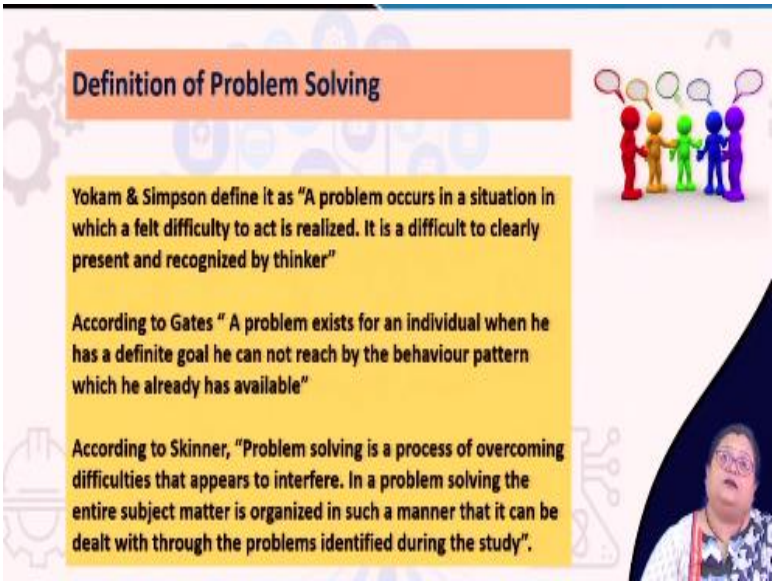

When we define problem solving, like there are various ways of defining problem solving, we will visit some of the definitions over here. Yokam and Simpson defined it as a problem occurs in a situation in which a felt difficulty to act is realized. It is difficult to clearly present and to be recognized by the thinker.

According to Gates, a problem exists for an individual when he has a definite goal he cannot reach by the behavior pattern, which he has already has available. According to Skinner, problem solving is a process of overcoming difficulties that appears to interfere. In a problem solving the entire subject matter is organized in such a manner that it can be dealt with through the problems identified during the study.

So, we will visit this definition one by one again. So, if you see the first definition, so what would see the focus is a problem occurs in a situation where it is more of a felt difficulty. When we feel like we are not able to do this, we are not able to reach a goal, the way that we are doing it now maybe is presently not helpful.

So, when we feel like there is a gap, it is more of a felt component where we feel like there is a gap or the ways that we are doing things are not proper, is not sufficient or it is difficult to reach a particular goal or we are not able to do it. So, when this sense of like difficulty happens, when we feel like we are not equipped enough to do it or the way that has been defined we cannot do it and there is a felt sense of difficulty or discomfort then a problem arises.

And to solve it in a better way we need to understand why this difficulty. So, but when first when we feel it is like difficult to realize or to act on to realize what is expected from the present state of being that we are in then the problem arises. So, the second definition tells like a problem arises when there is a fixed goal.

But the way that we are behaving presently does not help us to reach that goal or the competencies that we have presently, there is not makers equipped enough to reach that goal. So again, when there is a feeling of like the resource inadequacy or inadequacy in the behavior pattern, then it is so that the goal can be reached, there lies the problem also.

According to Skinner, then problem solving then if those are problems then according to Skinner, problem solving is a process what, it is a process of overcoming the difficulties that appears to interfere. If we understand what is the difficulty, what is the nature of the difficulty, why it is occurring, then problem solving is the process of overcoming the difficulties which appears to interfere.

The word appears to interfere is very important, which we understand it is a perceptual component also. In a problem solving the entire subject matter is organized in such a manner so that it can be dealt with easily if we are able to identify the problems properly.

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The characteristics of problem solving or problem solving is goal directed. We have to overcome certain difficulties, we have to strengthen ourselves, we have to reach a target. So, it is always goal directed. It involves a series of operations; it involves cognitive processes. Yes, we are thinking, we are taking certain decisions, we are prioritizing our moves.

So, these, it of course involves cognitive processes. It involves sub-goal decomposition reaching overall goal requires reaching sub goals. That is very important, if you have to set your goals over here, I target over here, it is better to break it down into sub components and reach smaller, achievable goals first. If the target is very high, unachievable, and we again face a failure, like for attempting it, then again it may be demotivating.

So, if you have to reach a higher goal, it is better like it is broken down into sub goals which are achievable and slightly becomes harder every time so that there is a motivational component also and then we reach the higher goals.

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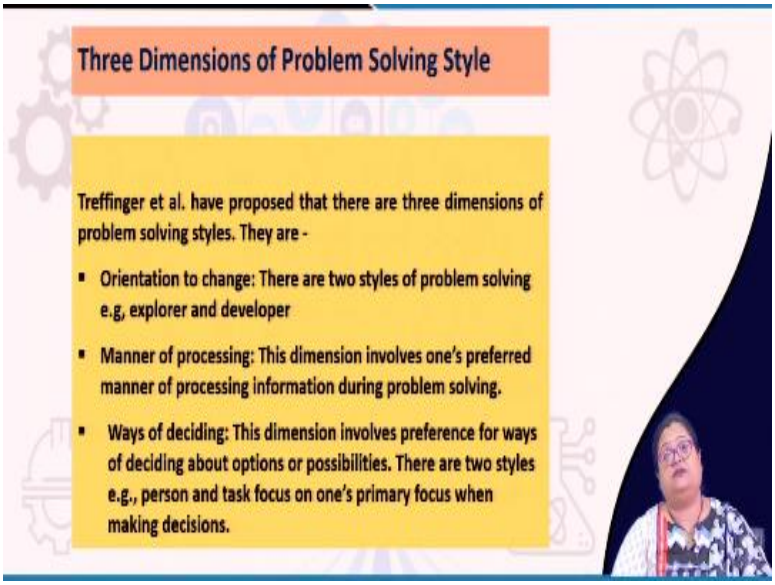

The three dimensions of problem solving are Treffinger et al. have proposed there are three dimensions of problem-solving styles. Orientation to change. There are two styles of problem-solving example, explorer and developer. And then these orientations to change. Manner of processing. The way in which the information is processed during problem solving will vary from person to person.

Ways of deciding. This dimension involves preference for ways of deciding about options or possibilities. So, it could be like the people focused or it could be task focus while you are taking a decision. So, you can understand problem solving styles is a blend of three things. Like how do we see the change?

What is your approach to change, like whether you want to explore or we want to develop something new and explore and find out how changes can be brought in, explore new dimensions also. Or build on whatever is present and move it to the point of excellence. The way that we process the information like whether, what is how do we see information is coming to us and whether we are like a divergent thinker or we are a convergent thinker.

Whether we are processing things based on field dependency or field independency. So, these are the kind of things which helps in information processing. Ways of deciding, of course whether we are people focused or task focused. So, these are three different dimensions of problem-solving style and you can find like you have

combinations of these things based on like the, and you get a particular problem-solving style.

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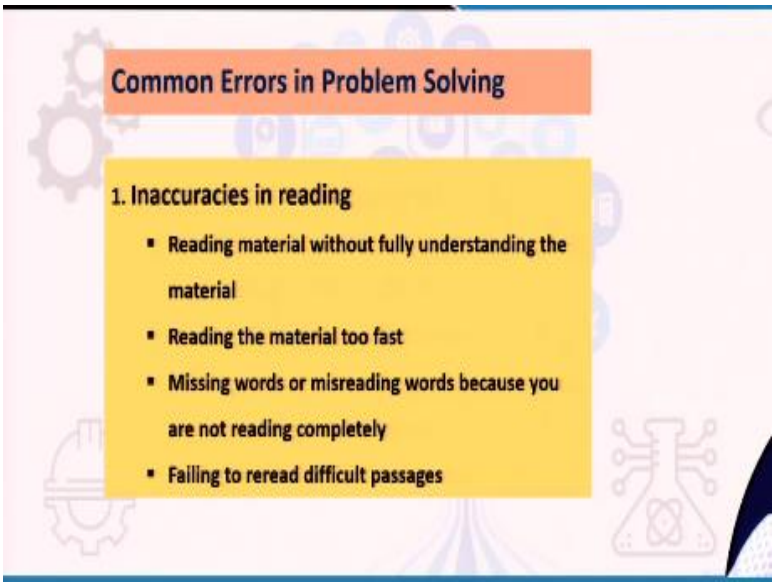

Some of the common errors in problem solving, like inaccuracies in reading. Reading material without fully understanding the material. Reading the material too fast. Missing words or misreading words because you are not reading completely. Failing to reread difficult passages. So, inaccuracies of reading sometimes gives rise to problem because we are not able to interpret the problem properly.

We are not understanding the like, latent meaning of the concept that we are reading. So, reading with the full concentration concentrating on the matter that we are reading putting our head and heart both into it is very helpful, putting your whole mind into it. Otherwise, few important information gets missed out. We are not able to comprehend the thing properly.

And when you are not able to comprehend the things properly, we may try to give meaning to it in different ways and as a result may give rise to future problems.

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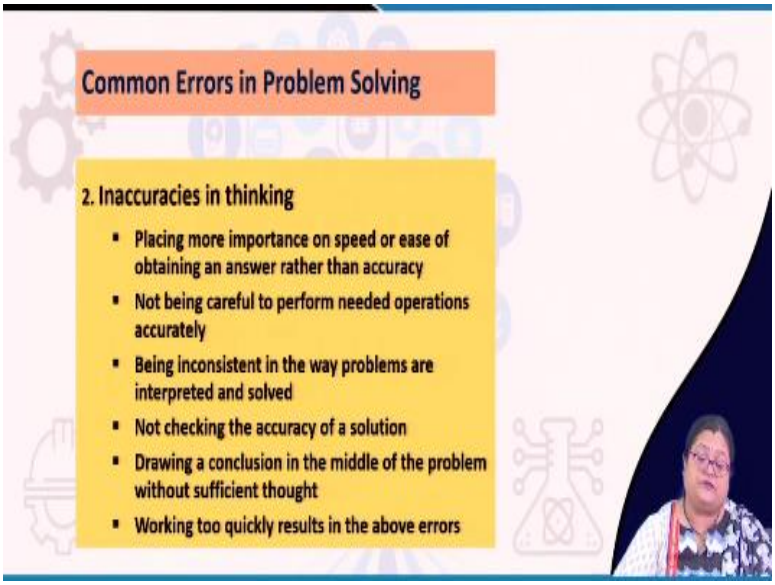

Inaccuracies in thinking. Placing more importance on speed or ease of obtaining an answer rather than the accuracy of it. Not being careful to perform needed operations accurately. Being inconsistent in the way problems are being interpreted and solved. Not checking the accuracy of a solution. Drawing a conclusion in the middle of the problem without sufficient thought.

Working too quickly results in the above error. So, if you are, it needs to be, you need to be more dedicated. You need to be perseverant. You need to be proactive while you are thinking about the problem. And you need to be well balanced with the pace of your thinking. So, if it is, you just think like I will be going to take a very quick decision, then what happens like you may miss out on the intricate details.

So, it is very important, like while you are reading the problem, you are reading it very carefully, maybe two, three times you are reading it or trying to revisit it, so that you can act on it properly or take the proper decisions on it.

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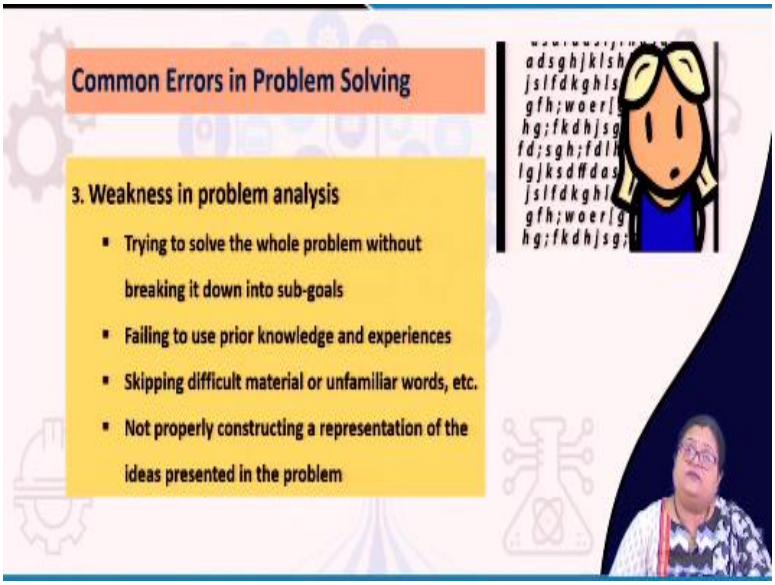

Weakness in problem analysis. Trying to solve the whole problem without breaking it down into sub goals. Failing to use proper knowledge and experiences. Skipping the difficult materials or unfamiliar words etc. Not properly constructing a representation of the ideas presented in the problem.

So sometimes what happens as we are telling like if it is a big goal, you need to break it down into smaller goals so that it becomes achievable, meaningful, understandable, and then you find out the connection between these sub parts with the whole. So, if you try to work with the big problem once at once so without breaking it down into small achievable goals, it may be overwhelming for the person who wants to solve it and may be stressful also.

We need to understand like we have to use a prior knowledge and experiences in solving a particular problem. And we if something appears to be difficult, if something appears to be unfamiliar, so that we can convert that into our strength of knowing the difficult things or being able to solve the difficult problems, we have to revisit that difficulty or the unfamiliar words first.

So sometimes what happens in order to get a quick solution, we try to skip the difficult material or the unfamiliar words. But they remain like as a problem and in future give rise to bigger problem because our knowledge is incomplete over there. So, if something appears to be difficult or unfamiliar, it is very important that we try

to visit it first and get our mastery over that difficult material or unfamiliar words before we proceed with the problem.

So, another thing is like whenever we are talking of a problem and how things are connected, it is very important that we draw a model of it. Okay, we try to find that we call the conceptual model. So, once we understand the link between the various variables which are involved in the problem, then if we can represent it with the help of a flow diagram or a chart so it helps us to think visually and in a more holistic way.

So having a representation of the ideas present in the problem is very important so that you can visualize and you can take your decisions. And while you are visualizing it and thinking together, then newer solutions may come up.

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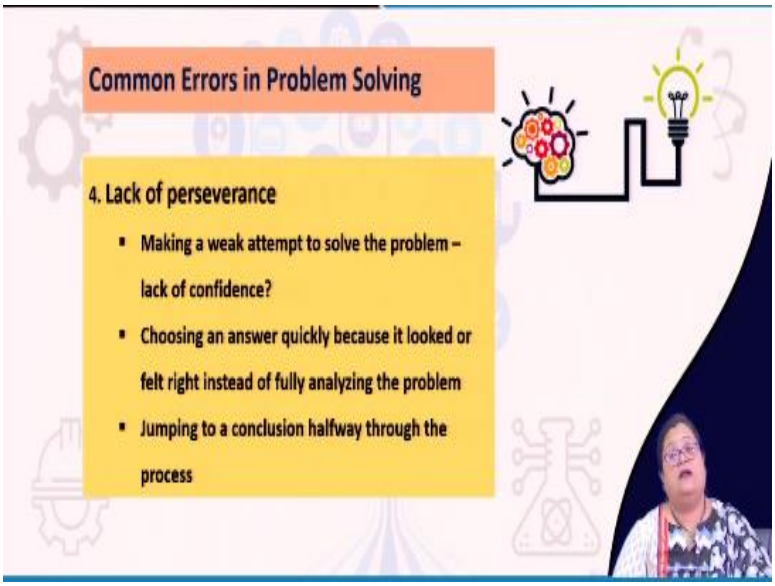

Lack of perseverance as we have told is also one of the common errors. For any problem-solving perseverance is a must. So otherwise, what happens you make a weak attempt to solve the problem because you have lack of confidence. Choosing an answer quickly because it is looked or felt right instead of fully analyzing the problem. Jumping to a conclusion halfway through the process, because you want to come to a quick solution and want to get a quick reinforcement or reward for your answer.

Now this hastiness in the process may make like you are losing on some of the very important details, which are very crucial for solving the problem.

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Now then if these are the errors then what are the problem solvers' proficiencies? Have a positive attitude. That it is very important to have your sense of confidence. Great concern for accuracy. So, this will come again with like caution over there. Yes, definitely, we need to be having a great concern for accuracy like things need to be perfect. But again, we should have some allowable space.

Error will decrease based on the maybe the situations that we are dealing with or the complexity of the issues that we are talking of or the importance of the thing that we are dealing with, what is the allowable space for errors. Otherwise, what happens, we may become so much become obsessed with reaching a particular degree of accuracy, then it may bring stagnation and we may not be able to proceed further.

So, we should be very prudent in understanding like whether accuracy is a point or it is a range and you know like what are the allowable errors, if possible, which gives a good level of tolerance. And of course, that will vary from problem to problem, the criticality of the problem, the complexity of the problem, but whether we get go for it. Breaking problems into parts that can be accomplished.

Avoid guessing and jumping into conclusions. More active, like doing more things and putting in more effort.

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However, we can improve on the problem-solving ability. Increasing the knowledge base. The experts have more efficient methods for problem solving. Automate some components through expertize. Follow a systematic plan of attack of like how would you attack the problem? How you are going to like dissect the problem? How you are going to analyze the problem?

So, following a systematic plan for attack. Draw inferences from information given and from memory. So, if solutions are not very obvious, then can we look at the heuristics, can we look at the analogy for solving a particular problem? Reformulate a problem. So, this is also very important like we tell like the half of problem solving is done, if you are able to define the problem properly.

So, while we are looking at the problem and problem solving, can we reformulate, restate the problem in a different way that may bring in different kinds of solutions. Trying to draw a picture, a mental map or a flowchart, conceptual diagram, which helps to relate the various variables related to the problem. And maybe nodes where it is a decision like what we need to do and which way to move forward to.

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Some of the problem-solving skills are clarifying what the problem is about. Brainstorm the better ideas to get a better clarify the problem. Planning out to what is going to be done. Trying out for implementing the plan. So, assessing in trial, how far it is able to solve as it will. Like before we use a technique on a bigger, larger scale, whether we need to do a trial run to find out how it is working.

Trying out for another case, if the trial is not a success. So, it may not be always true, like whatever ways we are thinking to solve the problem is going to work on the first instance. No, but every failure is also a point of learning so that we can learn from it and correct our mistakes and emerge more strongly later on.

So, with a different solution, different ways of looking at the problem, maybe redefining the problem and having a relook at the problem, restructuring it, and coming out with another solution.

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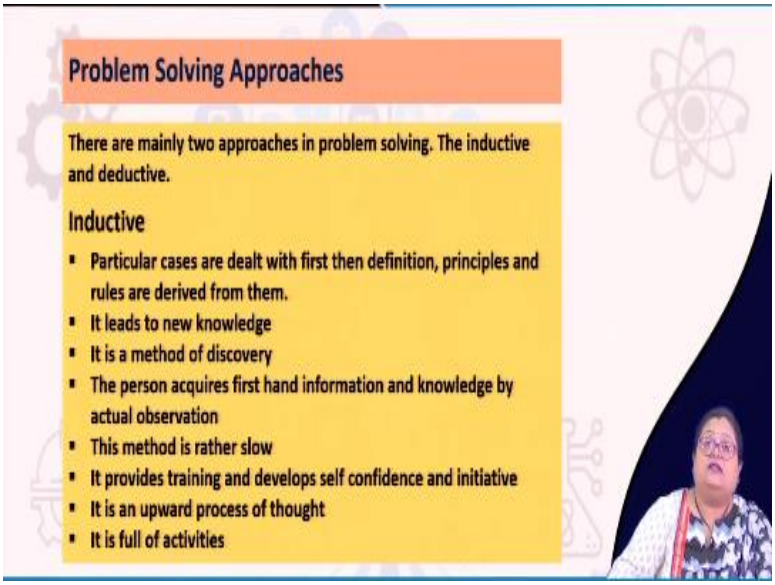

Based on the problem-solving approaches, there are two main approaches in problem solving. One is the inductive where the particular cases are dealt with first then definition principles and rules are derived from them. It leads to a new knowledge. It is a method of discovery. The person acquires firsthand information and knowledge by actual observation. It is a slow method.

It provides training and develop self-confidence and initiative. It is an upward process of thought. It is full of activities.

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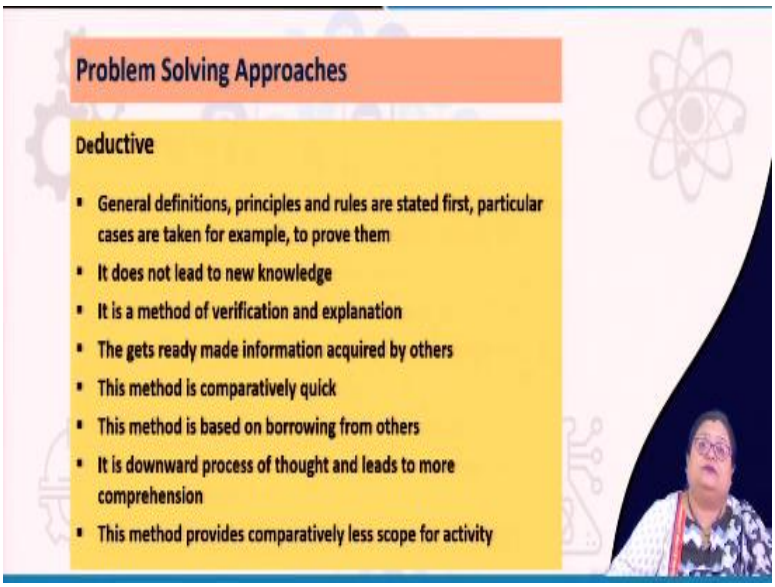

Problem solving approaches, deductive. The general definitions, principles and rules are stated first. Particular cases are taken for example to prove them. It does not need to lead to a new knowledge. It is a method of verification and explanation. It gets

ready made information acquired by others. It is a quick method because you have general described rules and principles are already defined.

And you are just matching cases to it to find out whether these rules and regulations are followed to what extent, like how things are happening and what kind of people are like coming closer to it and you verify it your hypothesis. And you verify the hypothesis that you may have thought of. So, this method is based on borrowing from others. It is a downward process of thought and leads to more comprehension.

This method provides comparatively less scope for activity. Because the principles are defined and you are just matching the cases, examples so that you understand like whether if it is getting practiced or it is valued or it is the way that you believe in. So, it is a first principles are there and then you go on matching cases to it.

While in inductive reasoning or an inductive problem solving you first deal with the cases and from there you try to find out certain principles and try to draw inferences, try to draw a thread connected with the thread of thought.

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These are the references that we have used for dealing with this chapter or introducing you to the concept of what is problem and what is problem solving, and characteristics of the competencies for better problem solving and some of the common mistakes also.

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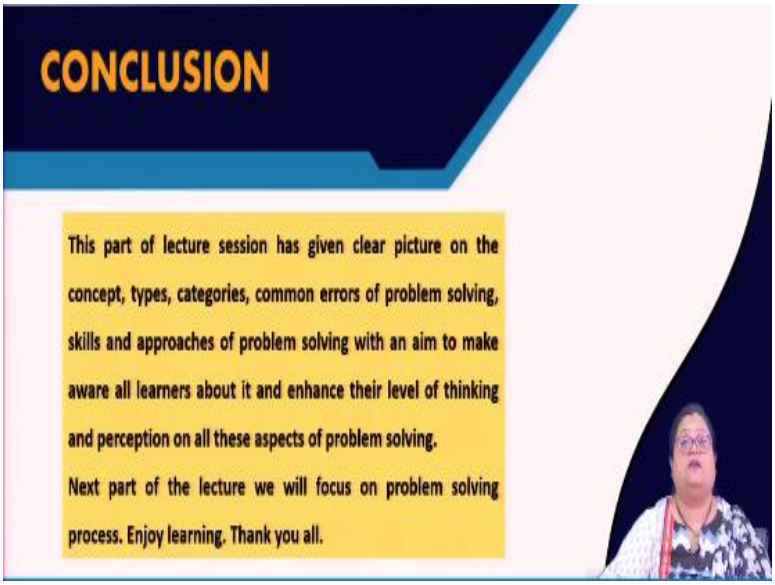

So, with this initial knowledge what it is given over here, the next part of the knowledge will focus on the problem-solving process based on this common understanding, the conceptual base that we have done now. In the next section, we will move on the problem-solving process. Enjoy learning till then. Thank you all.

Organizational Behaviour - II
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Lecture - 42
Problem Solving Process, Decision Making and Comparison between Research Process and Problem Solving

Welcome back. In the previous lecture we have understood about the problem, the concept of a problem, the ways the different ways of problem solving and the competencies of for better problem solving. In today's lecture, we are going to understand about the different processes of problem solving.

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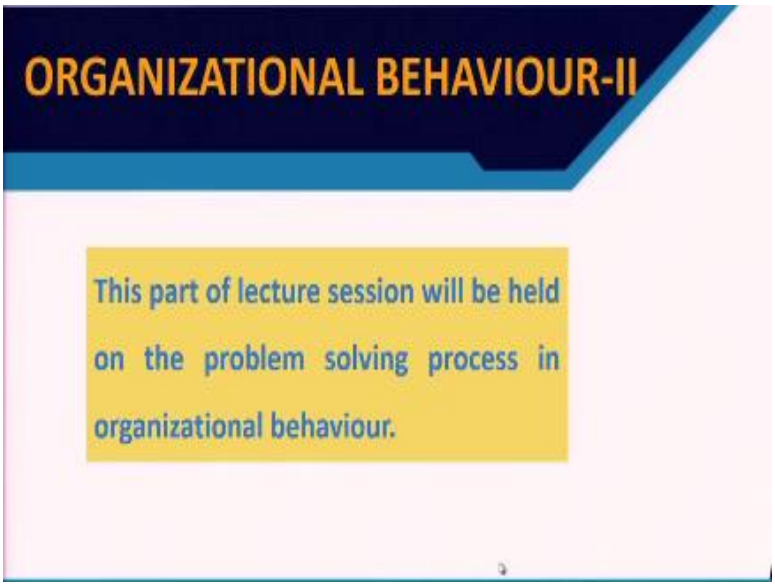

This part of the lecture session will be held on the problem-solving process in organizational behavior.

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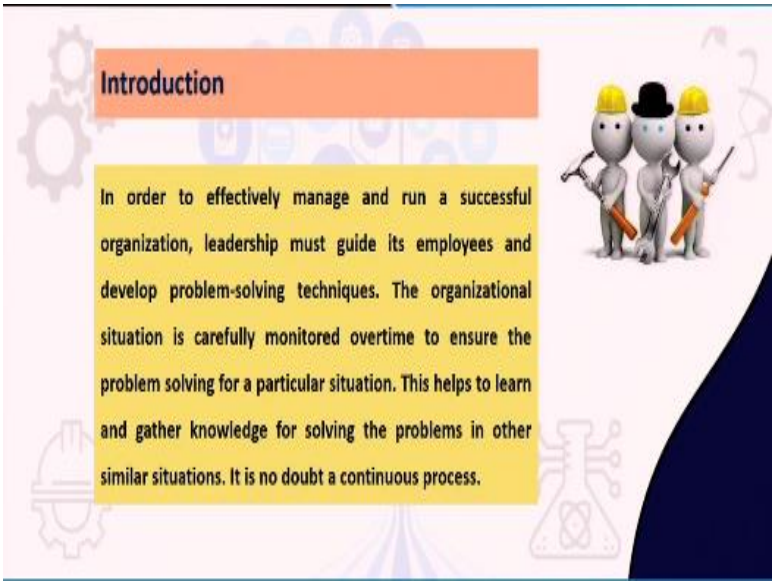

In order to effectively manage and run a successful organization, the leaders must guide their employees to develop the problem-solving techniques. The organizational situation is carefully monitored over time to ensure the problem solving for a particular situation.

Maybe they can understand the strength of the organizations towards efficiency lies in how better you are in understanding the problem and how better solutions you can see bring in for the problem, how effectively you are able to foresee the effect of the techniques that you are taking in problem solving. It is short term effect and the long-term effect. So, problem solving is a very important part of organizational behavior.

It helps the employees to learn and gather knowledge for solving the problems in other similar situations. And it is no doubt a continuous process.

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