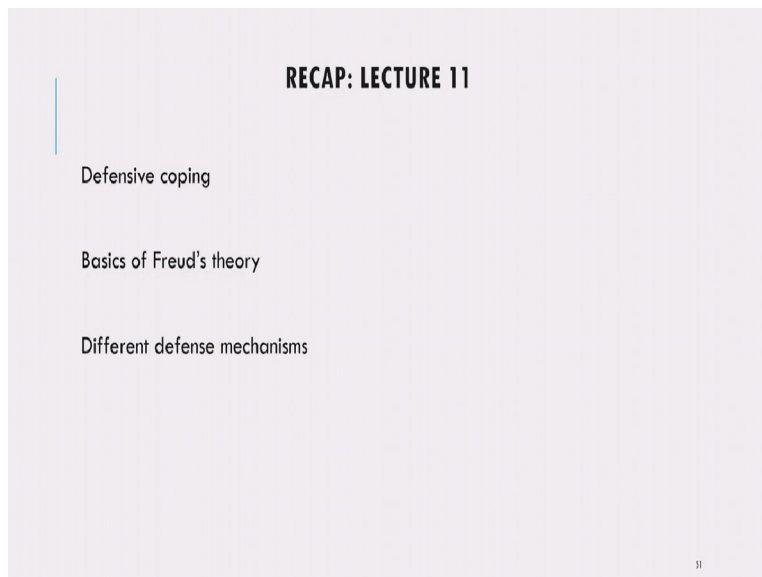


Psychology of Stress, Health, and Well-Being
Professor Dilwar Hussain
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Lecture 12

Characteristics of constructive coping; Physical ways of coping

I welcome you all to the twelfth lecture of NPTEL MOOCs course, titled Psychology of Stress, Health, and Well-Being. So, this is the third lecture of module 4, and overall it is the twelfth lecture. So, before we talk about today's lecture, let us have a brief recap of the last lecture that is lecture eleven.

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So, in the last lecture, we talked about a particular category of coping strategy, which is called defensive coping or defense mechanisms. So, in the last few lectures, we were trying to understand what is the meaning of coping strategy and why it is so important to understand coping strategies, and then, we started talking about some of the common maladaptive coping strategies that people commonly use in their life.

And in that context, we have discussed various strategies such as avoidance, self-indulgence, etc, and in the last lecture, we discussed defensive coping, which is also a coping strategy that can be maladaptive and also some part of it, aspects of it can be adaptive also.

So, in terms of defensive coping, these are essentially unconscious ways of dealing with intense feelings and anxiety that are triggered by a specific stimulus in our environment. So, there is an inner mechanism in the human mind that unconsciously attempts to cope with certain anxieties and emotions, and it is known as defensive coping. Its aim is to shield us from overwhelming emotions.

And this was first explored by Sigmund Freud in his psychoanalysis theory, which stated that there are unconscious ways of dealing, coping with, or adapting to different overwhelming emotions like anxiety.

So, in order to understand defensive coping, we discussed some of the basic ideas of Sigmund Freud's theory in the previous class, and in that context, we discussed the concept of human mind as proposed by Sigmund Freud, and we basically discussed that there are three aspects of human mind or levels of human mind, one being conscious mind, sub-conscious mind, and unconscious mind, and this categorization was done. As a result, the contents of the human mind are usually conscious, and we are aware of all of them. The contents of the subconscious mind are half conscious, half unconscious. We are not aware of the contents in the unconscious section, as the name implies. So, this is one of the fundamental ideas of Freud theory that we've discussed, as well as the definition of personality structure as suggested by Sigmund Freud, and in that sense, we've discussed three important structures or components of human personality that form human personality: ID, EGO, and SUPER-EGO.

So, ID is essentially that aspect of our personality that is mainly controlled by the pleasure principle, as we've mentioned. So it only wants to gratify pleasure, and it is a very illogical, irrational, and primitive aspect of our personality, and a baby is primarily ID at birth, because it only operates on the pleasure principle. As a result, it seeks enjoyment while avoiding pain.

The EGO, on the other hand, is that aspect of personality that emerges about the age of three or so, where it evolves from the ID, and where it mainly works on reality principle. As a result, it begins to differentiate between one's own inner desires and how to convey

them in a socially appropriate manner based on external reality. As a result, it is a more rational component of our personalities.

Then there was Sigmund Freud's discussion about SUPER-EGO, which is the moral part of our personality that evolves around the age of five. As a result, it is mostly focused on parental, societal, and educational ideas of what is right, wrong, moral, and immoral, among other things. As a result, there is a constant struggle and interaction between these three parts, and our personality is determined by how much energy is distributed among these three parts.

So, these and several other things we discussed in the last class, and we typically discussed that EGO is that part that tries to balance the demands from ID and SUPER-EGO, and that in the process of doing so, EGO often resorts to defense mechanisms, where it distorts reality a little bit, so that situations that are really overwhelming seem less overwhelming, and we are able to deal with them.

So, we've talked about a lot of different defensive mechanisms, such as denial, where you actually deny an element of truth that is bothering you. So, let us say a chain smoker simply denies that smoking causes cancer or something. So, it protects his anxiety because accepting that will increase anxiety. Similarly, we've addressed a variety of other defense mechanisms, including displacement, rationalization, intellectualization, sublimation, and so on, as well as how defense mechanisms can differ in their adaptive role. Some defense mechanisms are more adaptive than others; for example, sublimation seems to be, or at least was suggested by Freud to be, more healthy than others, and excessive use of defense mechanisms may be harmful to our mental health. So a certain amount of defensive mechanism use is appropriate. However, excessive usage may have negative consequences. So, these are some of the main topics that we covered in the previous class.

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Lecture 12

Key concepts

Constructive coping

Coping effectiveness training

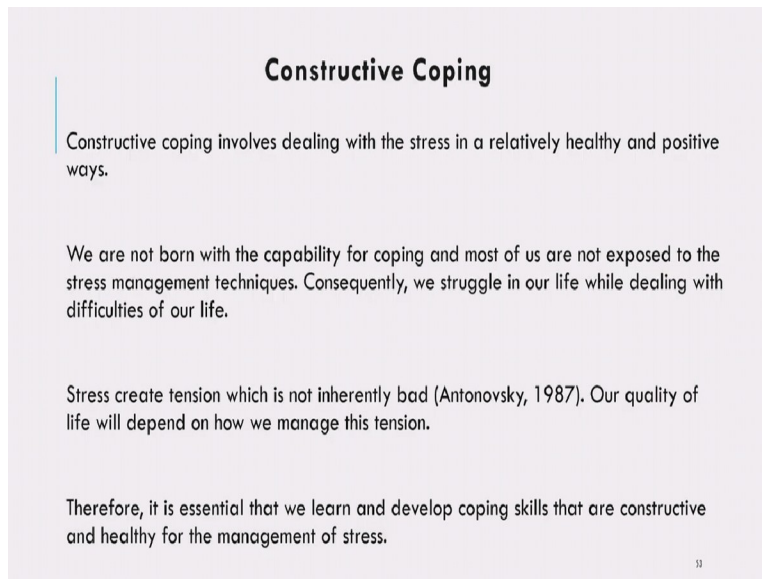
Physical ways of coping

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Today, we will discuss constructive coping or adaptive coping. So, this is more important because many times, because of the use of maladaptive coping, we are not able to deal with the situation properly, and in the long term, we are facing negative consequences.

So, we will try to understand and learn what are constructive coping? and how we can use them in our day-to-day life more to manage stress in a much better way. So, we will discuss constructive coping. We will talk about coping effectiveness training and the ideas associated with it. We will also talk about some specific coping strategies and more specifically, about physical ways of coping in today's lecture.

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Constructive Coping

- Constructive coping involves dealing with the stress in a relatively healthy and positive ways.
- We are not born with the capability for coping and most of us are not exposed to the stress management techniques. Consequently, we struggle in our life while dealing with difficulties of our life.
- Stress create tension which is not inherently bad (Antonovsky, 1987). Our quality of life will depend on how we manage this tension.
- Therefore, it is essential that we learn and develop coping skills that are constructive and healthy for the management of stress.

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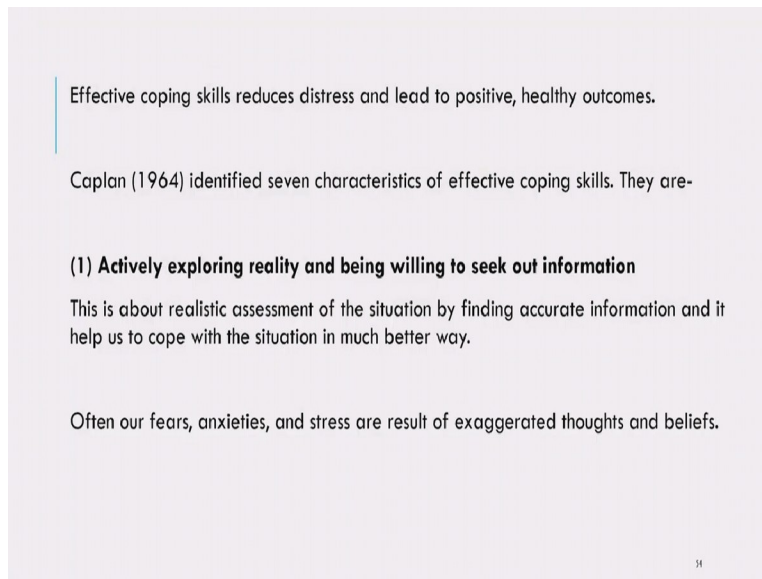
So, what is constructive coping? Constructive coping involves dealing with stress in a relatively healthy and positive way. It is about addressing the situation or stressful circumstances in much more constructive and healthy ways so that it is not really causing a problem in the long run. And it is generally considered more positive. We are not born with the capacity to cope. As a result, we have no idea how to cope when we are born. So we gradually master coping mechanisms, and the majority of us are not exposed to stress management techniques. So, through trial and error and observation of others, we learn a few things in our lives about how to deal with difficult situations, but no one is properly educated in that area.

As a result, we struggle in our lives as we cope with challenges, largely because we often do not know how to deal with challenging situations, either in terms of problem-focused or emotion-focused strategies. So, stress causes anxiety or pressure in our minds, which is neither good nor bad. Stress is a fact that we all face on a daily basis. As a result, it is neither good nor bad in and of itself. Our quality of life, on the other hand, is determined by how we manage it. So, if you can't handle it or are mismanaging it, it can have a variety of negative effects, some of which we've already addressed in the last few lectures in terms of negative physical and mental wellbeing, and if we can properly manage it, we can actually grow out of it. As a result, it is important that we learn and develop

constructive and healthy coping strategies for stress management. So, it's important that we learn about it so that we can apply it in our daily lives. So, at the very least, the psychological literature provides us with a wealth of information in this regard.

So, in this course, we'll try to figure out what ideas are offered by psychology literature. As a result, we'll come up with some ideas and practical applications based on that.

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Effective coping skills reduces distress and lead to positive, healthy outcomes.

Caplan (1964) identified seven characteristics of effective coping skills. They are-

(1) Actively exploring reality and being willing to seek out information

This is about realistic assessment of the situation by finding accurate information and it help us to cope with the situation in much better way.

Often our fears, anxieties, and stress are result of exaggerated thoughts and beliefs.

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As I previously stated, good coping skills reduce stress and contribute to positive health outcomes. As I previously stated, it at the very least tackles the problem in a much more proper manner, reducing stress and assisting in the achievement of positive health outcomes. As a result, constructive coping mechanisms can have a variety of characteristics.

So, we'll look at one researcher, Caplan, who published seven characteristics of good coping skills in 1964. So, in one of his books, he discusses how to successfully deal with challenging situations, challenges, or life crises in terms of crisis management. Despite the fact that he spoke about it in 1964, some of his ideas are very interesting and we can learn from them.

So, what are the seven characteristics that he mentioned? So, according to Caplan, the first characteristics of good coping skills are actively exploring reality and a willingness

to seek out information. As a result, this is the first important characteristic for effective coping. So, consciously exploring reality is one thing. As we've seen in some of the instances of maladaptive coping that people try to avoid active engagement with the issue and avoidance is not adaptive in long run. It may provide relief in the short term, but it is ineffective in the long run. As a result, effective coping requires active involvement and the gathering of realistic information from the situation. So, making a reasonable decision, assessing, or appraising the situation is critical, since our stress, fears, and anxieties are often based on irrational or unrealistic assessments of the situation. So, something negative happens, and people assume that my life is doomed, which may or may not be the case. One aspect of your life can be closed, but if you explore enough, you can find several other doors through which you can sort of find options and get out of it. However, as we exaggerate situations too much, we fail to assess the situation realistically. We have a tendency to exaggerate situations, and we perceive stress at a much higher frequency and intensity. As a result, evaluation and exploration of truth are important.

One of the important characteristics of successful coping is finding out facts, proper information, practical information of a situation. Not just making up ideas in your head that are irrational and unrealistic, which would just exaggerate your stress. It is important to seek properly objective information of the situation, what is there, what I have, and what I can do about it? What alternatives do I have? What are my options for dealing with the situation? So, all of this data will assist us in emerging from the situation in a far more efficient and adaptive manner.

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(2) Frustration tolerance and a willingness to express both positive and negative feelings freely

As coping involves managing emotions, expression of emotion both positive as well as negative can be helpful in this direction especially in a safer way.

Bottling-up of emotions can complicate the process of emotion regulation.

(3) Actively seeking out help from others

Seeking social support is one of most significant coping resources and may provide resources for both emotion focused and problem focused coping.

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According to Caplan, the second characteristics of effective coping is frustration, tolerance and a willingness to express both positive and negative feelings freely. So, coping with frustration, particularly at the initial level of dealing with stressful situations, is very important, and one element is expressing the emotion rather than bottling it up.

So, when we say "expression of emotion," we don't mean "getting angry and venting your frustrations on someone else." Expression of anger means that if you are experiencing either positive or negative emotions in a situation, especially negative emotions, you communicate them in a healthy manner rather than on anyone else, which would exacerbate the situation.

So, because if you bottle up those feelings, as most psychoanalysis theories point out, it simply complicates the emotions and makes emotion control even more difficult. So, particularly in the beginning, expressing emotion is really important because it allows you to calm down and reduce your stress level, and then you can look for more appropriate ways to cope with the situation. As a result, this is another characteristic that he discusses.

The third characteristic is actively seeking out help from others. So, one thing that has been repeatedly discovered by researchers in the literature of stress and coping is that finding help or social support, seeking social support, is a very necessary and significant

coping strategy. And when you know someone can help, a lot of the stress goes away immediately because you know there is someone that can help you out in a difficult situation, and social support acts as a stress buffer because you know you have resources, even though you don't have them yourself. However, another person might be able to provide me with that resource. As a result, it is a positive element that can provide support for both problem- and emotion-focused coping. As a result, it is critical to seek assistance whenever it is needed. So, if there is help available during a crisis, one can seek it out, as it is one of the most effective ways of successfully managing and dealing with the situation.

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(4) Breaking problems into manageable parts and working through them
It is more stressful and difficult to deal with big problems. Breaking a big problem into smaller manageable chunks is easier to deal with and is less stressful.

(5) Being aware of fatigue and pacing coping efforts while maintaining control in as many areas of functioning as possible.
Coping with stress and crisis can lead to fatigue and exhaustion. Therefore, it is important to recognize our limits and take care and pace coping efforts in such a way that we can maintain control in as many areas as possible.

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The fourth characteristics discussed by Caplan is breaking problems into manageable parts and working through them. As a result, one of the main characteristics of successful coping is that we are often confronted with large problems that are difficult to handle. So, breaking down larger problems into smaller chunks and then dealing with each smaller chunk one at a time is one of the best strategies for solving problems or effectively dealing with crises.

So, in the next concept that we'll be exploring here, we'll take a closer look at it. Since dealing with major problems, the bigger problems, can be difficult. So, there might be an economic crisis in your life, for example.

So, while you may not be able to deal with all facets of the economic crisis at once, you can break it down into chunks and determine what is the most important thing to deal with right now, for example, paying rent. While you may not be able to deal with all aspects at once, you can deal with paying rent because it is much smaller. Breaking down large problems into smaller chunks and coping with them one at a time is one of the strongest strategies, and the problem becomes much more manageable as a result.

The fifth characteristics is being aware of fatigue and pacing coping efforts, while maintaining control in as many areas of functioning as possible. So, one thing is obvious:

when faced with stressful situations or life crises, one may become tired and fatigued; one may feel exhaustion and fatigue, which is normal given the difficulty of dealing with life's challenges. Whatever strategies you employ, they can drain your energy and resources, resulting in exhaustion and fatigue. So, understand your limitations and options, and once fatigue and exhaustion strike, take care of yourself by using many other relaxation techniques and other things, or seeking support, etc., so that you can take care of yourself when exhaustion and other problems strike, so that you can deal with future problems even more effeciently. As a result, this is a vital aspect of it. So, you pace your coping mechanisms in such a way that exhaustion does not completely dominate you and you can retain as much control as possible over various operating states.

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(6) Mastering feelings where possible, being flexible, and possessing a willingness to change

It is necessary to accept that we feel the way we do and then to control our reactions and responses for better outcomes.

One needs to be flexible in their approach and motivation to change.

(7) Having trust in oneself and others and maintaining a optimism on outcomes

By having trust in your ability to deal with your situation and having faith in the others who are supporting you, it is easier to deal with the demands of your life.

It is also important to maintain an optimistic outlook on outcomes to succeed in coming out of the crisis.

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The sixth characteristic is mastering feeling where possible, being flexible and processing a willingness to change. As a result, mastering emotions is crucial. As a result, managing feelings is an essential aspect of coping strategies. So, as we previously mentioned, often expressing emotion can be beneficial, especially in the early stages when a lot of emotions are overwhelming. As a result, sometimes expressing yourself makes you feel lighter and calmer. But we must also learn to control negative emotions, specifically, how to minimize and manage them in such a way that they have a positive effect on the results of the various activities we engage in.

So, one important thing is to understand that whatever feelings you experience in whatever ways you convey them, it's fine; everybody goes through them. Acceptance is the first step; once we accept, we can learn how to cope with them. As a result, there might be a variety of particular techniques, which we will address in future lectures, that can be used to master, control, and regulate emotions. And one must be flexible in their approach; one should not be set in one way of dealing with it; whatever works should be examined and used. As a result, psychological flexibility is critical, as is inner encouragement to master one's own self. We can't really make any improvements in our lives unless we have inner motivation.

the last characteristics is having trust in oneself and others and maintaining an optimistic or maintaining optimism on outcomes. So, trusting oneself and others is crucial, because if you don't trust or believe in your own abilities, you won't try something. So, in previous lectures, we addressed the idea of learned helplessness, where we discussed how people can become passive and withdrawn simply because they have been subjected to uncontrollable negative circumstances in the past and do not even attempt to alter the situation in the future. As a result, such a strategy could not be beneficial to us. So, maintaining confidence that you can always make improvements in your life, trusting yourself, and finding help from those who are around us is also very important, and obviously, one must be confident that the potential results will be better and that you will make changes in the outcomes and bring about positive changes is also very important. As a result, this is important.

It is thus easier to deal with the demands of life if you have confidence in your ability to deal with your condition and faith in those who are helping you. As a result, it becomes quite easy. You have confidence and trust in your ability, and you still have helpful people that you trust, essentially, and you have a lot of tools to deal with situations. As a result, any situation can be treated.

To succeed in emerging from a crisis, it is also necessary to retain a positive outlook on outcomes. As a result, we would be unmotivated to do something in life if we lack optimism and hope. As a result, this is a crucial psychological trait. So, these are seven characteristics that Caplan mention are part of effective coping; effective coping should involve at least some of these characteristics, and some of these characteristics are very informative and can be applied in our daily lives.

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Coping Effectiveness Training (CET)

Chesney, Folkman, et al (1996, 2003) developed coping effectiveness training framework to deal with the stressors more effectively.

The framework converts the major ideas of stress and coping theory into more practical straightforward steps.

This framework includes three steps necessary for effective coping-

- (1) **Specificity of stressor:** Identify stressors and break them from general to more specific stressors.
- (2) **Changeability of stressors:** Sort your stressors into changeable and unchangeable aspects.
- (3) **Match strategies with the source of stressors**

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We'll now discuss the idea of coping effectiveness training. So, when we talk about coping effectiveness training, there are a lot of different concepts floating around, but we'll be talking about a training module that Chesney and Folkman created in 1996 and then expanded on.

So, we won't go into specifics about the training model because a lot depends on the situation and who gets the training, so a lot of details are dependent on that. However, we will attempt to comprehend the core characteristics of the developed training, which is known as coping effectiveness training. So that we can see how important coping can be in our daily lives.

As a result, this coping effectiveness training framework, translates major ideas of stress and coping theories from psychological literature into different theories, ideas, and principles discovered in the literature. They then tried to apply those conceptual ideas in more practical, straightforward steps, such as how do we actually use them in a practical way, because there are so many ideas, but how can we use them in our lives? As a result, this coping effectiveness training concentrates on the practical aspects of applying theoretical principles.

So, this framework discusses three critical steps for effective coping, three critical steps that are needed for effective coping. The first is specificity of stressor. So, in this phase,

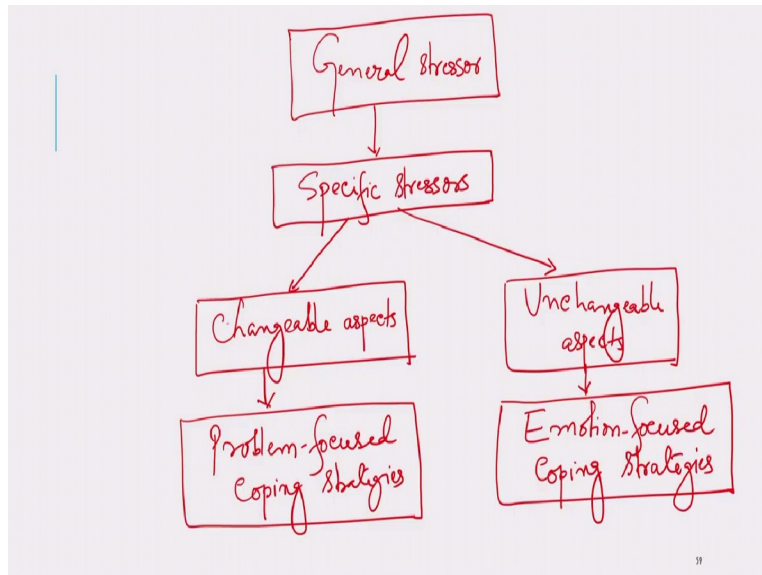
we'll basically classify stressors and categorize them from general to more specific. So, the first step is to determine the situation or stressor, which is whatever situation or incidence is causing you stress, and then break down certain stressful situations or stressors or stimuli from general to particular, from larger to smaller stressors.

It was also one of Caplan's characteristics, as we previously mentioned. So, this is the first step in breaking down a general stressor into a more basic stressor, so you know what to do now.

The changeability of stressors is the second characteristic to consider. Determine which aspects of the stressful situation you may alter and which aspects you are unable to change. So, sorting changeable and unchangeable aspects is the second important thing, and matching strategies with stressor sources is the third important aspect of coping effectiveness training.

So, if there are aspects that can be changed, you use problem-focused coping mechanisms, so that while it can be changed, you strive to change the root of it, and stress will naturally reduce. If certain elements of the stressor are unchangeable, it is preferable to use emotion-focused coping because you cannot actively solve the issue. The only thing left is for you to do to deal with the distressing feelings that it causes. So, if I present it diagrammatically, with a diagram, Folkman and others used a diagram to show the phases of coping effectiveness training.

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So, let's presume you're in a situation that's more of a general stressor. After that, you break it down into more specific stressors. Then, with that particular stressor, you determine what is changeable and what is unchangeable, and for the changeable aspects, problem-focused coping is often the most successful coping method. As a result, use a problem-focused coping strategy. It is more adaptive to use an emotion-focused coping strategy for unchangeable aspects.

So, when it comes to coping effectiveness training, you break down general stressors into more specific stressors first. Then determine what is changeable and what is not in the specific stressors. For changeable aspects, use problem-focused coping; for unchangeable aspects, use the emotion focused strategy. So, in terms of coping with a stressful situation, this is the solution that is more effective. So, let's take a closer look at each of these steps.

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General vs specific stressors

Effective coping starts with breaking a large global stressful situation into more manageable specific stressors that needs attention.

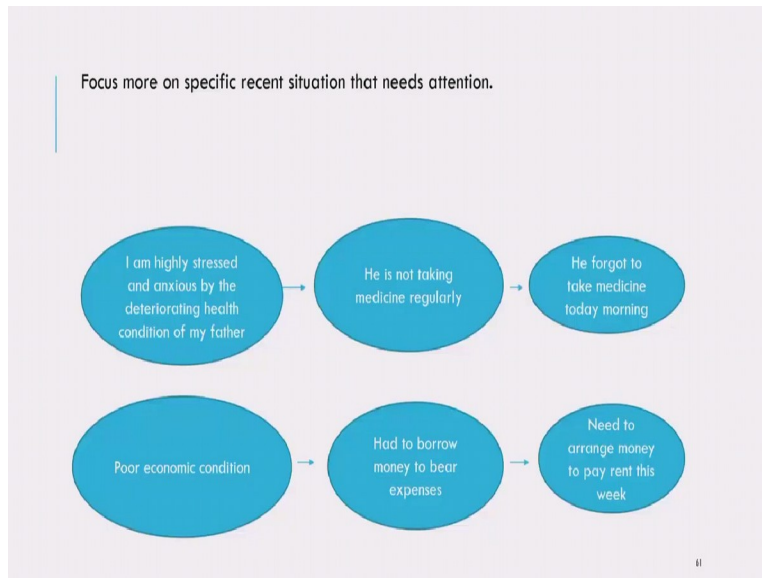
This approach reduces our stress as we have to deal with one chunk of stressor at a time.

Focus on more specific and recent event that needs attention rather than on large global situation. Ask Who, What, Where and When to get to specific event or situation.

So, there are general and specific stressors. As previously stated, successful coping begins with breaking down a broad global stressful situation into smaller, more manageable specific stressors that need immediate attention. As a result, breaking down a large global problem into smaller chunks.

As a result, we are less stressed because we just have to deal with one set of stressors at a time. It relieves stress because you know exactly what to do and deal with right now, rather than being preoccupied with a plethora of issues about which you have no control at the time. Focus on a more specific and recent event that requires attention rather than a larger global situation, and inquire as to who, what, where, and when to respond to the specific event or situation.

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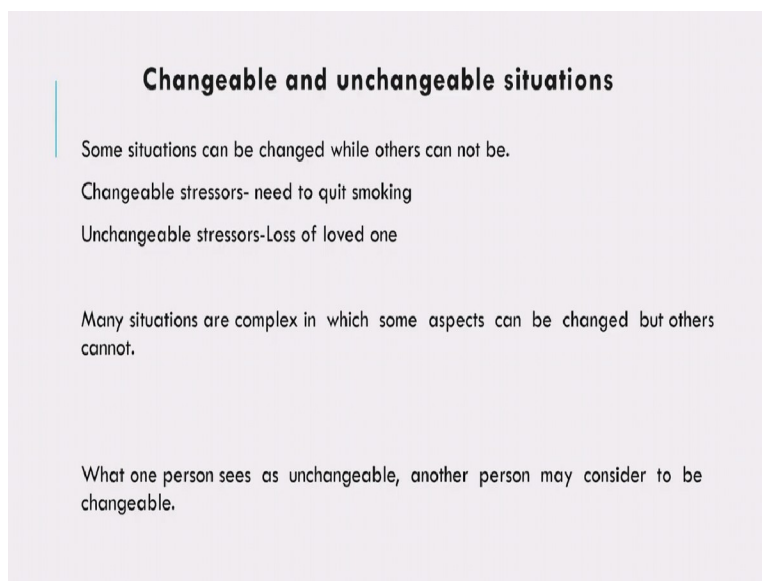
There are several examples of how to move from more general and global stressors to more specific stressors. So, let's say someone says, "I'm very worried and nervous about my father's declining health." As a result, his parent's health is causing a lot of stress. As a result, the health of parents is a little more global and general, and you can't really deal with every aspect of it directly. As a result, you can break it down into more specifics. So, his declining health condition could be more complex, and one of the main reasons could be that he is not taking medication on a regular basis, which is worsening his health condition, or it could be more specific that he failed to take medicine this morning. But it's possible that you can do it better right now. So, what are we going to do now?

So, deteriorating health condition is a kind of more global, you do not know what to do with it? However, you must now provide him with medication for today so that he is not skipping medicine. So, deal with today's medication, one step at a time. So it's much simpler and easier to deal with, and you know what to do.

Another example is when someone is in a difficult financial situation. So, while weak economic conditions are a global stressor, you don't know what to do about it. So, let's say one of the consequences of your bad financial situation was that you had to borrow money to cover your expenses. So you've taken out loans from others, which is causing you stress. Then, even more specifically, what you need to do right now to address your economic crisis is to set aside money to pay the rent for this week, which you would pay

this week. So, now that you have to schedule the rent for this month, this is a much more precise and specific stressor. So, rather than thinking I don't, I have an economic crisis and a lot of issues, which is far more global, and I don't know what to do, it's much more manageable. So, right now, paying rent is the expression of your economic crisis. But you should concentrate on that when dealing with this, which is far more manageable. As a result, this is an example of how general circumstances can be broken down into more basic situations that can be dealt with.

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Changeable and unchangeable situations

- Some situations can be changed while others can not be.
- Changeable stressors- need to quit smoking
- Unchangeable stressors-Loss of loved one
- Many situations are complex in which some aspects can be changed but others cannot.
- What one person sees as unchangeable, another person may consider to be changeable.

The next is changeable and unchangeable situations. So, while some circumstances can be changed, others cannot, we all know that there are many situations in our lives that we can change by putting forth the necessary effort and hard work. However, there are many circumstances in which you can't do anything about the situation in terms of changing it.

For example, let us say you want to stop smoking; it is possible because it is up to you; you can take steps to quit smoking; it is possible; it is changeable. Let us take, for example, unchangeable stressors such as death-related stressors, such as the loss of a loved one, over which you have no control.

Someone has died, and there is little that can be done about it; it is irreversible. Many circumstances are complicated, with certain things that can be changed and those that

cannot. So, there may be a variety of circumstances where something can be changed but something cannot be changed.

So, there are many scenarios like this that we encounter in our daily lives, and stress has a subjective aspect to it in all dimensions. What one person sees as unchangeable can be regarded as changeable by another. So we don't know; maybe stopping smoking is an unchangeable habit for one person. As a result, he could be addicted to it and unable to stop using it. So, although it may seem to him as an unchangeable habit, it may be very simple to change for others. So, in many cases, it all depends on subjective experiences. Things can't always be done objectively, and subjective perception can make things even more complicated.

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Match the coping strategies with the situation

Effective coping involves using different types of coping while dealing with changeable and unchangeable situations.

Changeable situation-----Problem focused coping (changing distress causing problem)

Unchangeable situation-----Emotion focused coping (managing distressing emotions)

Frustrations and maladjustment happens when people do not match appropriate coping to the situation.

The third point we addressed was the importance of matching coping strategies to the situation. So, successful coping entails using a variety of coping techniques when dealing with both changeable and unchangeable factors.

So, in a situation, you have to figure out what I can change and what I can't change, and it's up to you to figure it out, and we've already addressed how, in a changeable situation, problem-focused coping is often more adaptive and better. So, whatever is causing you stress, you simply need to fix it so that it no longer affects you. So, whatever is causing a

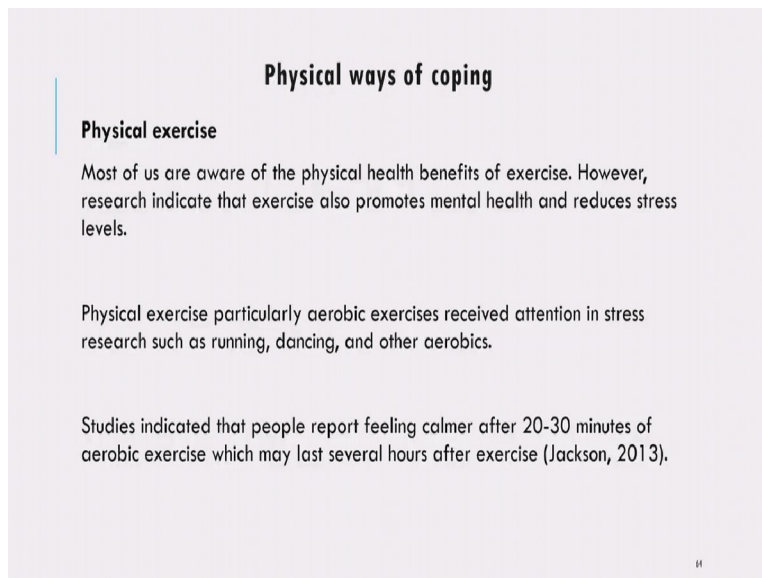
problem. So, if you're in a job that's causing you a lot of problems, one option is to leave and look for another job. As a result, this may be an example of problem-focused coping, because it is changeable in the sense that you will leave and pursue a new job. When something is really difficult to fix and you can't really do something at the moment, it's best to use emotion-focused coping to try to control your distressing emotions. So, if you're experiencing a lot of anxiety and stress, try some relaxation techniques. As a result, you can use different relaxation techniques, seek social support, speak to others to find solutions, and seek emotional support from others, among other things. If anything cannot be changed, it is easier and more adaptive to use emotion-focused coping, which we have already addressed in depth in previous lectures.

When people do not match appropriate coping to the situation, frustration and maladjustment occur. We would have maladaptive coping mechanisms if we are unable to properly balance the situation with the coping method. This will not fix the issue and we will not be able to get out of the stress because we are not matching the correct strategy with the situation.

So, if someone is in a situation where things can be changed, but he refuses to change and instead runs away and engages in emotion-focused coping, it can temporarily serve the purpose, but it will not help in the long run. As a result, a lot of avoidance coping is about mismatching, where things need to be changed and you need to adapt. As a result, it's critical to fit effective strategies.

So, these are some of the broad concepts of successful coping, as well as some of the actions we may take. We've gone through some of the characteristics that can help us use better coping, as well as how to cope with a difficult situation and use more effective tactics. But now, we'll discuss more specific techniques or exercises that can help us cope more effectively. So, these are the general approaches that we've discussed, where they weren't really specific. However, we will now discuss specific techniques and tactics that can be used to cope effectively.

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Physical ways of coping

Physical exercise

Most of us are aware of the physical health benefits of exercise. However, research indicates that exercise also promotes mental health and reduces stress levels.

Physical exercise particularly aerobic exercises received attention in stress research such as running, dancing, and other aerobics.

Studies indicated that people report feeling calmer after 20-30 minutes of aerobic exercise which may last several hours after exercise (Jackson, 2013).

So today, we will talk about physical ways of coping, at the physical level, what can we do? So, in the physical ways of coping, one thing that can be done is physical exercise. People usually equate physical activity with physical health. We don't usually equate physical activity with stress or mental factors. But, surprisingly, there is a clear connection between the two.

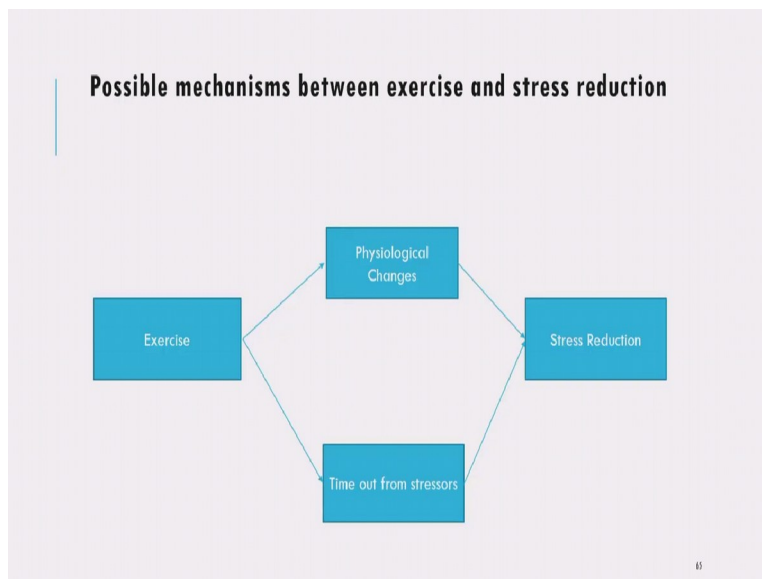
As a result, most of us are aware of the physical health advantages of exercises. Exercise, on the other hand, has been shown to improve mental health and minimize stress levels in studies. It has also been linked to the reduction of stress and the promotion of mental well-being.

Since the mind and body are not distinct entities, they are constantly in contact with one another. So, in general, whatever is good for your body is indeed good for your mind.

Physical exercises, particularly aerobic exercises, have recently received a lot of attention in the sense of stress study, especially aerobic exercises like running, dancing, and other aerobics, such as skating, running, and swimming. These aerobic activities are extremely useful when it comes to stress relief.

According to studies, people report feeling calmer and being much more relaxed and calm after 20 to 30 minutes of aerobic exercise, which can last for several hours. So, a lot of research has shown that after performing aerobic workouts or other types of exercises, people usually report more relaxation and calmness in their mental experiences after 20-30 minutes of exercise, for example. As a result, they become much calmer and more secure. As a result, it lowers stress in a very clear way.

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So, what are the mechanisms by which physical activity can help you relax and reduce stress? Some research suggests that there may be two possibilities: One is that physical activity causes physiological changes, some of which are beneficial physiological changes. As a result, it causes physiological changes in your body, such as hormones and other physiological activities, which reduce stress. Another pathway may be taking a break from stressors. As a result, exercise provides you with a break from your daily stresses and tensions. As a result, while you do the exercise, you are taking a break from all of the stresses and tensions that you are dealing with in your life. As a result, stress is relieved and reduced. So, let's talk about these two mechanisms in the context of some research findings.

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Exercise and physiological changes

According to one Harvard medical school publication (2011), physiological impact of exercise include-

-Reduction of stress hormones such as cortisol

-Release of endorphins which acts as painkiller and enhances mood (that's why people feel 'high' after aerobic exercises.)

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What is the relationship between exercise and physiological changes? So, according to a Harvard Medical School publication, one of the physiological effects of exercise is that it lowers stress hormones like cortisol. So, in previous classes, we've gone through the physiological effects of stress on our bodies in great detail. And we know that cortisol is a stress hormone that is released when we are stressed, particularly when we are under chronic stress, and that exercise decreases the amount of stress hormones released in the body. So, simply because when you feel calmer or happier, stress hormones are reduced from your bloodstream, your body, and your stressful experiences are reduced. Another important finding of the study was that endorphins are a type of hormone that is produced in our bodies and brains, and this hormone acts as a painkiller and improves our mood. When we exercise, especially aerobic exercises, it improves our mood and helps to make us feel high. This is why many people report feeling high after exercising, particularly aerobic exercises, because they feel good about themselves, satisfied, and their mood improves. So, this is largely due to the release of a hormone known as endorphins, which has the purpose of improving mood. So, these are some of the physiological changes that exercise causes.

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Other physiological benefits are-

-exercise-induces increases in hypothalamic temperature which promote tension reduction following exercise (Breus & O'Connor,1998).

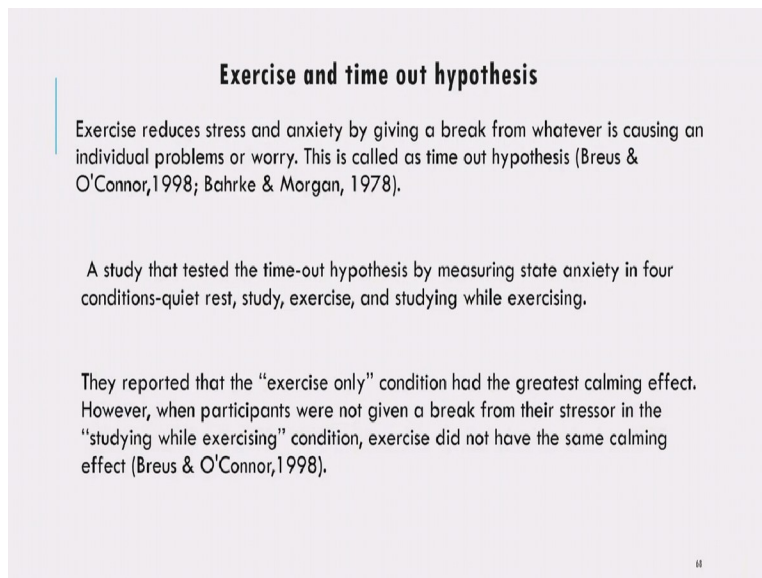
-anxiety and stress reduces following exercise may be caused by a post-exercise decrease in brain cortical activity (Breus & O'Connor,1998).

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According to some studies, other physiological benefits include a rise in hypothalamic temperature, a brain organ that promotes stress reduction during exercise. As a result, it may cause other physiological changes, such as raising hypothalamic temperature, which reduces tension and stress.

Anxiety and stress levels drop after exercise, resulting in a drop in brain cortical function. According to other studies, when we are stressed, our cortical behavior, which is the brain's outer layer, becomes very erratic and disrupted, and it becomes hyperactive. As a result, exercise decreases cortical hyperactivity, allowing you to relax and calm down and reduce the negative effects of stress. As a result, several other physiological effects may be useful in terms of stress reduction while exercising.

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Exercise and time out hypothesis

Exercise reduces stress and anxiety by giving a break from whatever is causing an individual problems or worry. This is called as time out hypothesis (Breus & O'Connor,1998; Bahrke & Morgan, 1978).

A study that tested the time-out hypothesis by measuring state anxiety in four conditions-quiet rest, study, exercise, and studying while exercising.

They reported that the “exercise only” condition had the greatest calming effect. However, when participants were not given a break from their stressor in the “studying while exercising” condition, exercise did not have the same calming effect (Breus & O'Connor,1998).

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The time out hypothesis is the next pathway. So, in a nutshell, exercise relieves stress and anxiety by providing a break from whatever is causing personal issues or concerns. So, if we are caught up in a problem in our lives and find ourselves constantly worrying about it and exaggerating it, engaging in activities such as exercise will provide a convenient break.

When you engage in physical activities, you are essentially immersed in the present moment. So, at the very least, it provides you with a brief respite from your concerns and problems. So, at least for the time being, that helps you to reduce stress. As seen in the slide, this is known as the timeout hypothesis proposed by some researchers.

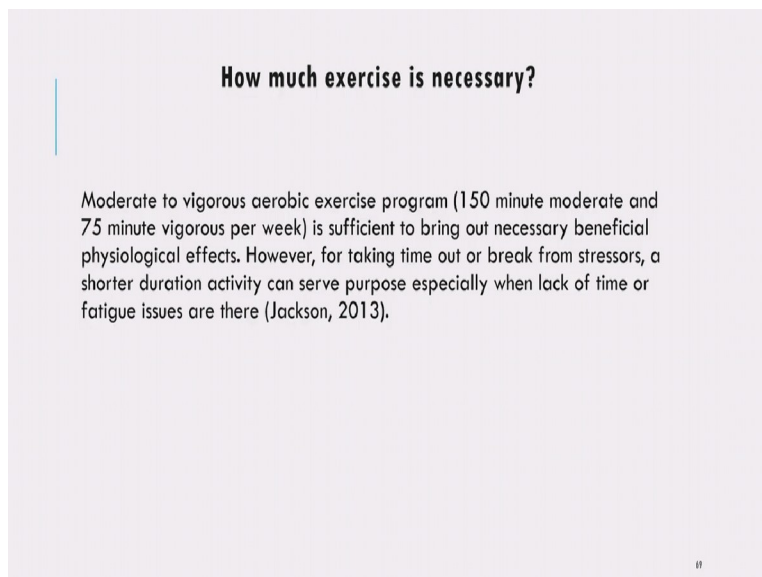
This timeout hypothesis was tested in a study that measured state anxiety in four different scenarios. As a result, several studies were carried out in order to test this theory, hypothesis. Whether or not the timeout hypothesis holds true in the sense of exercise. As a result, they used four conditions where participants are assigned a task.

Simply resting was one of the conditions. As a result, some participants were literally resting in this condition. In another condition, the participants were asked to read or study something. . So, one condition is to rest, and another is to read or study something. The third condition required participants to engage in exercise, specifically aerobic exercise,

and the fourth condition required participants to study and exercise at the same time. This can be achieved in a treadmill, for example, where one can run when reading. So, under these four conditions, participants were divided into four groups, and the influence of each group was reported in order to see what happened to the participants in each of the four groups. So, according to studies, the exercise-only state, in which participants engage in only aerobic exercise, has the greatest relaxing effects. So they recorded in terms of objective and subjective parameters, as well as the greatest calming effect. As a result, they felt much more calm and relaxed than in other conditions. However, when participants were not given a break from their stressors when studying and exercising, as in the fourth condition, where they were both studying and exercising, the results were unfavorable. Actually, there was no break. So they're exercising, but they're still busy; their minds are occupied. So, the timeout hypothesis didn't work out. As a result, exercise in that case did not have the same benefit as it did in the only exercise condition. So, at the very least, this provides support for the workout timeout hypothesis.

So, it gives you a break from your usual day-to-day issues and allows you to relieve stress by giving you a break as well as creating multiple beneficial physiological changes in your body.

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How much exercise is necessary?

Moderate to vigorous aerobic exercise program (150 minute moderate and 75 minute vigorous per week) is sufficient to bring out necessary beneficial physiological effects. However, for taking time out or break from stressors, a shorter duration activity can serve purpose especially when lack of time or fatigue issues are there (Jackson, 2013).

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So, how much exercise is required? Some of the researchers attempted to answer this question. In general, a moderate to intense aerobic exercise program of about 150 minutes moderate and 75 minutes vigorous per week is sufficient to bring about the required positive changes, which essentially means that about half an hour of exercise per day is sufficient to bring about positive physiological results in the body. However, for taking time out or taking a break from stressors, a shorter duration can be beneficial, which can be especially useful for people who are short of time or have fatigue issues, or who are unable to exercise for a long period of time, or even though even a shorter duration of exercise can be beneficial, especially in the context of giving them a break from the normal problems of life. However, even a half-hour of aerobic exercise, combining some moderate to intense exercise, will produce adequate and important positive changes in the body in terms of stress reduction and promoting physical and mental well-being.

So, those are some of the theories on how physical activity can help to relieve stress or be used as a coping strategy. As a result, we rarely consider physical exercise as a coping strategy. However, while you may not think about dealing with stress specifically, being involved in physical exercise will indirectly help you deal with the challenges and challenging situations of life, and it is something that anyone can do. As a result, this is an important consideration.

So, in the next few lectures, we'll cover a variety of other basic coping strategies that are really adaptive and can be used by us. We'll be talking about more mind-body strategies. So far, we've just talked about pure physical activity. We'll start with techniques that are linked to the mind-body connection, and then move on to pure mental strategies for dealing with problems and stress on a mental level. Then we'll discuss some of the more deeper aspects of coping, such as social support and meditation strategies, among other things. As a result, the next few lectures will focus solely on concrete constructive coping strategies. So that concludes today's lesson. Thank you so much.