

**Course Name: Sports Psychology**  
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PSYCHOLOGICAL FACTORS IMPORTANT FOR PST

Hi, and this is session 3, where we will be looking at psychological factors important for the PST or the Psychological Skills Training program. When we look at learning or acquiring any kind of a new skill, there are a lot of internal processes that happen. So, these internal processes help us in developing and improving a particular skill. So, if we look at say goal setting or we look at even imagery, if it is a new skill that is being taught to us, this new skill will be effective if the internal processes or the internal psychological factors assist us in developing this particular skill. So, in this session, we will be looking at two important factors. One is how we develop self-confidence and the second one will be arousal regulation, where we will be talking about relaxation.

So, this session will be handled by both myself Nivedita as well as Miss Priyanka Prabhakar. So, Priyanka will be talking about arousal regulation shortly later on. So, what are these factors of self-confidence and arousal regulation? Before that, let us look at this slide where we talk about how mental training is effective if the player's psychological aspect or the mindset support them. So, here you are where you will be working on an imagery skill or you will be introduced to imagery.

So, how to make it effective? So, there are two aspects of looking at it. The first part you are educated about a particular skill, right? So, you learn what is the skill, what is imagery, how it happens and the whole process. The second aspect is where we go into the acquisition phase. In the acquisition phase, we are looking at trying to practise that particular skill, we are trying to work on the skill because we want to do it in the practice situation and then finally, take it to the competitive situation. But how will we be able to do it if the psychological aspects or the internal processes within us do not support? Let us look at this

small research study which was done on imagery.

As you all know that in imagery, it is very important to focus on generating positive images. So, when we try to do an imagery, we get a negative image of a particular skill or a particular competition etcetera where you are not successful and then you just try to replace it with a positive image. Now, just replacing a negative with a positive image does not help to improve our performance. Why is this so? Because you are just replacing something with something else. You have not practised or you do not have the required internal psychological factors which would in the first place create a positive image for you.

So, it is said that if we tell ourselves not to image something, we are more likely to image that. So, we need to practise and also we need to develop our psychological aspects. The first key aspect here is self-confidence. Self-confidence is the platform on which an individual a player rests on, right? That is the home ground for us. So, self-confidence is a belief that you can successfully perform a desired behaviour.

Here it could be like converting a free shot, hitting the winning run, serving an ace, anything, but please remember it is successfully performed, right? Without any hindrance. So, according to Vealey, Vealey has brought in a concept called a sports confidence and he says it is a belief or degree of certainty an individual possesses about their ability to be successful in the task. So, it is a belief. So, do you believe that you can successfully perform a desired behaviour? So, linking this with the internal process and to goal setting and imagery, the self-confidence you have or the belief that you have will assist you in setting goals, will also assist you in your imagery process. So, I would like you to look at this slide.

It talks about something called a self-fulfilling prophecy. We do this all the time. So, when we expect something to go wrong, we are creating a self-fulfilling prophecy very common in competitive sports. Like you know you see the draw, if you are a tennis or a badminton player and you know you are pitted against some player and you say oh man I am you know I am not going to win this game. So, what are you doing? You are creating a self-fulfilling prophecy and the expectation of failure will lead to actual failure.

So, when you actually fail, it is going to lower your self-image and also your expectation of future failure will only magnify. So, you look at like you are not going to win at all. This is

something that all athletes do. So, it is very important not to focus on something or to focus on failure. So, just by telling yourself that you know you are not going to lose is not enough, you need to practise that and these are the internal processes that are very important.

When we are talking about confidence, there are 3 types of confidence that can vary from person to person. So, here you have on the screen. You have the optimal confidence, then you have the lack of confidence and then you have the over or the false confidence. So, what happens when you have optimal confidence? You have optimal confidence when you have trained well, you are ready for the situation and you are ready to take on the challenge. You are at optimal confidence because you know that you have a self-belief that you will be able to successfully play the match, you will be able to successfully do rallies, you will be able to successfully swim, you have that optimal confidence. This is the kind of confidence that players should actually be having, but there are also situations in which players have a lack of confidence.

Now what is this lack of confidence? Lack of confidence does not imply that you do not have the skill sets, you have the skill sets, but somewhere down the line you have made some errors, you have made some mistakes in the practice or in the game or in the match. This drops your confidence to a lower level. Say you are a crack shooter or you know you are a person who is always serving aces. If you are a crack shooter and you know you miss your opening 2 or 3 baskets in basketball, what happens to your confidence level? You start doubting yourself and you think that you are not you know good enough to take the shot. So, actually when you are supposed to take the shot you tend to pass out.

So, you are lacking the confidence. And finally, you have overconfidence or false confidence which is actually not really good for sport because you are trying to personify something that you do not have. You are trying to act confident when you actually are not having that kind of confidence because you may not be having the skill sets to meet the demand. So, what happens in each of the situations and how it affects the psychological skills? When you have optimal confidence, you are realistic about what you can achieve, you are realistic about your goals, your confidence is very high and when your goals are realistic, the imagery or the imagery skills that you use to image a particular activity or a competition is also effective because it goes in sync with your confidence level. When you have a lack of self-confidence, you tend to set easier goals, you are less challenging because you want to

develop that confidence.

So, you set lower and easier goals and also there is an element of self-doubt. So, just because you miss 2 or 3 shots it should not hamper your self-confidence. It is in the game's momentum. So, you need to recover yourself and you know, inspire yourself and be confident that you can do it. And the third aspect which is the overconfidence, here in this situation, the goals are totally unrealistic because you are trying to be somebody that you are not.

You are trying to think that you have skills that you do not have. So, there is a mismatch between the abilities and the demands. And here, when you try to visualise or try to do imagery, what are you imaging? Are you imaging the real capabilities or are you imaging the unrealistic? Because you are overconfident, you may end up trying to image skills or image doing something that you probably cannot do. So, your imagery can be distorted. So, you can see how the 3 different types of confidence can affect our psychological skills.

So, how do we improve self-confidence? Self-confidence can be improved. Does not mean that if you lack confidence, you cannot become confident again. So, self-talk. So, what is self-talk? It is an overt or covert personal dialogue in which the athlete interprets feelings, perceptions and convictions and gives himself or herself instructions and reinforcement. So, it is overt, you know, you would have seen on TV or even seen in some matches where players are talking to themselves.

So, it is an overt, it is an open thing. Covert is having a dialogue in your brain, it is hidden. You just keep talking to yourself, you know, you probably express some kind of feeling, you keep giving instructions or you try to encourage yourself or you try to pep yourself. It is very useful to be used in, you know, in your practice and also in reaching your goal. So, having self-talk as a skill set is very important.

The usefulness of self-talk, again as all skills training talk about, it is about motivation, it drives you, it provides you that kind of a confidence and finally, it is also cognitive in nature because it, you know, when we look at the different types of self-talk, it helps you to work on particular skill. It kind of gives you instructions of what to do. So, it also helps you to improve your performance. What are the different types of self-talk? You have three types,

positive, negative and instructional. So, positive self-talk, very positive in nature, encouraging you, saying that you are doing good.

Examples would be like you are doing good, you know, you are having a great game, go for it, you will do it. These are all the positive phrases that athletes or players can use. You can develop your own, these are just illustrations. Then you have the negative self-talk where you look down upon yourself because you are making errors or you are not doing well, you know, you cannot do it, you are not good enough, this is not the way you play, you know, these kinds of things which are trying to put you down. And finally, you have the instructional self-talk. Instructional self-talk is basically giving you instructions at crucial points of time where it tells you how to execute a particular skill.

Like you are taking a free throw in basketball, you miss the first one, you have a second one, you can use a self-talk and say, you know, give more flight, flick off your wrist or you know, in a serve, you are faulting your serves regularly. So you can give instruction, right? Work on your toss, work on your point of contact, work on your footwork. So in every sport that you play, you can have instructional self-talk. So when you use these, when you use positive and instructional, they kind of really help you to improve your confidence. And this is very useful when you set, when you are working on your goals and when you are working on your goal chart or your daily goal charts.

What happens when we negatively talk to ourselves? What happens to the body and mind? So it leads to development of anger, right? You are angry with yourself because you are making such silly mistakes. You shouldn't have done it, it happened. You know, sometimes you have unforced errors, feelings of hopelessness because you know that you can do it, but there isn't, you don't know what to do at that particular point of time. Increase muscle tension, okay? Because you know, you start getting anxious and you get frustrated and it has an effect on the physiological part of the body when your muscles get tense. And this in turn hinders skill development and also the imagery process.

So imagine, you know, doing an imagery of a particular skill and you start getting angry and you start feeling hopeless and you know that increases the muscle tension, right? So your imagery process will not be complete. So it's very important to be more positive, use positive talk in order to enhance your skill and also to, you know, work on your PST program

and like especially when it comes to goal setting and imagery. How do you change it from negative to positive? We all have negative thoughts from time to time. I mean, there is nobody who doesn't get negative thoughts, right? But the beauty is to convert the negative into positive thought. So we focus our attention on encouraging and motivating ourselves.

So here I've just given a small example of a negative self-talk. That was a terrible serve, you know, in tennis, the positive would be just slow down, keep your rhythm and timing. So here you're not only encouraging yourself, but you're also giving some kind of an instruction. So doing this is of great assistance and important, that even if we get the negative thoughts into our mind, to work on it to change it into positive talk. And finally, the important concept in sport is also called positive affirmations or affirmations what they're called.

Affirmations are very powerful positive self statements that can be written down by players. It helps to overcome self-doubt, channelize our focus and energy. And when we use the positive affirmations, we change our belief system and our destructive thoughts like you know, something that you cannot do to something that you can do. They're usually written down based upon the goals that are set. So here we look at how positive affirmations can be used or how they can be written down or what kind of positive affirmations can be used.

So as a player or even as a coach, or even as a parent, you could write down affirmations for yourself. Some examples for a player would be: This is my game, I have trained enough, I deserve to win, I'm confident in my abilities and in my game.

This is if you are an individual, if you would like to use positive affirmation, these are some examples you can build on your own, you can create a whole list of positive affirmations for yourself. If you're working and being a part of a team, you could have these positive affirmations like: I'm a good team player. We have fun playing together. I believe in myself and in my teammates. So it's advised that all these positive affirmations be written down, stuck somewhere in your desk or in your cupboard so that you can see it on a daily basis and read it.

So reading these positive affirmations will help you to develop your self-confidence and build your self-confidence. So finally, we have an exercise here just to test how attentive you were. So the first one, the three levels of confidence are: optimal, moderate and low. False,

moderate and low. Optimal, lack of confidence and overconfidence and D optimal, basic and moderate. So the answer is C optimal self-confidence, lack of self-confidence and over self-confidence. The second question is the different types of self-talk are: positive, negative and instructional. Positive, directive and negative. Positive, incentive and negative and positive, talk and directive.

So the answer is A- positive, negative and instructional. So this comes to the end of this small discussion on how to use self-talk and how as an internal process self-confidence can be developed and the next part will be spoken by Priyanka Prabhakar on how one can regulate their arousal levels. Hello everyone, you have got an understanding of how imagery and self-talk, self-confidence actually helps you in developing positive images previously. Right now let us look at how relaxation and imagery can really play an important role in helping you with your performance. Let us just take a minute, just close your eyes.

I invite you to just take a deep breath and come into your stillness. Take a deep breath in and slowly breathe out. Breathe in, slowly and gently breathe out. Imagine you are in a very calm and quiet place.

You are free from all your thoughts and worries. Now slowly open your eyes and come back to the present moment. So I did feel relaxed by doing this particular exercise. I hope you feel the same. So we are going to be talking about what relaxation is. So according to the American Psychological Association, relaxation is an abatement of intensity, vigour, energy or tension resulting in calmness of mind, body or both.

The return of a muscle to its resting condition after a period of contraction is relaxed. Basically there are two components which we need to understand when it comes to relaxation. One is you know the aspect of the physical component and the second one that we have to understand is you know the mental component. So relaxation results in reduction of you know tension in the body and in the mind to a large extent. What are the benefits of relaxation? Relaxation results in low tension.

It helps you to make better decisions. It results in clarity of thoughts. There is reduced stress levels and less muscle tension. In fact, research shows that imagery which is preceded by relaxation is more effective than imagery alone. This was found by Weinberg et al. So

basically what they say is prior to every imagery session, athletes need to relax using several relaxation techniques like deep breathing, PMR, etc.

And relaxation before imagery is important for two main reasons. One is it lets the person forget everyday worries and concerns and concentrate on the task at hand as it results in more purposeful imagery. And the second one is you know relaxation results in more powerful imagery because there is less competition from other stimuli. So the two reasons why we have to relax are, one is you know a person can forget all the worries and concerns and the second one is there is no competition from other stimuli.

So now let us look at relaxation and imagery use. So I remember in 2000, I mean this was long back when I had gone to give my interview. I was extremely anxious about this particular job that I wanted to attend the interview for and what happened was that you know right before the interview because I was so anxious, my therapist really helped me to combine relaxation and imagery. So basically what my therapist did was ask me to imagine the interview scenario. So I imagined maybe there were three interviewers and you know first time when I actually imagined I was quite anxious, I was scared, I did not want to imagine at all and I just felt that the people who will be taking my interview, they are going to be so you know, they may not be very understanding and I will be yelled at or I will be scolded for not doing a great job. And all these thoughts were coming out of my anxiety and also probably the images which were coming out was also because of my fear.

Then next time we tried the same imagery, my therapist made sure that I was relaxed more and more and in that scenario I was able to imagine three interviewers again and now there was a difference because I was slightly relaxed, I was able to see at least one interviewer was compassionate. And again because I was still not fully relaxed we did more and more deeper relaxation and the third time I was actually able to see all my interviewers being extremely kind and compassionate and I felt more confident in my body. And you know this particular imagery along with relaxation helped me quite a bit because I was relaxed even on the day of my interview to a very large extent and I did quite well in that particular interview. So the reason I am speaking about this particular story is because you can combine relaxation with imagery and use it in various aspects of your life. So now in sports where can you combine relaxation and imagery? Let us look at this particular case.

A high jumper wants to improve the height of her jump. She was jumping at a height of 1.40 metres. After 3 months of training on imagery she said her jump increased to 1.42 metres. She also reported relaxation training has helped her calm and also be focused in most situations.

So basically from this particular case study we can understand that relaxation training helps people to remain more calm and focused. So let us just do a particular activity right now. I just want you to close your eyes and take a deep breath in. So one thing I want you to remember when we are doing this activity is the inhale and exhale ratio is going to be 1 is to 2. So if you take a deep breath in at the count of 1 you need to exhale twice the amount of it.

That is if you take in the breath at the count of 1 the exhale has to be 1, 2. That is the ratio at which the breath is going to come out has to be at 2 counts. So probably let us just try this activity. So I want you to just take a deep breath. Inhale, take a deep breath in, let the breath reach your stomach and slowly and gently relax. Okay, exhale.

Let us try it again now using the count inhale, take a deep breath in at a count of 1 and slowly exhale at the count of 1, 2. Let us try again now. I want you to inhale at the count of 1, 2 and exhale ratio is going to be 1, 2, 3, 4 okay? Take a deep breath in, breath in at the rate of 1, 2. Now slowly and gently relax, breathe out at the rate of 1, 2, 3, 4. So basically when we are breathing in and breathing out you know the inhale exhale ratio has to be 1 is to 2 because the longer you exhale the more relaxed you will actually end up feeling.

And you know I remember attending a breath workshop and one of the facilitators actually told me you are a chest breather because mainly you know it is very shallow breathing. So he also gave me a feedback that it is important that you practise more abdominal breathing. So that is what we are going to be learning right now. Diaphragmatic breathing, belly breathing, abdominal breathing basically you know when you think of it I want you to just imagine a balloon. Just like the way the balloon inflates your belly or your stomach region, your abdominal region needs to get inflated and when the air of the balloon goes out you can see that the balloon contracts or it deflates the balloon.

So in the same way that time, your stomach can come into your normal position. So inhale just imagine the balloon bloating and exhale the balloon coming into its normal contraction

position, okay? So that is one way of breathing through which you can actually relax. So you can try that right now wherein as you are taking your breath in I want you to imagine your stomach being more inflated and as you are breathing out bring the stomach back to the regular position, okay? So there was this research study which was actually conducted by Xiao ma et al in 2017 where they actually found that diaphragmatic breathing in healthy adults improved sustained attention, affect and cortisol levels.

In fact diaphragmatic breathing also helps in relaxing, reduces BP and heart rate and prevents muscle strain and muscle function. So there have been research studies which have also supported that relaxation reduces stress and anxiety and helps in effective imagery generation. Now let us look at the second type of relaxation we are going to focus on that is progressive muscle relaxation. What generally happens with this particular relaxation is that we progressively relax all the areas, all the muscle groups in the body, okay? So basically there will be tensing of the muscles and then slowly and gently we relax it.

So there are a number of benefits of doing the same because it is a very body to mind relaxation. So the more you relax by tensing your muscles, the more you are going to feel relaxed all over your body. So there are a number of studies again which have used progressive muscle relaxation and the benefit it actually provides to the athletes to a large extent. Maybe we can just try out one activity right now wherein you know I have just held my hand here, this is known as clenching the fist. So with progressive relaxation we tightly clench the fist of the right hand, okay? Feel the tightness, yeah?

And slowly and gently you are going to relax, relax, relax and this is something we end up doing you know this way. And in the same way all the areas of the body are relaxed like for example, your hands are relaxed, your shoulders are relaxed, your face is relaxed, your eyes relaxed, your teeth muscles, then chest and your stomach and your legs, you know your knees every single area in the body is relaxed in a very progressive manner. And again like I said it helps in development of imagery to a large extent. Now let us look at the next type of relaxation, autogenic training. So autogenic training is a mind to body relaxation wherein it is a self-produced relaxation with the verbal phrases involving warmth and heaviness.

So it takes quite a long time to learn autogenic training but you know research has also found its efficacy with imagery. So autogenic training is an excellent tool which people can

use. I remember one of the you know you use certain phrases saying that my body is feeling warm right now and my body is feeling heavy right now. And you train on that and you will see that the body has the same impact. I remember one of the athletes had to go to another country to compete and she was going to a cold country.

So because she was trained on autogenic training for quite a long time she started training her mind and telling herself that my body is warm, my body is warm. So that somewhere helped her in order to you know especially when she went out to another country and that helped her to adjust to the temperature. In the same way I also know of athletes who train their mind that my body is cool and that helps them especially in hot temperatures to a large extent. Now let us look at you know biofeedback. This is another way which is technology based and it helps in relaxation of your body.

So biofeedback provides feedback about the involuntary process of the body like heart rate, respiration, skin temperature, muscle response, etc. So basically most of the time we do not get feedback about these areas. Like for example about our heart rate or our respiration or our skin temperature. But using this technology we get feedback about all the areas of our body and we can voluntarily try to control them because your heart rate and your respiration etc. will be measured and it will be shown on the monitor. So using that you can use breath in order to relax yourself and at the same time you can use imagery and biofeedback in order to help athletes improve their effective performance.

In fact, there was a study which was done by Ferguson and basically it was found that biofeedback with imagery definitely enhances the quality of the session. And we have come to the end of the session. I want to talk about how effective all the tools are with respect to you know be it confidence or using relaxation and imagery together. So for imagery to be effective it is so important for us to use all the tools which are required. Rather than just you know just doing imagery by itself. Thank you so much.