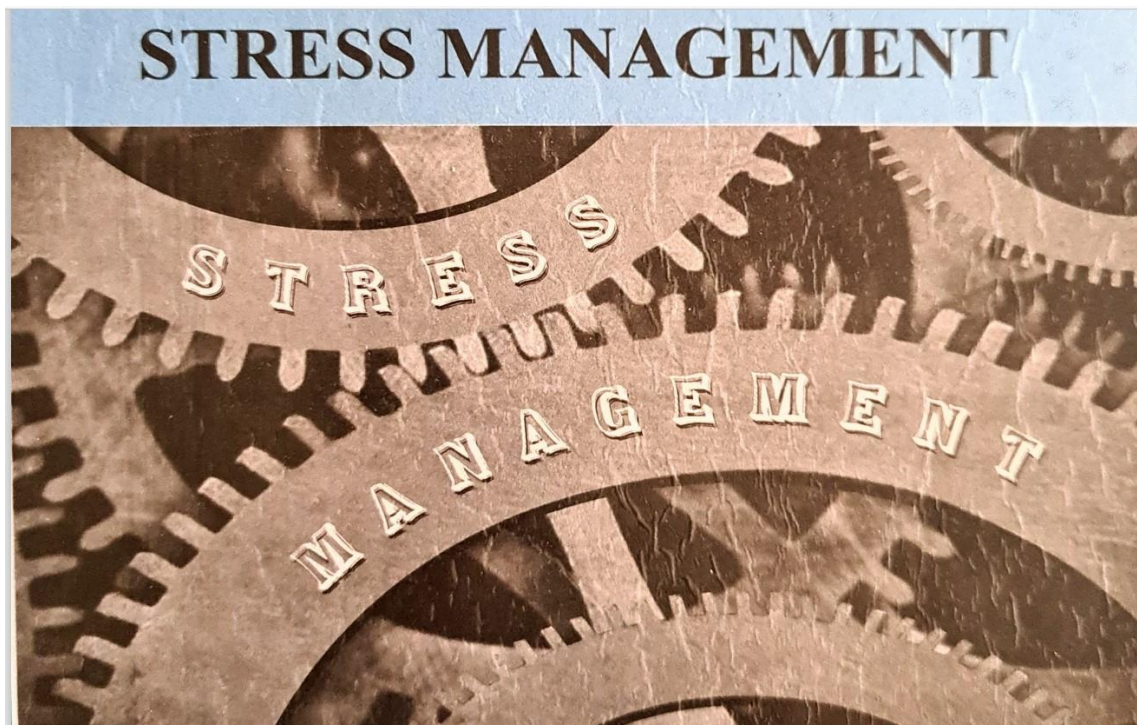


Online Course STRESS MANAGEMENT



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and
Dr. B.R. Ambedkar Open University



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UNIT-1: INTRODUCTION TO STRESS

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1.0 OBJECTIVES

After reading this unit, you will be able to:

- Define stress
- Explain Eustress and Distress
- Enlist Signs and Symptoms of stress
- Describe types of stress

1.1 INTRODUCTION

World Health Organization considered stress as Health Epidemic of 21st Century.

Stress is part of day-to-day living. Modern day life has become more and more complicated due to a number of factors such as pressure of work, technological innovations, intense competitiveness, inflation, unemployment, changes in value system. This has resulted in stress pervading every sphere of life, which can have adverse impact on health.

Stress may be understood as a state of tension experienced by individuals facing extraordinary demands, constraints or challenging situations that can lead to emotional imbalances, thus disrupting the body's homeostasis. Stress is both mind and body's response

or reaction to a real or imagined threat, event or change. The stress experiences may not be necessarily harmful. However, stress is not always unpleasant. Mild forms of stress can act as a motivator and energizer. Stress is the spice of life and the absence of stress makes life dull, monotonous and spiritless.

1.2 MEANING AND CONCEPT OF STRESS

The term stress began as a variant of the term ‘distress’ in the fourteenth century. The medieval term actually meant physical hardship, pain, torture and starvation. However, the use of term stress in modern day world is different.

The stress is generally used to describe a variety of negative feelings and reactions that accompany threatening or challenging situations. However, all stress reactions are not negative. Stress is a part of fabric of life. A certain amount of stress is actually necessary for survival.

The term ‘**stress**’ can mean worry, anxiety, burden, hardship, nervousness, strain and tension. Stress means physical or mental tension. Stress has a different meaning for different people under different conditions. Each person’s meaning about the term stress is uniquely personal. What is stressful for one person may not have any effect on another person. What feels like a pressure and burden causing heightened anxiety for one individual may not be of any strain at all for another person.


Stress is a feeling of strain and pressure. Stress is a type of psychological pain. Small amounts of stress may be desired, beneficial and healthy. Positive stress helps to improve performance and act as a stimulation to cope with challenging situations. It also provides the sense of urgency and alertness needed for survival when confronting threatening situations.

Stress is the reaction people have to excessive pressures or other types of demand placed upon them. It arises when they worry that they can’t cope. Stress can be caused by an event or situation that calls for a change or threatens safety of one’s life. It places an unusual demand on one’s physical, mental and emotional resources. The threat, event or changes are commonly called stressors. But each individual is different, with unique perceptions of, and reactions to, events. Some are more sensitive owing to experiences in childhood, the influence of teachers, parents and religion than others. With the death of a loved one, the birth of a child, a job promotion, or a new relationship, we experience stress as we readjust our lives. In so adjusting to different frustrations and sorrows add depth and enrichment to our lives. Stress is a natural human condition. At one time or another most people experience stress. Stress can affect people of all ages, genders, and can lead to both physical and psychological health issues.

Definition

Hans Selye who is credited as the modern day “father of stress” defined stress as “the non - specific response of the body to any demand for change”. In behavioural science, stress is regarded as “perception of threat with resulting anxiety, discomfort, emotional tension and difficulty in adjustment”. Skinner defined “stress as a reaction of a particular individual to a stimulus event”. Stress may be viewed as the body’s response to any real or imagined event perceived as requiring some adaptive response and producing strain. The stress reaction is

elicited by a wide variety of psychosocial stimuli that are either physiologically or emotionally threatening. Stress can be external related to environmental stimulus or may be caused by internal perceptions that cause an individual to experience anxiety, discomfort or other negative emotions which are deemed stressful. There is no single level of stress that is optimal for all people. We are all individuals with unique requirements. As such, what is distressing to one may be a joy to another. And even when we agree that a particular event is distressing, we are likely to differ in our physiological and psychological responses to it.

Understanding Stress	Video Link https://youtu.be/vbIHCbuJWL4	Scan with QR Code 
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1.3 REASONS FOR STRESS

The reasons of stress can be:

- External
- Internal

External Stressors

- Physical Environment like lighting, heat, high noise levels, temperature and working excessive hours.
- Social interaction-bullying, rudeness
- Organisational rules: red-tape, deadlines, overcrowding, lack of support, lack of on-the-job training, workload.
- Major life events: birth, death, loss of job, separation, divorce and health/medical issues, relationships, money/bills, lack of free time.
- Daily hassles-are annoyances encountered in daily life. Examples include traffic problems, difference in lifestyles between roommates, deadlines, expectations of parents or teachers.

Internal Stressors

Internal stressors include:

- Lifestyle choices: workload, insomnia, personal habits
- Negative self-talking which includes pessimistic thinking, self-criticism
- Mind traps: unrealistic expectations, all or nothing thinking, exaggeration
- Rigid thinking

- Personality traits - perfectionists, workaholics


Stress is the “wear and tear” of our bodies experience as we adjust to our continually changing environment; it has physical and emotional effects on us and can create positive or negative feelings.

One of the most comprehensive models of stress is the Bio-Psychosocial Model of Stress. According to this stress involves three components namely, an external component, an internal component, and interaction between external and internal components.

Stress is the body’s way of responding to any kind of demand or threat. When a person senses danger, whether real or imagine, the body’s defences gear up in a rapid, automatic process known as Fight - or Flight Stress Response.

The Diagnostic and Statistical Manual (DSM - 5) of American Psychiatric Association recognizes two stress disorders namely:

1. Active Stress Disorder (ASD)
2. Post Traumatic Stress Disorder (PTSD)

Sources of Stress	Video Link https://youtu.be/TO66WLaNm5c	Scan with QR Code 
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1.4 EUSTRESS AND DISTRESS

Eustress: is derived from the Greek root ‘eu’ which means or euphoria or good. Eustress is a term for positive stress. Eustress is useful and has a positive influence. It offers an opportunity to a person to gain something and move in the direction of achievement. It acts as a motivator for peak performance. Eustress or positive stress has the following characteristics:

- Motivates, focuses energy
- Enable concentration
- Improves performance
- Energizes into action

Distress stems from the Latin root ‘dis’ which means dissonance or disagreement. Distress is a term for negative stress. Distress is a threat to the quality of life. It is when a demand vastly exceeds a person’s capabilities.

Selye (1974) proposed four variations of stress. On one axis he locates good stress (eustress) and bad stress (distress). On the other is over-stress (hyperstress) and under stress (hypostress). Selye advocates balancing these: the ultimate goal would be to balance hyperstress and hypostress perfectly and have as much eustress as possible. Stress is extremely useful for a productive lifestyle

because it makes working enjoyable instead of a chore, as seen with distress.

Stress has a negative influence when a person faces social, physical, organizational and emotional problems. It can result in feelings of rejection, anger and depression leading to health problems.

Distress or negative stress has the following characteristics:

- Causes anxiety and tension
- Loss of motivation
- Physical, mental and behavioural problems
- Decreases performance
- Reduces effectiveness

Check Your Progress

Note: (a) Space is given below for writing your answer

(b) Compare your answer with the one given at the end of this unit.

1Q. What is the meaning of stress?

.....
.....

2Q. Write Hans Selye's definition of stress.


.....
.....

3Q. List out the merits of Eustress.

.....
.....

4Q. Explain the demerits of Distress

.....
.....

Eustress and Distress	Video Link https://youtu.be/sC9WdLymatw	Scan with QR Code 
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Characteristics of stress

When we feel stressful the following changes occur:

- Adrenaline starts pumping
- Breathing quickens
- Heart starts pounding
- Blood pressure increases
- Blood vessels constrict
- Blood rushes to the muscles
- Increased mental alertness

1.5 SIGNS AND SYMPTOMS OF STRESS

In today's demanding world, we tend to get stressed out frequently and we may live in heightened state of stress most of the time. Yet many of us do not take notice or are in denial until stress builds up and symptoms develop which can lead to serious health hazards. Hence, it is important to be aware of signs and symptoms of stress.

Physical Symptoms

- Low energy
- Aches and pains
- Diarrhea or constipation
- Nausea, dizziness
- Chest pain
- Frequent colds or flu
- Decreased appetite
- Loss of sex drive

Cognitive Symptoms

- Memory problems
- Inability to concentrate
- Poor judgment
- Perceiving everything negative
- Anxious or racing thoughts
- Constant worrying

Emotional Symptoms

- Depression or general unhappiness

- Anxiety and agitation
- Moodiness, irritability, or anger
- Feeling overwhelmed
- Loneliness and isolation
- Other mental or emotional health problems


Behavioural Symptoms

- Eating more or less
- Sleeping too much or too little
- Withdrawing from others
- Procrastinating or neglecting responsibilities
- Using alcohol, cigarettes, or drugs to relax
- Nervous habits like nail biting, pacing

Stressful Life Events

There are the certain stressful life events that can significantly contribute to stress leading to illness. These are:

1. Death of a spouse
2. Divorce
3. Marriage separation
4. Imprisonment
5. Death of a close family member
6. Injury or illness
7. Job loss
8. Retirement

Signs and Symptoms of Stress	<p style="text-align: center;">Video Link</p> <p style="text-align: center;">https://youtu.be/TO66WLaNm5c</p>	<p style="text-align: center;">Scan with QR Code</p> <div style="text-align: center;">  </div>
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1.6 TYPES OF STRESS

Stress can be categorised into three different types

1. Acute Stress
2. Episodic Acute Stress
3. Chronic Stress

1.6.1 Acute Stress:

Acute Stress is the most common form of stress. Acute stress is the most widely experienced stress. It is caused by the daily demands and problems encountered by every one of us in daily life. Acute stress is thrilling and exciting in small amounts, but too much of it is extremely exhausting. To illustrate, for example Marathon run is exhilarating early in the day. The same run late in the day is taxing and wearing. Too much of short term of stress can lead to psychological distress, tension and physical symptoms.

The most common symptoms of acute stress are:

- Emotional distress - irritability, anxiety and depression.
- Muscular problems including tension headache, back pain, jaw pain and ligament problems.
- Stomach upsets like gut and bowel problems such as heartburn, acid stomach, flatulence, diarrhea, constipation and irritable bowel syndrome.
- It leads to elevation in blood pressure, rapid heartbeat, sweaty palms, heart palpitations, dizziness, migraine headaches, cold hands or feet, shortness of breath and chest pain.

Acute stress can crop up in anyone's life, and it is highly treatable and manageable.

1.6.2 Episodic Acute Stress

When acute stress happens too frequently, it is called episodic acute stress. This type of stress is usually seen in people who make self-inflicted, unrealistic or unreasonable demands which get all clamoured up and bring too much stress in their attempt to accomplish these goals.

It is common for people with acute stress reactions to be over aroused, short-tempered, irritable, anxious and tense. They are always in a hurry; they tend to be abrupt, and irritable. Interpersonal relationships deteriorate rapidly when others respond with hostility. The workplace becomes a very stressful place for them.

Episodic acute stress is typically observed in people with "Type A" personality, which involves being overly competitive, aggressive, demanding and sometimes tense and hostile. The symptoms of episodic acute stress are found in Type A persons. These include:

- Longer periods of intermittent depression, anxiety disorders and emotional distress
- Ceaseless worrying
- Persistent physical symptoms similar to those found in acute stress
- Coronary heart diseases, or other heart problems

Another form of episodic acute stress comes from continuous worry. They are called “Worry warts” who see disaster around every corner and pessimistically forecast catastrophe in every situation. The world is a dangerous, unrewarding, punitive place where something awful is always about to happen. These “awfulizers” also tend to be over aroused and tense. They are more anxious and depressed than angry and hostile.

Treatment of episodic acute stress requires intervention by professional help. People who suffer can be fiercely resistant to change. Only the promise of relief from pain and discomfort of their symptoms can keep them in treatment program.

1.6.3 Chronic Stress

Chronic Stress is opposite of acute stress. It is not exciting and thrilling, but dangerous and unhealthy. Chronic stress tears the life of a person apart his mind, body or spirit. This is the grinding stress that wears people away day after day, year after year.

Chronic stress destroys bodies, minds and lives. It wreaks havoc through long-term attrition. It is the stress of poverty, of dysfunctional families, of being trapped in an unhappy marriage or in a despised job or career. It is the stress that gives never-ending “troubles”.

Chronic stress comes when a person never sees a way out of a miserable situation. It is the stress of unrelenting demands and pressures for seemingly indefinite periods of time. With no hope, the individual lives in continuous stress and gives up searching for solutions.

Chronic stress may stem from traumatic, early childhood experiences that become internalized and remain forever painful. Some experiences profoundly affect personality. A view of the world, or a belief system, is created that causes unending stress for the individual.

The worst aspect of chronic stress is that people get used to it. They forget it is there. People are immediately aware of acute stress because it is new; they ignore chronic stress because it is old, familiar, and sometimes, almost comfortable.

Chronic stress can kill people through suicide, violence, heart attack, stroke and, perhaps, even cancer. People wear down to a final, fatal breakdown. Because physical and mental resources are depleted through long-term attrition, the symptoms of chronic stress are difficult to treat and may require extended medical as well as behavioral treatment and stress management.

Check Your Progress

Note: (a) Space is given below for writing your answer

(b) Compare your answer with the one given at the end of this unit. 5Q.

List any five symptoms of stress.

.....
.....

6Q. Name 3 types of stresses.

.....
.....

7Q. Which type of personality is observed in Episodic Acute Stress?

.....
.....
8Q. Which type of stress is difficult to treat?
.....
.....

Types of Stress	Video Link https://youtu.be/jN3rsBII0jA	Scan with QR Code 
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1.7 SUMMARY

WHO labelled stress as Health Epidemic of 21st century. Stress is a part of everyday life. Stress is a state of tension experienced by individuals facing extraordinary demands or challenging situations that can disrupt body's homeostasis.

Stress means physical or mental tension. However, stress is not always unpleasant. Stress is part of fabric of life. A certain amount of stress is necessary for survival. Eustress is good and has positive influence while Distress is bad and can have adverse impact on health. Stress can lead to physical, cognitive, emotional and behavioural symptoms.

There are three different kinds of stresses, namely, Acute Stress, Episodic Acute Stress and Chronic Stress. Acute Stress is the most widely experienced stress caused by problems encountered in daily life. When acute stress happens too frequently, it is called Episodic Acute Stress which is more common among people who are highly competitive, ambitious, seek risky jobs and hence die early in life. Chronic stress is when stress becomes part of life, which is dangerous and unhealthy.

1.8 CHECK YOUR PROGRESS – MODEL ANSWERS

- 1A. The term 'stress' can mean worry, anxiety, burden, hardship, nervousness, strain and tension. Stress means physical or mental tension.
- 2A. Hans Selye who is credited as the modern day "father of stress" defined stress as "the non-specific response of the body to any demand for change".
- 3A. Eustress or positive stress has the following characteristics:
 - Motivates, focuses energy
 - Enable concentration
 - Improves performance
 - Energizes into action

4A. Distress or negative stress has the following characteristics:

- Causes anxiety and tension
- Loss of motivation
- Physical, mental and behavioural problems
- Decreases performance
- Reduces effectiveness

Low energy

Aches and pains

Anxiety Nervous

habits Depression

6A. Stress can be categorised into three different types

1. Acute Stress
2. Episodic Acute Stress
3. Chronic Stress

7A. Episodic acute stress is typically observed in people with “Type A” personality, which involves being overly competitive, aggressive, demanding and sometimes tense and hostile.

8A. The symptoms of chronic stress are difficult to treat and may require extended medical as well as behavioural treatment and stress management.

1.9 MODEL EXAMINATION QUESTIONS

I. Answer the following questions in about 10 lines each

1. What is stress? Elucidate positive and negative influences of stress.
2. Distinguish between Eustress and Distress

II. Answer the following questions in about 20 lines

3. What are signs and symptoms of stress?
4. Describe types of stress.

1.10 GLOSSARY

- **Stress:** a state of mental or emotional strain or tension
- **Homeostasis:** tendency towards stable equilibrium maintained by physiological process.
- **Fight or Flight stress response:** response of sympathetic nervous system to a stressful event preparing the body to fight or flee from the challenging situation.
- **Eustress:** good or beneficial stress
- **Distress:** a state of severe anxiety or strain

- **Acute Stress:** intense or severe stress
- **Episodic Acute Stress:** Stress that occurs episodically and frequently
- **Chronic Stress:** Emotional tension suffered for prolonged period of time.

1.11 FURTHER READINGS

1. Bhut Nath Mahato & Madhuri Singh (2013) Modern Life Stress.
2. Fink, G (2017) Stress: Concepts, Definition and History. In Reference Module in Neuroscience and Biobehavioural Psychology, Elsevier Inc.
3. Kelly MC Ganigal (2015) The Upside of Stress : Why Stress is good for you, and How to get good at it.
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Unit 2: SOURCES OF STRESS

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 - 2.2.1 Psychological - Personality Factors
 - 2.2.2 Environmental Factors
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- 2.3 Stressors from Academic, Family and Work Areas
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- 2.4 Summary
- 2.5 Check Your Progress – Model Answers
- 2.6 Model Examination – Questions
- 2.7 Glossary
- 2.8 Further Readings

2.0 OBJECTIVES

After reading this Unit, you will be able to:

- Explain the sources of stress
- Know Various types of stressors
- Discuss on sources of stress and its importance in managing stress.

2.1 INTRODUCTION


Most of us need little introduction to the phenomenon of stress, formally defined as the response to events, that threaten or challenge a person. The main causes of stress are many. Individual variations are quite high and natural in causes of stress. What one considers as stressful depends on several factors including one's personality, general out-look towards life, problem solving abilities and social & familial support systems. Something that is stressful to person "A" may not be stressful to person "B". Stressors are circumstances that produce threat to our well-being and tax one's coping abilities. The demands, pressures and challenges that cause stress are known as stressors. We generally think of stressors as being negative e.g., strained relationship or divorce, fatal disease, loss of job, breaking relationships etc. However, stressor can be anything that forces us to adjust. This includes, for e.g., positive events such as

getting married, beginning of a new job, planning a party, getting job and any reward or recognition. No matter whether an event is good (positive) or bad (negative) that causes distress if adjustment requires strains in coping skills and adaptive resources end up in stress. The impact of negative events is more devastating consequences than positive events.

Stress and its Sources - An Introduction	<p>Video Link https://youtu.be/88rLyAeAhJ8</p>	<p>Scan with QR Code</p> 
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2.2 STRESS AND ITS SOURCES: WHERE DOES STRESS COME FROM?

The sources of stress can be categorized under psychological / personality factors, environmental factors and socio-cultural factors. Some of these stressors originate from our surroundings and others are from our inner struggles. Some stressors come from both the sources. How much control we have and a choice in our exposure to it will determine our stress response. If you work late because your boss “made you” for e.g., you will respond differently than if you “choose to” work late because you want to finish the project and relax later. The compatibility between a person’s background, aspirations and interests and the nature of work determine the intensity of stress at work place. Knowledge of stressors in different categories will help us to be aware of various types of stress in our life and help us in the management of stress.

Sources of Stress	<p>Video Link https://youtu.be/xktMjCSSQYs</p>	<p>Scan with QR Code</p> 
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2.2.1 Psychological / Personality factors as sources of stress

Individuals with certain personality characteristics cope easily with stress than others and do make them less vulnerable to illness. In the research studies, three personality types that have been reported extensively in relation to stress are Type A and Type B behavior, hardiness and personal control. Persons with Type A behavior pattern are characterized as being excessively competitive, hard-

driving, impatient and hostile. Type B behavior pattern persons on the other hand are commonly relaxed and ongoing. The researchers during 1950's (Friedman & Rosenman) have found that certain components of Type A behavior are more precisely linked with coronary risk. Especially people who are hostile outwardly or who shows anger inward, known as "hot reactors", are more likely to develop heart disease than those persons with less angry. Their hearts race, breathing quickens and muscles tense up.

Hardiness: It is a personality style characterized by a sense of commitment and of control. The association between hardiness, stress and illness were highlighted in numerous research studies.

Personal Control: This personality factor refers to the extent to which a person can do something to control or reduce the stress, as well as their perception of a sense of control. Individuals who have no sense of personal control are more prone to stress. In contrast, having a general sense of control reduces stress and can lead to the development of problem – solving strategies to cope with the stress.

Psychological and Personality factors of Stress	<p style="text-align: center;">Video Link https://youtu.be/q-0A5C6qXTo</p>	<p style="text-align: center;">Scan with QR Code</p> 
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2.2.2 Environmental factors:

Many circumstances, large and small, can produce stress. Certain events, for e.g., war, an automobile accident, sudden tsunami, floods, or death of a loved ones, naturally produce stress.

Life events and Daily Hassles: For persons to consider an event to be stressful, they must perceive it as threatening and must lack the resources to deal with it effectively. As a consequence the same event at times may be perceived as stressful and sometimes no stressful reaction at all.

What type of events perceived as stressful? There are three general types of events. Cataclysmic events, personal stressors and background stressors. Cataclysmic events are strong stressors that occur suddenly and affect many people simultaneously. Natural disasters like tsunami, floods, tornadoes and plane crashes are cataclysmic events that can affect many people simultaneously. Interestingly, sometimes these cataclysmic events may be less stressful in the long run than events that are initially less intense. In certain circumstances some victims of major catastrophes can experience a post traumatic stress disorder, where the original events and the feelings attached with them are experienced in vivid flashbacks or dreams and can cause lasting emotional harm.

Individuals who experience clusters of stressful life events are more likely to become

ill than they normally would be. A life-events checklist tells us nothing about a person's physiological makeup, constitutional strengths and weaknesses, ability to cope with stressful circumstances or support systems or the nature of the social relationships involved, which are important in understanding how stress is related to illness. For eg., a divorce might be less stressful than a marriage filled with day-to-day tensions.

The greater the number of uplifts (flip side of hassles) experienced by people, the fewer the psychological symptoms. In view of this limitation information about daily hassles and daily uplifts provides better clues than life events about the effects of stress. When people feel that they can control a situation and determine its outcome, stress reactions are reduced. These daily hassles differ from one person to another and do have some common characteristics.

Daily hassles or background stressors are for e.g., delays in traffic, broken appliances, other people's irritative behaviors, stuck in traffic jam, which may cause irritation but have no long term effects, unless they continue or are accumulated by other stressful events. Critics of the daily-hassles approach argue that it has some limitations as life events scales. The daily –hassles and uplifts concept can be used with information about a person's physiological reactions, coping and perceptions of stress to provide a more complete picture of causes and consequences of stress.

Daily hassles can also result in a reaction called overload. In some instances the stimuli becomes so intense and unable to cope with them. Stress overload can lead to burnout, a state of physical and emotional exhaustion that includes feelings of hopelessness, chronic fatigue and low energy. Burnout usually occurs not because of one or two traumatic events but because of a gradual accumulation of everyday stressors. Burnout is most likely to occur among individuals who deal with others in highly emotional situations (e.g., nurses, social workers, psychiatrists) but who have only limited control over the behavior of others or the outcome. In work situations, combination of personal and job factors cause high risk of getting sick.

2.2.3 Socio-cultural factors as sources of stress:

The above mentioned personality and environmental factors described so far are not the only sources of stress. The other socio-cultural factors help to determine which stressors individuals are likely to encounter, whether individuals are likely to perceive events as stressful or not stressful and how do they confront with stressors. Certain social conditions cause stress. The socio-cultural contexts for e.g., poverty, social demands / pressures, discrimination on the basis of social class or gender, unemployment, isolation, absence or lack of familial and social supports. Apart from these, there may be stressors due to relocation which is known as acculturative stress. Relocation is even more stressful when a person moves from one culture to a different culture. Acculturative stress refers to the negative consequences that result from contact between two distinctive cultural groups. Several cross-cultural studies on immigrants carried out in USA and Canada, examined migrants stress. These studies were also looked in their adaptation patterns to overcome acculturative stress. The four major adaptation methods were assimilation, integration, separation and marginalization.

Assimilation occurs when individuals relinquish their native cultural identity and adopt an identity that helps them blend into the larger society. Sometimes assimilation occurs when

many groups merge to form a new society. Integration means people move into the larger culture but, in contrast to assimilation, maintain many aspects of their distinctive cultural identity. Under these circumstances, a number of ethnic groups cooperate and form as a group within a large social system. Separation means self-imposed withdrawal from the larger culture. However, separation becomes less stressful, where people maintain their traditional way of life because they want to maintain identity i.e. independent existence. The least-adaptive response to acculturation is marginalization, the process by which the dominant groups lose cultural and social contact with both their traditional society and the large dominant society. The desirable features of one's culture are lost, but they are not replaced by those of the larger society. It only results in feelings of alienation, normlessness and lack of identity. Some individuals may seek separation and encounter stressful experiences while most members of their group may seek assimilation. Integration and assimilation were found to be healthier adaptations to acculturative stress.

Poverty, a social-cultural factor which can cause a considerable stress for individuals and families. Poverty ridden conditions such as inadequate housing, dangerous surroundings and money constraints are major stressors among poor people. Poverty ridden conditions are also related to threatening and uncontrollable life events. For example youth living in poverty are more likely to experience crime, violence and delinquency than the youth in higher income neighborhoods. Also, in such conditions there will be less social support that helps in buffering the effects of stress.

The above mentioned sources like personality, environmental and socio-cultural factors can also be classified as internal and external stressors. People are prone to either internal or external stressors and both types have physical and psychological origins. Physical external stressors include unpleasant environmental conditions (eg., heat, confined spaces etc). Physical internal stressors include things such as infections or inflammation. External psychological stressors are like having conflicting relationships characterised by rudeness, bossiness, aggressiveness, bullying or poor working conditions. External psychological stressors include workplace rules & regulations, major life events (birth, death, promotion, transfer and other daily hassles).

Stress can also be self generated. The internal psychological stressors are: lack of sleep, negative self-talk, self criticism, over analyzing, mind traps, rigid thinking, perfectionist attitude, lack of assertiveness, pessimistic thinking, etc.

Internal psychological sources of stress can be most harmful because there is no easy resolution to the stressful situation. These stressors are anxieties and worries about events that may or may not happen and the stress reaction continues to be active as long as one is worrying about it.

The presence of stressor doesn't automatically resulting in disabling symptoms of stress. Though the individual differences are obvious in stress experience, stress from different source can affect the performance of person intensity and result in both physical and psychological health issues. Thus, the extent to which the stressful situation or event impacts one's daily functioning depends partly on the type of stressor and to some extent the psychological (internal) and external resources.

Check your progress:

Note: (a) Space is given below for writing your answers


(b) Compare your answer with the one given at the end of this unit.

1. Define stressor. Explain different stressors.

.....
.....

2. What are the personality and environmental factors that causes stress?

.....
.....

Stressors - Family and Environment	Video Link https://youtu.be/dx3XyIEbmn4	Scan with QR Code 
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2.3 STRESSORS FROM ACADEMIC, FAMILY AND WORKAREAS

2.3.1 Academic Stress:

Academic stress is a mental distress with respect to some anticipated frustration associated with academic failure or even awareness of the possibility of such failure. Academic stress pervades the life of students, and tends to impact adversely their mental and physical health, and their ability to perform schoolwork effectively. Stress has been seen tightening its grip on the students, as they have to compete at every step of their academic career in this fast racing contexts.

Academic stress does not necessarily begin in college. The nervous breakdowns, panic attacks, burnouts and depressions are also common among many young students. The situation does not remain the same for everybody, and everyone do not experience the same feelings or gloomy thoughts when they are under stress. At this point of time, apart from dealing with the physical and socio- emotional changes, the adolescents have to fulfil the expectation of their parents, build their career and compete with tasks, school work in which they might fail and thereby have a negative impact on him / her. Family is considered to be the first school for the child and is a source of expectations whereby the parents' play a vital role in their children's academic achievements.

The stressors or causes of academic stress are from many sources in study related areas such as academic grades, admission to desirable academic institutions, forced change of schools, final board exams, entrance exams for admission in professional courses (EAMCET, PG CET, RET, PGE at UG, PG and research levels), social comparison, exam stress, teacher's evaluation, teacher's expectations, over scheduling of events apart from curricular activities, uncompatible parental expectations, stress from one's relationship with others and from the social environment like conflicts with in family, ragging, rivalry among siblings and strained relationship.

2.3.2 Family Stress:

Family as a unit of society is subjected to stress from minor to severe stressors. Urban families living in poverty are exposed to frequent, significant and various stressors such as victimization, community violence, reduced access to medical & health care services, economic problems and inadequate educational and career opportunities. The physical, emotional, social and behavioural changes that occur during adolescence appear to impact the family unit as a whole, contributed to higher caregiver distress and family conflict. Thus, major life and traumatic events in the family and also stress from daily hassles and developmental transitions are the major sources of stress in familial context.

Certain familial conditions (sources) like loose family ties, intra familial conflicts, divorce, and broken families can lead to domestic violence, lack of sense of coherence, and human made disasters.

Many studies on family stressors indicate that due to stressors, youth and adults develop internalisation of problems and poorer psychological adjustment and result in feelings of rejection from peers & family, heightened risk of suicide and develop depressive and habit of substance use.

2.3.3 Work Stress:

Stress is very common in work place. Stressor could be from threatening environmental conditions and lack of infra-structural facilities. In addition to this, personality disposition of an individual, threat from superior staff, feelings of absence of identity and recognition etc. have significant impact on performance, absenteeism and result in aggressive behavior and withdrawal from social life.

In the work area, situations that are likely to cause stress are those that are unpredictable or uncontrollable, uncertain, ambiguous, or unfamiliar or involving conflict, loss of performance expectations. Stress may be caused by time limited events, such as the pressures of examinations or work deadlines or by ongoing conditions, including family demands, job security, or long commuting daily travel.

The work place is an important source of both demands and pressures causing stress. Those that are intrinsic to the job include: long hours of work, work overload, time pressures, difficult or complex tasks, lack of breaks, lack of novelty (monotony), and poor physical working conditions (space, temperature, light etc.).

Unclear work or conflicting roles and boundaries can cause stress. Stressors can be from the role of organization includes role ambiguity, role conflict, responsibility for people etc. Sources can also be career development factors such as over promotion, under promotion, lack of job security,

thwarted ambition etc. A part from the above, stress can be originated from the relationships at work which includes poor relations with boss, subordinates or colleagues, difficulties in delegating responsibility and so on. In some situations, the causes of stress could be from superiors, bosses who are critical, demanding, unsupportive or bullying create stress, and also from organizational structure and climate for example situations where little or no participation in decision, restrictions on behaviors, office politics, lack of effective consultations etc.

In recent years, interestingly the demands on the individuals in the work place reach out into the homes and social lives of employees. For e.g., work away from home, job insecurity and job relocation adversely affect family responsibilities and leisure activities. This is likely to have negative impact and lead to poor quality of life outside work. In addition, domestic pressures such as childcare responsibilities, elderly parents care obligations, financial worries, bereavement, and housing problems may affect a person's effectiveness in work. Women are likely to experience these sources of stress, since they still carry more of the burden of childcare and domestic responsibilities than men. In addition, women are concentrated in low paid, lower status jobs. They may often work shifts in order to accommodate domestic responsibilities, and may suffer discrimination and harassment.

Check your progress:

Note: (a) Space is given below for writing your answers

(b) Compare your answer with the one given at the end of this unit.

- 3. Write about internal and external factors that causes stress.

.....

- 4. What are the sources of stress in area of academic?

.....

- 5. What are the sources of stress in work life?

.....

<p>Academic Stress and Workplace Stress</p>	<p>Video Link https://youtu.be/el1Dc46Hzz0</p>	<p>Scan with QR Code</p> 
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2.4 SUMMARY

From the above one can understand that stress is part and parcel of human life course. The sources of stress are known as stressors. Perception of stimuli as threatening varies from one individual to another individual. For the sake of understanding the sources of stress are reported as psychological/ personality factors, environmental factors and socio cultural factors i.e. the sources can be from internal or external sources.

2.5 CHECK YOUR PROGRESS – MODEL ANSWERS

1. The demands, pressures and challenges that cause stress are known as stressors. Stressors can be positive or negative that forces an individual to adjust. The stressors are personality factors, environmental factors and socio-cultural factors. The socio-cultural contexts like poverty, social pressures, class or racial discrimination, social isolation, unemployment, lack of social supports, make an individual prone to stress. These factors can also be classified as external or internal sources of stress.
2. Individuals with certain personality characteristics especially Type A behavior, absence of hardiness and personal control. Individuals with Type A behavior are characterized by highly competitive, hard driving, impatient and hostile. Type B behavior is just opposite to this. Hardiness is a personality style which is marked by a sense of commitment and of control and perception of problems as challenges. Individuals with personal control personality can do something to control or reduce stress. Absence of this type of personal control in persons may contribute to stress. Environmental factors as stressors refer to circumstances which can produce stress such as life events and daily hassles.
3. Internal and external stressors have physical and psychological origins. Physical external stressors refer to unpleasant environment conditions such as excess heat, confined spaces etc. External psychological stressors can be conflicting relationships characterized by rudeness, aggressiveness, bullying, poor working conditions etc. External psychological stressors are like workplace rules & regulations, life events like moving to a new culture, divorce and certain daily hassles. Internal psychological stressors are such as mind traps, rigid thinking, lack of assertiveness, pessimistic thinking etc.
4. The sources of stress in academic areas such as academic tracks, admission to desirable colleges, final board exams, entrance examinations into Profession (at degree, PG and Research levels), teacher's & parental expectations, social expectations, teacher's & parents evaluations, unrealistic demands from parents, over scheduling events, threatening social relationships etc.
5. Sources of stress in work area could be from intrinsic sources and from organization. Intrinsic to job sources are poor physical working conditions, work overload, time pressures, physical danger etc. career development sources like over promotion, under promotion, lack of job security, thwarted ambition etc. also from other organizational role related sources such as

role ambiguity, role conflict, responsibility for people, conflicting organizational boundaries etc. Certain other sources from relationship at work with others like poor relations with boss, subordinates or colleagues, difficulties delegating responsibilities etc. Some sources of stress could be from organizational structure and climate.

2.6 MODEL EXAMINATION QUESTIONS

I. Answer the following in 10 lines.

1. What are sources of stress?
2. Discuss in detail how life events as sources of stress.

II. Answer the following in 20 lines.

1. Explain the role of personality factors in stress.
2. Identify environmental factors in stress.
3. Describe how socio-cultural factors are stressors.

2.7 GLOSSARY

- **Stressors:** Circumstances that produce threats to our well being.
- **Type A Personality:** Characterized by highly competitive, hard driving, impatient and hostile.
- **Hardiness:** A personality characteristic associated with a lower rate of stress – related illness, consisting of components like commitment, challenges and control.
- **Cataclysmic Events:** Strong stressors that can affect many people simultaneously.
- **Post traumatic stress:** A phenomenon in which victims of major incidents experience the original stress event and associated feelings in flashbacks or dreams.
- **Personal stressors:** Major life events such as the death of a family member, which has negative consequences which generally fade with time.
- **Life events:** Events those bring changes in how the individual lives and they require considerable adaption to the annoying events
- **Daily hassles:** Represents the minor irritations of life that we all face time and time again but always require some degree of adjustment and have no long term ill effects, unless they continue or compounded by other stressful events.
- **Uplifts:** Minor positive events that make one feel good.
- **Social support:** Support from network of people at times of need or distress.

2.8 FURTHER READINGS

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UNIT 3: IMPACT OF STRESS

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- 3.0 Objectives
- 3.1 Introduction
- 3.2 Physiological Impact of Stress
 - 3.2.1 Autonomic Nervous System Changes, Changes in Brain
 - 3.2.2 Quality of Sleep
 - 3.2.3 Diet and Health Effects
- 3.3. Psychological Impact of Stress
 - 3.3.1 Impaired Mental Functions, Poor Memory
 - 3.3.2 Impact of Stress on Emotions
- 3.4 Social Impact of Stress
 - 3.4.1 Stressful Life Events
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- 3.9 Further Readings

3.0 OBJECTIVES

After reading this Unit you will be able to:

- Describe physiological impact of stress
- Explain impact of psychological stress
- Analyze social impact of stress

3.1 INTRODUCTION

How does stress affect bodily process? How does it lead to illness? Stress can produce physiological, psychological and social consequences. The most immediate impact of stress is a physiological one. If a person is exposed to stress, it triggers secretion of certain hormones by the adrenal glands, acceleration of heart rate, elevation of blood pressure etc (Selye, 1976). On a short-term basis, their responses may be adaptive but continued exposure can result in decline in the body's overall level of biological functioning it is because of continued secretion of stress-related hormones and result in deterioration of body tissues especially the blood vessels and the heart. It will ultimately result in the decrease of immunity and increase the susceptibility to disease. In fact,

the likelihood of onset of major illness seems to be related to a number of stressful events a person experiences. Researches on stress and its impact found that stress triggered changes in the immune system and hormones might create greater vulnerability to infection. Apart from major health problems, other health upsets like headaches, skin rashes; body pains, indigestion, constipation and fatigue are caused and worsened by stress.

From the psychological point of view, high levels of stress prevent people from appropriate ability to cope with their life circumstances. Moreover, people under severe stress experience poor mental functioning, indecisiveness; memory lapses etc., As a result of past stress, there will be a decline in the ability to face future stress. From the sociological point of view the impact of stress manifest in problems in interpersonal and familial relations, lack of interest in establishing and maintaining social relations and feelings of withdrawal from the mainstream life.

3.2 PHYSIOLOGICAL IMPACT OF STRESS, QUALITY OF SLEEP, DIET AND HEALTH EFFECTS

3.2.1 Autonomic Nervous System and Changes in Brain

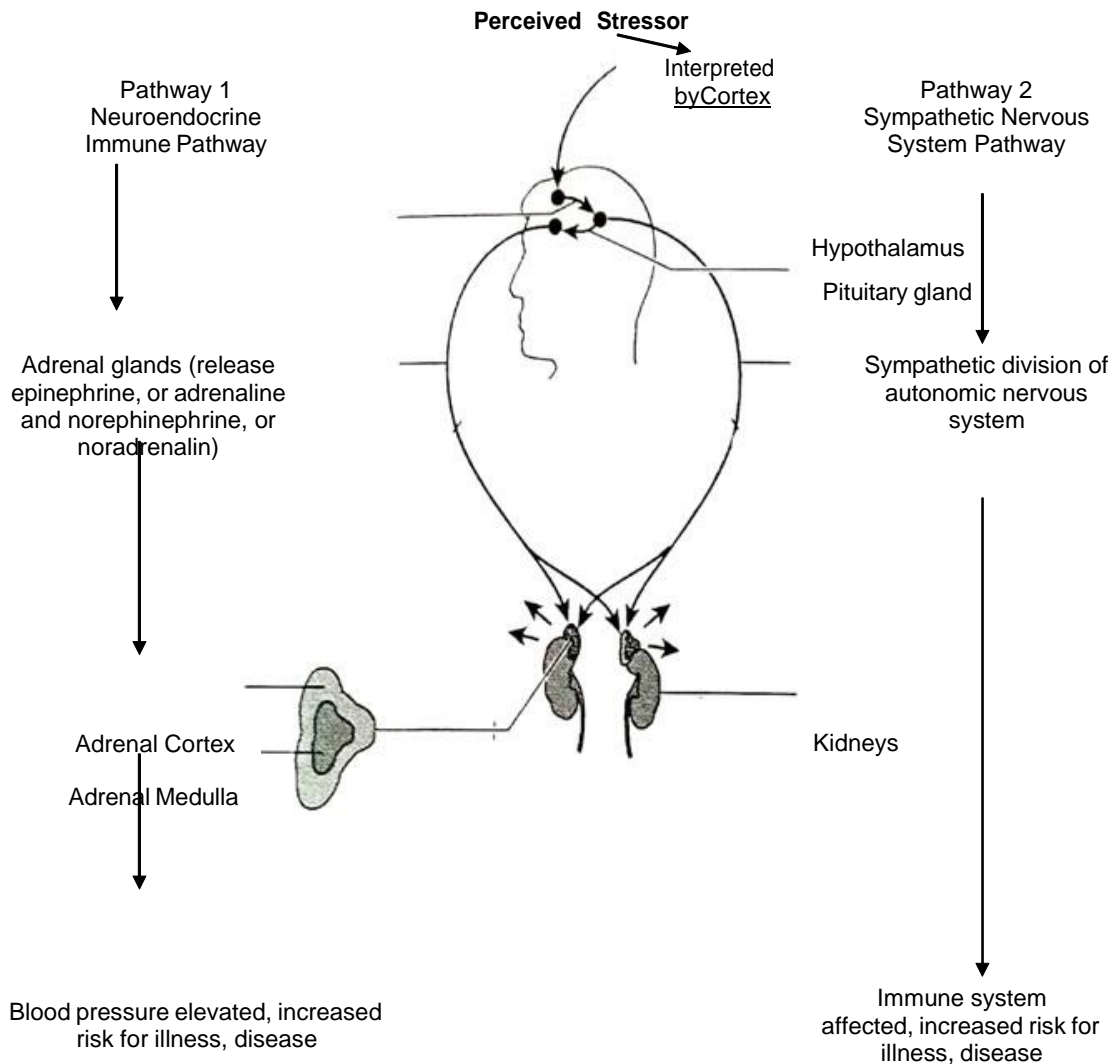
Walter Cannon in the early 1900's named the individual's response to stressor (stimulus), the "critical" stress and he identified the now famous "fight-or-flight" response in which the human organism is readied for fighting or taking flight when in danger.

When the brain detects a threat, a coordinated physiological response involving autonomic, neuro endocrine, metabolic and immune system components are activated. The key system in the stress response is the hypothalamus – pituitary – adrenal (HPA) axis. Neurons in the medial parvocellular region of the paraventricular nucleus of the hypothalamus release corticotrophin releasing hormone and arginine vasopressin (AVP). This triggers the subsequent secretion of adrenocorticotrophic hormone (ACTH) from the pituitary gland, leading to the production of glucocorticoids by the adrenal cortex. The adrenal medulla also releases catecholamines. Following the activation of the system, and once the perceived stressors has subsided, feedback loops are triggered at various levels of the systems in order to close the HPA axis down and return to a set homeostatic point. By contrast, the amygdala, which is involved in fear processing, activates the HPA axis in order to set in motion the stress response that is necessary to deal with the challenge. Other major systems and factors that respond to stress (such as ANS, the cytokines and the hormones) are affected by HPA activity and in turn affect HPA function, and they are also involved in the pathophysiological changes that occur in response to chronic stress, from early experiences into adult life.

As per the biological pathways between the brain and the endocrine system (figure 1), Individual's effect to cope with the initial effects of stress, the body releases hormones in a short time; adversely affect the immune systems functioning. At this time, the individual is prone to infection and injury. The neuroendocrine immune pathway is through the hypothalamus and pituitary gland to the adrenal glands, from which cortisol is released. For a shorter period, cortisol (a steroid) is good for the body and acts like a fuel at cellular level to move to muscles. But over a long period it can be bad for the body, suppress the immune system and strain the cellular functioning of the brain. In a sense, much of cortisol also increases appetite and can cause weight gain.

The other sympathetic nervous system pathway (the subsystem of autonomic nervous system) goes through the hypothalamus and then to sympathetic nervous system rather than the pituitary gland. When the signal reaches the adrenal glands, hormones like epinephrine and nor epinephrine will be released. Release of these hormones produce body arousal, causes number of physiological changes including elevated blood pressure and over the period it leads to increased risk for illness and disease like damage of blood vessel and cardiovascular disease. Physiologically the reactions are rise in the blood pressure, increase in the heart and respiration rates and rise of blood sugar levels. The experience of stress causes breakdown in individual's homeostasis. The immune system keeps us healthy by recognizing foreign bodies, such as viruses, bacteria and tumors and then helps us in destroying them. Although some stressful situations the fight or flight response can be quite adaptive, continuous physiological arousal can be hazardous to the individual in view of its significant physical disruption. The physiological impact of stress is illustrated in the figure (1).

FIGURE 1: TWO-PHYSIOLOGICAL PATHWAYS TO STRESS




In the aforementioned subsection, it was stated that stress can have impact on the immune system and chances of becoming ill are high. There is also evidence to convince that stress causes cardiovascular disorders, high blood pressure and certain psychosomatic disorders such as asthma, ulcers, allergies and headaches. Thus, the research evidence shows that 50 to 80% of all physical health problems are caused by stress.

How does stress affect immune competence? It is believed that stress causes the adrenal glands to produce epinephrine and cortisol and that these in turn affect immune cells. Table-1 summarizes the common effects of stress.

Table 1: Common Effects of Stress

Immunological and Cardiovascular	Effect
Events in response to stress	
1. Cortisol levels increase	Phagocytes and lymphocytes inhibited
2. Blood pressure increase	Pressure and Friction on artery walls
3. Epinephrine levels increase	Helper T-Cell levels decrease; suppress or T-Cell levels increase.
4. Salivary IgA levels decrease	Indicates decreased immune functioning

Physiological Impact of Stress	<p>Video Link https://youtu.be/d28m8l_VJZA</p>	<p>Scan with QR Code</p> 
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Stress, HIV and the Immune System

In view of increasing incidence of HIV around the world, there is a question that has become very pressing. Several studies on HIV – infected individuals suggest that both stress and depression have a deleterious effect on immune functioning. Social relationships also affect progression of the disease, and being sensitive to rejection by others has been found to accelerate decline in health status among HIV persons. Also, feelings of loneliness have been found to predict faster declines in the immune function because the nature of his/her social network is problematic.

Stress and Tuberculosis

For most people, the immune system alone or with the help of antibiotics is able to resolve the infection. In about 5 to 10 percent of individuals who are affected by TB, the infection persists because the immune system cannot fully get rid of from the body. Thus, by reducing the effectiveness of the immune system, stress can influence the course of TB. In addition to this, other individual factors appear to play a role as well, particularly in not responding to treatment.

Stress, Cardiovascular Disorders (CVD) – Blood Pressure, Coronary Heart Disease:

Cardiovascular disorders are disorders of heart, blood vessels, and blood circulation. The direct cause for CVDs is stress. For e.g., job stress (especially hard driving, highly competitive and time urgency type A personalities) leads to higher rates of the risk factors for CVDs. Among few who had higher levels of job effort with little reward have reported to have higher rates of hypertension, higher total cholesterol, and higher ratios of total cholesterol to high density lipoprotein cholesterol. Though hypertension is determined by several risk factors like obesity, sedentary lifestyle, diet, hostile behavior, family history, alcohol use and other psychosocial factors cause CVDs. Coronary Heart Disease (CHD) includes thickening of walls of coronary arteries, chest pain and heart attack.

Though there is no clear link between stress and cardiovascular disease has not been there is a evidence that major life changes and chronic emotional stress are both associated with high blood pressure, heart disease and early death (Caroll et al., 2003; Taylor, 2003). It is apparent that, the surge in adrenaline caused by emotional stress causes the blood to clot morerapidly and such blood is a major marker in heart attacks (Fogoros, 2001).

Research indicates that people who are quick to anger or who display frequent hostility also appear to have an increased risk for cardiovascular diseases. Also, evident that people who live in chronically stressed conditions are likely to take up smoking, start overeating and avoid exercising. All of these stress related behaviors are linked with the development of cardiovascular disease.

3.2.2 Stress and Quality of Sleep:

The body's stress systems play a critical role in adapting to a continuously changing and challenging environment. It is important to understand whether these systems are affected by sleep loss. The human body mobilizes defensive processes in an adaptive effort to maintain homeostasis. If these defenses fail, sleep loss may occur.

An individual who experiences extremely traumatic events shows more recollection of a dream with low sleep efficiency. Research revealed that sleep can be easily disrupted in people undergoing divorce, (delta sleep). Some researchers reported that an emotional reaction is the best predictor for explaining the factors such as depth and quality of sleep among three stress factors such as burden events, personality mediators and emotion reactions. Hick and Garcia (1986) reported that the increasing stress lessens the length of sleep. According to the Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV), most of the insomnia occurs with acute psychological, social and medical stress.

Sleep activates the sympathetic – adreno – medullary (SAM) and HPA systems, influencing Cardiovascular, catecholamine, cortisol, ACTH and CRH hyperactivity. Excessive secretion of cortisol due to stress negatively affects neural structures such as the hippocampus, resulting in memory deficits and especially negatively influences sleep by affecting the activity of the SAM and HPA systems. Increased activity of the autonomic nervous system and cortisol causes alertness,

influences awakening. Therefore, awakening from sleep after stress can be related to the early increase of ACTH.

The immune system is important in the relationship between stress and sleep. Acute or chronic stress in humans considerably affects sleep through the immune system. Acute stress mainly activates the immune system related to natural killer cells mediated by catecholamine. Typically stress related insomnia is transient and persists for only a few days. But in the clinic setting the real problem is chronic insomnia, which is also called as physiological insomnia (clinical problem).

3.2.3 Stress – Diet and Health:

Stress might increase the craving to eat in two ways either directly or via its arousal provoking properties. When individuals experience stressful events, they may more likely develop disordered eating attitudes and behaviors. Adolescence is a critical period of life for both body weight and psychological stress. Studies show that adolescents tend to more likely to develop negative body image, disturbed eating behaviors and high levels of stress.

The dietary habits play an important role in coping with stress as well as neurological and psychiatric breakdowns. It has been stated that some foods lead to increased stress reactions, making individuals much more sensitive towards stress. It is observed that women and restrained eaters consume more calories and fat under stress and shift their food choices away from meat type foods, such as meat and vegetables, toward snack type foods. In contrast, men and unrestrained eaters show either little difference or a reduction in food intake under stress. Thus, stress has been associated both with unhealthy emotional eating behavior and an imbalanced dietary pattern.

Individuals with high BMIs show a stronger association between chronic stress and weight gain than those with low BMIs who experience similar degrees of stress. Consistent with this notion, stress related eating is significantly associated with obesity in women. Moreover, overweight and obese individuals appear sensitized to food, food cues, particularly when exposure to stress. Studies revealed that obese individuals demonstrated significantly increased activation in brain reward regions including the striatum, insula, and thalamus during exposure to favorite food cue and stress. Thus identifying specific biomarkers and developing quantifiable measures to assess bio behavioral adaptations associated with stress and food addiction could be beneficial in developing public health interventions.

Check Your Progress:

Note: (a) Space is given below for writing your answers

(b) Compare your answer with the one given at the end of this unit.

1. Discuss the relationship between stress –diet and health.

.....
.....

2. How does stress affects Quality of sleep?

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.....

Stress and Immune System	Video Link https://youtu.be/CbylpT9ebKo	Scan with QR Code 
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3.3 PSYCHOLOGICAL IMPACT OF STRESS: IMPAIRED MENTAL FUNCTIONS, POOR MEMORY

3.3.1 Impact of stress on cognitive competencies:

Continued experience of stress for a longer period affects one's cognitive functioning. Specific exposure to higher levels of stress impairs individual's capacity to think and make sound decisions and in turn influence the family, workplace and social life. Rather than resolving the conflicts, arguments such decisions and loss of social life cause financial loss and of job. Severe stress also has an impact not only on thinking capacity but also affects one's concentration and memory leading to attention and memory problems and reduce short memory capacity.

Although the cognitive effects of stress are detrimental, there are many instances in which cognitive functions are not impaired by stress or even improved. It is reported that the specific effect induced by stress depends on number of factors related to both stress characteristics and to specific aspects of cognitive function under consideration. The intensity of stress determines the directions of stress effects in cognition in general and in memory function in particular. Studies show that there is a linear relationship between the intensity of stress and strength of the memory. Mental functions or cognition is a broad concept that involves a variety of processes that deal with information and manipulate representations in the brain with an aim to produce a suitable response. They range from perception and attention to various types of memory, language etc.

There is a considerable individual difference that exists in their cognitive capabilities when exposed to particular stress conditions. Some individuals are particularly "vulnerable", others may be quite "resistant" to the effects of stress. These differences could be due to predisposing factors, previous life experiences or more likely both. Among the personal factors, gender, genetic endowment, personality traits and age can play an important role in the consequences of stress.

According to Yerkes – Dodson law, the cognitive performance in “difficult” tasks is best when an individual is under optimal stress, while it is impaired under conditions above or below optimal stress levels. Overall, mild stress tends to facilitate cognitive function particularly in simple tasks or when the cognitive load is not excessive. The general view that emerges is that exposure to high to very high stress acutely or chronically impairs performance on explicit memory tasks that requires complex, flexible reasoning while improving performance on implicit memory tasks, in simple declarative memories and in well-rehearsed tasks.

Stress and Psycho-physiological Disorders:

Psycho physiological disorder is characterized by physical symptoms or dysfunctions that are intimately aligned with psychological factors. Psychological and physiological processes interconnect so closely in psycho-physiological disorder that it is impossible to separate them. Researchers suggest that there is a link between psycho-social factors (especially negative emotions like anger, hostility, depression, anxiety and aggression) to psychosomatic diseases like ulcers, arthritis, asthma, and headaches.

Post Traumatic Stress Disorder:

Stressful situations produce psychological reactions such as anxiety, anger, discouragement, worry and depression. If stressful situation continues, emotions may fluctuate, stress beyond normal range of human setting develop a severe set of symptoms known as post traumatic stress disorders. Stress experience lasts for a longer period’s even months or years after the event occurs. These effects can include flattened affect (emotion), sleep disturbances, exaggerated scary responses, extreme guilt, intense watchfulness and relieving some of their traumatic experiences. These types of individuals are categorized under Post – Traumatic Stress Disorder (PTSD). PTSD occurs most often following extreme war experiences, but can also be a response to other traumatic events such as rape or natural disasters. Like other disorders, PTSD has been linked to changes in immune functioning and also with a variety of hormonal fluctuations as we discussed above.

Psychological Impact of Stress	<p style="text-align: center;">Video Link https://youtu.be/z9n3PJHHSP0</p>	<p style="text-align: center;">Scan with QR Code</p> 
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3.3.2 Impact of stress on Emotions:

It is well documented that individuals who suffer from stress for a longer period are more

likely to experience mood swings and exhibit erratic familial and other social relations. In some individuals this will be like a vicious cycle of decreasing confidence and courage leading to more severe emotional problems such as increased feelings of anxiety, depression, physical & psychological tension and alter actions in mood (mood swings). For example, during examination student's experience "examination anxiety", where inadequate preparation decrease confidence and cause emotional problems like severe anxiety, poor memory (difficulty in remembering), alterations in sleep patterns, fear of failure etc.

Also evident those positive emotions have been shown to help in maintaining good health. Many studies have focused primarily on the role of negative factors, such as emotional stress, anger and illness. Moods can also influence people's health. Researchers found that, when people are experienced with a stressful life they may also likely to get sick or to use medical services. It is also reported that happy individuals are more likely to engage in health promoting behaviors and had more confidence that these behaviors relieve their illness than those who were sad and experienced negative emotions.

Research has demonstrated that the immune system does not operate independently of the central nervous system. Rather, the brain houses centers that are critical to the regulation of hormones and neurotransmitters that affect immune responses. Till recent years, there has little information on as to why or how emotional factors affect resistance to or progression of disease. When psycho-neuroimmunologists have studied the biochemical interactions between mood and immunity, they found that certain emotions can indeed cause suppression of the immune system. The nervous, cardiovascular and immune systems are affected by stress associated with uncontrollable life events.

Psychological stress is accompanied by negative emotions and associated behaviors, including depression, hostility, anger and aggression. Negative emotion states are of particular concern to the study of effects of stress on health. The incidence of psychological disorders, such as panic attacks and obsessive behavior increases with the buildup of long-term stress. Worries can reach such a level that they surface as a frightening, painful physical sensation, which can be mistaken for a heart attack. People under prolonged stress are more prone to irrational fears, mood swings and phobias, and may experience fits of depression, anger and irritability. These negative emotions appear to be related to the function of the immune system. Negative moods have been associated with poorer health outcomes. Feelings of hopelessness are related to worsening of disease, increased risk of injury and death due to various causes.

Stress and Emotions	<p style="text-align: center;">Video Link https://youtu.be/HAiOEYVtBb4</p>	<p style="text-align: center;">Scan with QR Code</p> 
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3.4 SOCIAL IMPACT OF STRESS

3.4.1 Stressful life events:

Life events are the main environmental sources of stress. The life events for example, the death of a spouse, being overloaded with work, being frustrated in an unhappy relationship produces damaging stress. People who experience clusters of stressful life events are more likely to become ill. Major life changes a person deals with at any one time, the more he/she will experience. Research indicates that life events which are sudden, negative, unexpected and uncontrollable are more likely to predict illness than are events that are positive, expected, under personal control or that develop gradually with the opportunity for adjustment.

Homes and Rahe (1967) carried out researches on impact of life events and stress revealed that almost any type of event, even positive events, can be experienced as stressful, particularly if they require substantial changes or readjustments in our lives. Negative life events such as death of spouse, divorce, marital separation, jail term etc and positive life events like son or daughter leaving home, begin or end of school, change of residence, change in ‘school’ etc, require readjustments in life (Homes and Rahe Social Readjustment scale, 1967).

Uncontrollable events can lead to a set phenomenon that’s been labeled learned helplessness, after a while they become apathetic, withdrawn and inactive. Usually they don’t seem to take opportunities to regain control over their negative circumstances. Some jobs, such as firefighting and emergency – room medicine are filled with unpredictability and are considered very stressful. Even an event as overwhelmingly negative as torture can be affected by the extent to which victims feel that the episodes of torture are predictable. Victims are able to predict the timing and type of torture they experience while being detained recover better once they are released than victims who perceive the torture as completely unpredictable. Finally, the duration of a negative event seems to be a strong predictor of its stressfulness, with more chronic events perceived as more stressful than more short-term events.

3.4.2 Social support and Health:

Social supports refer to the supports or resources we receive from significant others at times of need. Social support involves the size of our social network and the number of links that we

have with other individuals in our socio cultural context. Researches by health psychologists found that support from social relationships moderate the effects of stress and assist in coping and enhancing their health. Social supports can be in many forms – emotional support from others, esteem support, instrumental supports, informational support and network support. Emotional support from others refers to receiving love, empathy and security from significant others, instrumental support refers to economic support, support in providing transport, money etc. Informational support refers to getting advice, suggestions and feedback from others. Research shows that social supports significantly reduce likelihood of illness and to speedy recovery from illness.

Social supports influence stress and coping. If people are socially integrated and able to use effective social support from others; it is likely that they will face fewer stressors. The association between the role of social support and chronic – life threatening illnesses recovery was explained by many researchers. Many studies have found significant beneficial effects of social support on the functioning of cardiovascular, endocrine and immune system. Research on the immune system has demonstrated that marital relations and lower levels of social support can have a deleterious effect on one’s health. For example, having the support from a friend can be essential to effective immune functioning and overall health. Studies show that hostile or negative interactions between wife and husband were associated with increased levels of nor epinephrine, epinephrine growth hormone and ACTH and all showed suppression of the immune system. It only means that the hostility of any existing conflict produces observable immune changes. Individuals also who feel that they have someone to confide in and to share their thoughts and feelings will have better immune functioning than those who do not have such supportive contacts.

Check Your Progress:

Note: (a) Space is given below for writing your answers


(b) Compare your answer with the one given at the end of this unit.

3. Explain about the stressful life events.

.....
.....

4. Discuss Social support and Health.

.....
.....

Social Impact of Stress	<p style="text-align: center;">Video Link https://youtu.be/z-XoHQ_GxSY</p>	<p style="text-align: center;">Scan with QR Code</p> 
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3.5 SUMMARY

Severe stress in daily life of an individual can divert an individual’s attention from many activities of day today life. If stress is for prolonged period, it affects physical health and psychological functioning. The physical exhaustion is also seen in the signs of chronic fatigue, weakness and low energy. Stress has impact on key body systems i.e., nervous system, respiratory system, cardiovascular system, reproductive system, endocrine system, gastrointestinal systemetc.

Chronic stress grinds away our mental health, causing emotional damage in addition to physical ailments. Long-term stress can even rewire the brain, leaving you more vulnerable to everyday pressures, memory lapses, indecisiveness and less able to cope. Over time, stress can lead to mental health problems such as: anxiety, depression, eating disorders and substance abuse. Severe stress reactions can result from sudden, catastrophic events or traumaticexperiences such as a natural disaster, sexual assault, life-threatening accident, or participation in combat. After the initial shock and emotional fallout, many trauma victims gradually begin to recover from its effects. But for some people, the stress symptoms don’t go away, the body doesn’t regain its equilibrium, and life doesn’t return to normal. This severe and persisting reaction to trauma is known flashbacks, intrusive thoughts, or nightmares about the trauma, avoidance of places and things associated with the trauma, hyper vigilance for signs of danger, chronic irritability and tension, depression. PTSD is a serious disorder that requires professional intervention.

3.6 CHECK YOUR PROGRESS – MODEL ANSWERS

- 1A) Stress might increase the carving to eat in two ways either directly or via its arousal provoking properties. When individuals experience stressful events, they may more likely develop disordered eating attitudes and behaviors. Adolescence is a critical period of life for both body weight and psychological stress. Studies show that adolescents tend to more likely to develop negative body image, disturbed eating behaviors and high levels of stress.
- 2A) The body’s stress systems play a critical role in adapting to a continuously changing and challenging environment. It is important to understand whether these systems are affected by sleep loss. The human body mobilizes defensive processes in an adaptive effort to maintain

homeostasis. If these defenses fail, sleep loss may occur.

- 3A) Life events are the main environmental sources of stress. The life events for e.g., the death of a spouse, being overloaded with work, being frustrated in an unhappy relationship produces damaging stress. People who experience clusters of stressful life events are more likely to become ill. Major life changes a person dealing with at any one time, the more he/she will experience. Research indicates that life events that are sudden, negative, unexpected and uncontrollable are more likely to predict illness than are events that are positive, expected under personal control or that develop gradually with the opportunity for adjustment.
- 4A) Social supports refer to the supports or resources we receive from significant others at times of need. Social support involves the size of our social network and the number of links that we have with other individuals in our socio cultural context. Researches by health psychologists found that support from social relationships moderate the effects of stress and assist in coping and enhance their health. Social supports can be in many forms – emotional support from others, esteem support, instrumental supports, informational support and network support. Emotional support from others refers to receiving love, empathy and security from significant others, instrumental support refers to economic support, support in providing transport, money etc. Informational support refers to getting advice, suggestions and feedback from others.

3.7 MODEL EXAMINATION – QUESTIONS

I. Answers the following Questions in about 10 lines each.

1. Explain the physiological impact of stress on health.
2. What are the psycho physiological disorders?
3. Discuss how stress influence learning & memory?

II. Answers the following Questions in about 20 lines each.

4. Explain common psycho immunological disorders.
5. Explain psychological impact of stress.
6. Discuss the role of social supports in promoting health and well being.

3.8 GLOSSARY

- **Pituitary Gland:** The endocrine gland at the base of the skull that controls growth and regulates other glands.
- **Adrenal Gland:** Endocrine glands instrumental in regulating moods, energy level and ability to cope with stress.
- **Sympathetic Nervous system:** The division of the autonomic nervous system that arouses the body.

- **Hypothalamus:** Fore brain structure involved in regulating eating and sex, directing the endocrine system through the pituitary gland and monitoring emotion, stress and reward.
- **Lymphocytes:** White blood corpuscles that arise in the reticular tissue of the lymph glands and play a key role in immune system functioning.
- **Life change events:** Life events that require considerable adaptation.
- **Short term Memory:** The memory system in which limited amounts of information is retained less than 30 seconds unless strategies are used to retain it longer.
- **Long term Memory:** The memory system in which huge amounts of information are held relatively permanently.
- **Cardiovascular disorders:** Disorders of the heart, blood vessels and blood circulation.
- **Arteriosclerosis:** Condition in which the walls of arteries thicken and lose their elasticity.
- **PTSD – Post traumatic Disorder:** An anxiety disorder that develops through exposure to a traumatic event a severely oppressive situation, severe abuse, or a natural or an unnatural disaster.
- **Homeostasis:** The process by which the body maintains a constant internal physiological environment.
- **Insomnia:** Chronic difficulty in which person has difficulty in initiating and maintaining sleep and complain of not feeling restored or rested upon awakening.
- **Working Memory:** A three part system that temporarily holds information as people perform tasks, a kind of mental work bench on which information is manipulated and assembled to perform other cognitive tasks.
- **Social Support:** Help from others eg., friends, family, neighbours, co-workers and acquaintances. It can be in the form of physical assistance and/or psychological assistance.
- **Yerkes – Dodson Law:** The cognitive performance in difficult tasks is best when an individual is under optimal stress, while it is impaired under conditions above or below optimal stress levels.
- **Psychophysiological disorders:** Characterized by physical symptoms and/or dysfunctions that is intimately linked with psychological factors.
- **Psychoneuro-immunology:** A field of study that examines the direct effects of psychological factors and the nervous system on the immune system.
- **Psychosomatic Disorders:** Asthma, Ulcers, allergies and headaches. Characterized by physical symptoms and or dysfunctions that are intimately linked with psychological factors.
- **Coronary Heart Diseases:** Arteriosclerosis, angina pectoris and myocardial infarction.
- **Myocardial Infarction:** Involves severe or prolonged blockage of blood to the heart that results in the muscle tissue.

- **Arteriosclerosis:** Condition in which the walls of arteries thicken and lose their elasticity.
- **Post-Traumatic stress Disorder (PTSD):** A person's determination of whether the event has any potential negative implications for him or her.

FURTHER READINGS

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UNIT-4: STRESS RESPONSE

Contents

- 4.0 Objectives
- 4.1 Introduction
- 4.2 The Stress Response
- 4.3 Fight or Flight Response
- 4.4 General Adaptation Syndrome
- 4.5 Stress Warning Signals
- 4.6 Summary
- 4.7 Check Your Progress – Model Answers
- 4.8 Model Examination Questions
- 4.9 Glossary
- 4.10 Further Reading

4.0 OBJECTIVES

After reading this unit, you should be able to:

- Understand the concept of stress response.
- Describe the physiological responses to stress.
- Identify different stress warning signals.

4.1 INTRODUCTION

We are all familiar with the word ‘Stress’. Stress is when you are worried about getting good rank, or getting laid off your job, or worried about having enough money to pay your bills, or worried about your mother when the doctor says she may need an operation. In fact, to most of us, stress is synonymous with worry. If it is something that makes you worry, then it is stress. Stress is common to everyone. Our bodies are designed to feel stress and react to it. It keeps us alert and ready to avoid danger. It is not always possible to avoid or change events that may cause stress. We can feel trapped and unable to cope. When stress persists, the body begins to break down and illnesses can occur. The key to coping with stress is identifying stressors in your life and learning ways to direct and reduce stress.

Dr. Hans Selye, the father of stress theory, defined stress as “the nonspecific response of the body to any demand made upon it.” The “demand” can be a threat, a challenge or any kind of change which requires the body to adapt. The response is automatic and immediate. Stress can be good (called “eustress”) when it helps us perform better, or it can be bad (“distress”)

when it causes upset or makes us sick. Another commonly accepted definition of stress (mainly attributed to Richard S Lazarus) is that stress is a condition or a feeling that is experienced when a person perceives that “demand exceed the personal and social resources the individual is able to mobilise.”

In order to understand how people learn to cope with stress, it is important to first reflect on the different conceptualizations of stress. In this unit we will discuss what happens to people when they experience stress. The physiological responses to stress in terms of Fight or Flight response and General adaptation syndrome will be described in depth. The different categories of stress warning signals will also be explained in the unit.

4.2 THE STRESS RESPONSE

The groundwork for the modern meaning of “stress” was laid by Dr. Walter B. Cannon, a physiologist at Harvard almost 100 years ago. He was the first to describe the “fight or flight response” as a series of involuntary physiological and biochemical changes that prepare you to deal with threats of danger. This response was critical to the survival of primitive humankind when requiring quick bursts of energy to fight or flee predators such as the saber-toothed tiger.

Hans Selye, the first major researcher on stress, was able to trace what happens in your body during the fight or flight response. He found that any problem, real or imagined, could cause the cerebral cortex (the thinking part of the brain) to send an alarm to the hypothalamus (the main switch for the stress response, located in the midbrain). The hypothalamus then stimulates the sympathetic nervous system to make a series of changes in your body. Your heart rate, breathing rate, muscle tension, metabolism, and blood pressure all increase. Your hands and feet get cold as blood is directed away from your extremities and digestive system into the larger muscles that can help you fight or run. You experience butterflies in your stomach. Your diaphragm locks. Your pupils dilate to sharpen your vision and your hearing becomes more acute.

While all of this is going on, something else happens that can have long-term negative effects if left unchecked. Your adrenal glands start to secrete corticoids (adrenaline, epinephrine, and nor-epinephrine), which inhibit digestion, reproduction, growth, and tissue repair and the responses of your immune and inflammatory systems. In other words, some very important functions that keep your body healthy begin to shut down. The stress response is useful and can be necessary in times of emergency, but the frequent or unrelenting triggering of the stress response in our modern life without a balancing relaxation response can contribute to a number of illnesses and symptoms.

The same mechanism that turned the stress response on can turn it off. This is called the Relaxation Response. As soon as you decide that a situation is no longer dangerous, your brain stops sending emergency signals to your brain stem, which in turn ceases to send panic messages to your nervous system. Minutes after the danger signals stop, the flight or fight response burns out. Your metabolism, heart rate, breathing rate, muscle tension, and blood pressure all return to their normal

levels. Many professionals suggest that you can use your mind to change your physiology for the better, and improve your health by using the natural restorative process called the Relaxation Response.

Understanding Stress Response	Video Link https://youtu.be/mtjP9Yc95yA	Scan with QR Code 
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4.3 FIGHT OR FLIGHT' RESPONSE

The fight-or-flight response, also known as the acute stress response, refers to a physiological reaction that occurs in the presence of something that is terrifying, either mentally or physically. The response is triggered by the release of hormones that prepare your body to either stay or deal with a threat or to run away to safety.

The term 'fight-or-flight' represents the choices that our ancient ancestors had when faced with a danger in their environment. They could either fight or flee. In either case, the physiological and psychological response to stress prepares the body to react to the danger.

The fight-or-flight response was first described in the 1920s by American physiologist Walter Cannon. Cannon realized that a chain of rapidly occurring reactions inside the body helped to mobilize the body's resources to deal with threatening circumstances. Today the fight-or-flight response is recognized as part of the first stage of Hans Selye's general adaptation syndrome, a theory describing the stress response.

What Happens During the Fight-or-Flight Response?

In response to acute stress, the body's sympathetic nervous system is activated due to the sudden release of hormones. The sympathetic nervous systems stimulate the adrenal glands triggering the release of catecholamines, which include adrenaline and nor-adrenaline. This results in an increase in heart rate, blood pressure, and breathing rate. After the threat is gone, it takes between 20 to 60 minutes for the body to return to its pre-arousal levels. You can probably think of a time when you experienced the fight-or-flight response. In the face of something frightening, your heartbeat quickened, you begin breathing faster, and your entire body becomes tense and ready to take action.

The fight-or-flight response can happen in the face of an imminent physical danger (such as encountering a growling dog during your morning jog) or as a result of a more psychological threat (such as preparing to give a big presentation at school or work).

Some of the physical signs that may indicate that the fight-or-flight response has kicked in include:

- **Rapid Heart Beat and Breathing:** The body increases heartbeat and respiration rate in order to provide the energy and oxygen to the body that will be needed to fuel a rapid response to the danger.
- **Pale or Flushed Skin:** As the stress response starts to take hold, blood flow to the surface areas of the body is reduced and flow to the muscles, brain, legs, and arms are increased. You might become pale as a result, or your face may alternate between pale and flushed as blood rushes to your head and brain. The body's blood clotting ability also increases in order to prevent excess blood loss in the event of injury.
- **Dilated Pupils:** The body also prepares itself to be more aware and observant of the surroundings during times of danger. Another common symptom of the fight-or-flight response is the dilation of the pupils, which allows more light into the eyes and results in better vision of the surroundings.
- **Trembling:** In the face of stress or danger, your muscles become tense and primed for action. This tension can result in trembling or shaking.

Importance of Fight or Flight Response

The fight-or-flight response plays a critical role in how we deal with stress and danger in our environment. Essentially, the response prepares the body to either fight or flee the threat. It is also important to note that the response can be triggered due to both real and imaginary threats.

By priming your body for action, you are better prepared to perform under pressure. The stress created by the situation can actually be helpful, making it more likely that you will cope effectively with the threat. This type of stress can help you perform better in situations where you are under pressure to do well, such as at work or school. In cases where the threat is life-threatening, the fight-or-flight response can actually play a critical role in your survival. By gearing you up to fight or flee, the fight-or-flight response makes it more likely that you will survive the danger.

While the fight-or-flight response happens automatically, that does not mean that it is always accurate. Sometimes we respond in this way even when there is no real threat. Phobias are good examples of how the fight-or-flight response might be triggered in the face of a perceived threat.

A person who is terrified of heights might begin to experience the acute stress response when he has to go to the top floor of a skyscraper to attend a meeting. His body might go on high alert as his heartbeat and respiration rate increase. When this response becomes severe, it may even lead to a panic attack.

Understanding the body's natural fight-or-flight response is one way to help cope with such situations. When you notice that you are becoming tense, you can start looking for ways to calm down and relax your body.

The stress response is one of the major topics studied in the rapidly-growing field of health

psychology. Health psychologists are interested in helping people find ways to combat stress and live healthier, more productive lives. By learning more about the fight-or-flight response, psychologists can help people explore new ways to deal with their natural reaction to stress.

Check your Progress

Note: (a) Space is given below for writing your answer
 (b) Compare your answer with the one given at the end of this

unit. 1Q. Define Stress

2Q. What is Stress Response?

3Q. Explain “Fight or Flight” response?

Flight or Fight Response	<p style="text-align: center;">Video Link</p> <p style="text-align: center;">https://youtu.be/ewLWKCenF18?list=PLjKv4J9tOrjs8Mkm_gQxl1jZkQT2xJ6hr</p>	<p style="text-align: center;">Scan with QR Code</p> 
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4.4 GENERAL ADAPTATION SYNDROME

In 1936 Hans Selye created the stress model “General Adaptation Syndrome”, which thoroughly explains the stress response and how aging and disease are caused by chronic exposure to stress. Selye noticed that the body has been adapting to external stressors in terms of a biological pattern that is actually predictable, so that the internal balance, or homeostasis, would be restored and maintained.

In its attempt to retain homeostasis, the body makes use of its hormonal system, also known as the fight or flight response. With this response, you would notice how the body wants things to be resolved fast and easy, that’s why it already resorts to releasing hormones that would enable you to combat stress in the most immediate way possible. This struggle of the

body against stress is the main theme of the General Adaptation Syndrome.

Stress as a response model, as introduced by Hans Selye, describes stress as a physiological response pattern and was captured within his general adaptation syndrome (GAS) model. This model describes stress as a dependent variable and includes three concepts:

1. Stress is a defensive mechanism.
2. Stress follows the three stages of alarm, resistance, and exhaustion.
3. If the stress is prolonged or severe, it could result in diseases of adaptation or even death.

The General Adaptation Syndrome is a model that is comprised of three elements or phases which describe the body's response to stress:

Alarm Reaction Phase

During the alarm reaction phase, a stressor disturbs homeostasis. The brain subconsciously perceives the stressor and prepares the body either to fight or to run away, a response sometimes called the fight or flight response. When the mind perceives a stressor, the cerebral cortex, is called to attention. If the cerebral cortex consciously or unconsciously perceives a threat, it triggers an autonomic nervous system response that prepares the body for action.

The autonomic nervous system is the portion of the central nervous system that regulates bodily functions that we do not normally consciously control. When we are stressed, the rate of all these bodily functions increases dramatically to give us the physical strength to protect ourselves against an attack, or to mobilize internal forces.

In addition to this, the hypothalamus, a section of the brain, functions as the control centre and determines the overall reaction to stressors. When the hypothalamus perceives that extra energy is needed to fight a stressor, it stimulates the adrenal glands to release the hormone epinephrine, also called adrenaline. Epinephrine causes more blood to be pumped with each beat of the heart, dilates the air sacs in the lungs to increase oxygen intake, increases the breathing rate, stimulates the liver to release more glucose, and dilates the pupils to improve visual sensitivity.

The body is then poised to act immediately. Other physical responses to stress during this stage include “butterflies” in the stomach, an elevation in blood pressure, dry mouth and tensing of muscles. In some instances if too intense or if for too long the individual may find it difficult to concentrate on preparing well to deal with the stress properly. The alarm reaction directs resources away from the digestive and immune systems to more immediate muscular and emotional needs. In normal circumstances the alarm reaction phase will not last for very long, in some instances it may only be for a few seconds, in other instances longer. The alarm reaction phase is only meant to be a preliminary phase of activating the body and mind into dealing effectively with the presenting stressor or threat.

Resistance (adaptation) Phase

As we move from the initial alarm reaction phase, as a preparatory response to the presenting stressor, we then move onto the resistance or adaptation phase. It is in this phase where the body is now actively dealing with the stressor. If this adaptation phase continues for a prolonged period of time without periods of relaxation and rest to counterbalance the stress response and allow time for the body to replenish and repair from the exertion required to execute the appropriate stress response, sufferers become prone to fatigue, concentration lapses, irritability and lethargy as the effort to sustain arousal slides into negative stress.

At the most fundamental level of response the organism is going to be either fighting or fleeing in some way, in an attempt to resist the negatively perceived consequences of the threatening stressor. This resistance may be required for either, a few moments, days, months and sometimes even years. The form of resistance employed will have varying degrees of success depending on how well it is employed and how relevant it is in dealing with the stressor situation. Regardless of the length of time, once the threatening stressor has been dealt with effectively the organism is able to return to its pre-activated state and recover from the ordeal. It is in the process of recovery that adaptation occurs.

Every organism has restricted resources to adapt to stressors. Therefore, whenever someone has to adapt to a stressor they will lose “adaptation energy” meaning that they will have less resources to adapt next time they are confronted with a stressor unless they adapt successfully.

Successful adaptation from resistance is when the body and mind adapts to a point of being more capable in its capacity to resist if ever confronted by the stressor again. In this sense, successful adaptation means the organism has increased its bio-psychosocial level of fitness whereby it can take on the same threat more effectively next time or successfully take on a bigger threat next time.

It is through this process of adaptation that we learn how to cope better and deal with things more effectively. At a physiological level successful adaptation actually means getting physically fitter. Psychosocially it means having greater levels of resilience, working better coping strategies and having more appropriate emotions and thought processes around the challenging situation.

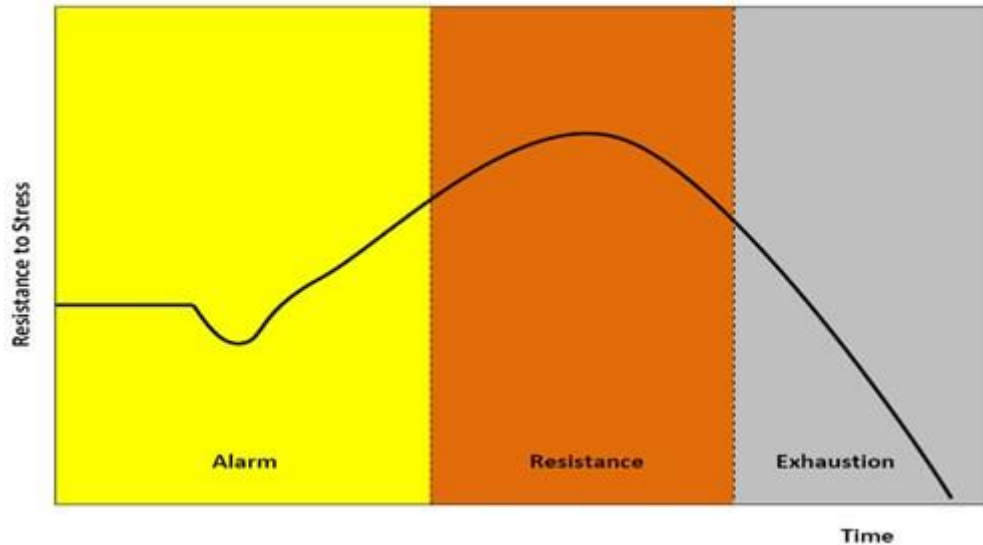
Problems occur at the resistance/adaptation phase if the combined biological, psychological and social responses employed do not deal with the threat effectively or if the threat is chronic whereby it eventually wears down the capacity of the organism to resist the threat or deal with it properly. This problem leads us to the exhaustion phase of the general adaptation syndrome.

Exhaustion Phase

A person can only fight or flee for so long before they begin to wear down in their capacity to resist and deal with it. If the stressor environment is chronic and excessive without any real opportunity to recover or adapt successfully, the organism will begin to show signs of adaptation failure. Systems begin to break down and we become more susceptible to a range of

bio-psychosocial symptoms. If we persist in functioning at this level, death can occur.

As a model of stress, the General Adaptation Syndrome (GAS) is focused primarily on the bodies' physiological response to stress. It does not take into account other factors influencing an individual's response to stress such as their thoughts, perceptions or feelings and how these cognitive and psychological factors impact upon their experience of stress itself (garysturt, 2004). Nonetheless the GAS was a hugely influential model which generated a lot of further study (currentnursing.com, 2014).




General Adaptation to Stress (GAS) Model (Source:<http://opentextbc.ca>)

Factors Responsible for GAS

GAS can occur with any type of stress. Stressful events can include:

- a job loss
- medical problems
- financial troubles
- family breakdown
- trauma


General Adaptation Syndrome	<p style="text-align: center;">Video Link</p> <p style="text-align: center;">https://youtu.be/M0hTV65dp78?list=PLjKv4J9tOrjs8Mkm_gQx11jZkQT2xJ6hr</p>	<p style="text-align: center;">Scan with QR Code</p> 
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Effects of GAS

But while stress is unpleasant, the upside is that GAS improves how our body responds to stressors, particularly in the alarm stage. The fight-or-flight response that occurs in the alarm stage is for our protection. A higher hormone level during this stage benefits us. It gives us more energy and improves our concentration so we can focus and tackle the situation. When stress is short-term or short-lived, the alarm stage isn't harmful.

This isn't the case with prolonged stress. The longer we deal with stress, the more harmful it is to our health. You also don't want to remain in the resistance stage for too long and risk entering the exhaustion stage. Once we're in the exhaustion stage, prolonged stress raises the risk for chronic high blood pressure, stroke, heart disease, and depression. We also have a higher risk for infections and cancer due to a weaker immune system.

Since it's not possible to eliminate every stressor, it's important to find ways to cope with stress. Knowing the signs and stages of stress can help us take appropriate steps to manage our stress level and lower our risk of complications. It's essential for our body to repair and recover during the resistance stage. If not, our risk for exhaustion rises. If we can't eliminate a stressful event, employing problem-focused strategies and regular exercise can help us cope and maintain a healthy stress level. Other techniques for stress management include meditation and deep-breathing exercises.

Effects of GAS	Video Link https://www.youtube.com/watch?v=ptbzVUtklUM&list=PLjKv4J9tOrjs8Mkm_gQx11jZkQT2xJ6hr&index=19	Scan with QR Code 
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4.5 STRESS WARNING SIGNALS

It is important to learn how to recognize when your stress levels are “out of control” or having an adverse effect. The signs and symptoms of stress overload can be almost anything. Stress affects the mind, body, and behaviour in many ways, and everyone experiences stress differently.

Three common ways that people respond when they are overwhelmed by stress are:

1. An angry or agitated stress response. You may feel heated, keyed-up, overly emotional, and unable to sit still.
2. A withdrawn or depressed stress response. You shut down, space out, and show very little

energy or emotion.

- Both a tense and frozen stress response. You “freeze” under pressure and feel like you can’t do anything. You look paralyzed, but under the surface you may feel extremely agitated.

The following are some of the common warning signs and symptoms (signals) of stress. The more signs and symptoms you notice in yourself, the closer you might be to feeling stress overload.

COGNITIVE SYMPTOMS	EMOTIONAL SYMPTOMS
Memory problems	Moodiness
Indecisiveness	Agitation
Inability to concentrate	Restlessness
Trouble thinking clearly	Short temper
Poor judgment	Irritability, impatience
Seeing only the negative	Inability to relax
Anxious or racing thoughts	Feeling tense and “on edge”
Constant worrying	Feeling overwhelmed
Loss of objectivity	Sense of loneliness and isolation
Fearful anticipation	Depression or general unhappiness
PHYSICAL SYMPTOMS	BEHAVIORAL SYMPTOMS
Headaches or backaches	Eating more or less
Muscle tension and stiffness	Sleeping too much or too little
Diarrhoea or constipation	Isolating yourself from others
Nausea, dizziness	Procrastination, neglecting responsibilities
Insomnia	Using alcohol, cigarettes, or drugs to relax
Chest pain, rapid heartbeat	Nervous habits (e.g., nail biting, pacing)
Weight gain or loss	Teeth grinding or jaw clenching
Skin breakouts (hives, eczema)	Overdoing activities (e.g., exercising, shopping)
Loss of sex drive	Overreacting to unexpected problems
Frequent colds	Picking fights with others

Everyone reacts to stress differently, and each body sends out its different set of red flags. Some people may not even feel the physical or emotional warning signs until hours or days of stressful activities. But when we do notice a stiff back or that we are snapping at our friends, pay attention to the signs and listen to what our body is telling us. While the adrenaline rush after acing that presentation to the board is something to enjoy, the warning signs of stress

are not anything to take lightly or ignore. By noticing how we respond to stress, we can manage it better and in healthy ways, which will help our body correct itself, reducing the high cost and care of chronic, long-term health problems.

Keep in mind that the signs and symptoms of stress can also be caused by other psychological and medical problems. If you or your friends, family and acquaintances are experiencing any of the warning signs of stress, it's important to see a doctor for a full evaluation. Physician can help determine whether or not the symptoms are stress-related.

Check your Progress

Note: (a) Space is given below for writing your answer

(b) Compare your answer with the one given at the end of this

unit.4Q. Explain about GAS

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.....

5Q. What is Alarm Reaction?

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.....

6Q. Describe the Resistance Stage.


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.....

7Q. What is Exhaustion?

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.....

8Q. Discuss about the Importance of stress warning signals

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Stress Warning Signals	<p>Video Link</p> <p>https://www.youtube.com/watch?v=YgXq2om2Z4k&list=PLjKv4J9tOrjs8Mkm_gQx1jZkQT2xJ6hr&index=20</p>	<p>Scan with QR Code</p> 
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4.6 SUMMARY

Stress is an emotion or bodily reaction to physical, psychological or emotional demands. Stress produces numerous physical and mental symptoms which vary according to each individual's situational factors. These can include physical health decline as well as depression. The groundwork for the modern meaning of "stress" was laid by Dr. Walter B. Cannon, a physiologist at Harvard almost 100 years ago. He was the first to describe the "fight or flight response" as a series of involuntary physiological and biochemical changes that prepare you to deal with threats of danger.

It's known as "fight-or-flight" response because it evolved as a survival mechanism, enabling people and other mammals to react quickly to life-threatening situations. The carefully orchestrated yet near-instantaneous sequence of hormonal changes and physiological responses helps someone to fight the threat off or flee to safety.

Hans Selye's General Adaptation Syndrome model of Stress is a model that analyses an individual's response to long term stress which is broken down into three main stages, the initial alarm stage, the interim resistance stage and finally the exhaustion stage. If the stressor persists the individual will progress through each of the stages, and in some cases disease and even death can result.

Our body's stress warning signs tell us that something isn't right. Much like the glowing orange, "check engine" light on our car's dashboard, if we neglect the alerts sent out by our body, we could have a major engine malfunction. Stress that is left unchecked or poorly managed is known to contribute to high blood pressure, heart disease, obesity, diabetes and suicide. So when things aren't going our way, or you feel like you are losing control or are overwhelmed, pay attention to the warning signs. Stress warning signs can be physical, behavioural, emotional, and cognitive.

4.7 CHECK YOUR PROGRESS – MODEL ANSWERS

- 1A. Stress is an alarm reaction, involving heightened mental and bodily states - it is both a psychological and a physiological response to the environment. The brain produces a stress reaction - a cascade of stress hormones (for example, adrenaline and cortisol) when we are in a situation that is physically or mentally demanding. Stress occurs when the demands of a

situation seem greater than our ability to cope.

- 2A. There is different conceptualizations or theories of stress and one views stress as a response to a threatening situation. Stress response is a series of involuntary physiological and biochemical changes that prepare you to deal with threats of danger.
- 3A. The flight or fight response, also called the “acute stress response” was first described by Walter Cannon in the 1920s as a theory that animals react to threats with a general discharge of the sympathetic nervous system. The response was later recognized as the first stage of a general adaptation syndrome that regulates stress responses among vertebrates and other organisms.
- 4A. GAS is a stress response pattern proposed by Hans Selye that consists of three stages: alarm, resistance and exhaustion.
- 5A. Alarm reaction involves excitation of autonomic nervous system, the discharge of the stress hormone adrenaline, and physical symptoms of anxiety.
- 6A. Resistance is adapting to the stressor and finding a way to cope with it.
- 7A. Exhaustion is the last stage of GAS. It occurs when individual lacks good coping measure, resistance breaks down causing levels of activation to bottom out.
- 8A. Our body’s stress warning signs tell us that something isn’t right. Stress that is left unchecked or poorly managed is known to contribute to high blood pressure, heart disease, obesity, diabetes and suicide. So when things aren’t going our way, or you feel like you are losing control or are overwhelmed, pay attention to the warning signs. Stress warning signs can be physical, behavioural, emotional, and cognitive. By noticing how we respond to stress, we can manage it better and in healthy ways, which will help our body correct itself, reducing the high cost and care of chronic, long-term health problems.

4.8 MODEL EXAMINATION QUESTIONS

I. Answer the following questions in about 10 lines each

1. What is stress response? Discuss in detail the Fight or Flight response to stress.
2. Discuss the importance of Fight or Flight response.
3. What is General Adaptation Syndrome? Explain the different stages of GAS.

II. Answer the following questions in about 20 lines

4. When does GAS occur? Write about the effects of GAS on an individual.
5. Discuss the various categories of stress warning signals. Explain the importance of paying attention to stress warning signals.

4.9 GLOSSARY

- **Homeostasis:** is a point of balance or internal biological equilibrium.
- **Stimulus:** a thing or event that evokes a specific functional reaction in an organ or tissue.

- **Fight or Flight response:** The fight-or-flight response, also known as the acute stress response, refers to a physiological reaction that occurs in the presence of something that is terrifying, either mentally or physically.

4.10 FURTHER READINGS

1. Nevid, J. 2009. Psychology: Concepts and Applications. Houghton Mifflin Company: New York.
2. Comer, R., Gould, E. 2011. Psychology Around Us. John Wiley & Sons.

UNIT 5: COPING MECHANISMS

Contents

- 5.0 Objectives
- 5.1 Introduction
- 5.2 Stress Management Strategies
- 5.3 What are Coping Mechanisms?
- 5.4 Types of Coping Mechanism
 - 5.4.1 Adaptive Coping Techniques
 - 5.4.2 Maladaptive Coping Techniques
- 5.5 Coping Strategies
 - 5.5.1 Appraisal Focused
 - 5.5.2 Problem Focused
 - 5.5.3 Solution Focused
 - 5.5.4 Emotion Focused
- 5.6 Coping Mechanisms and Mental Health
- 5.7 Summary
- 5.8 Check Your Progress – Model Answers
- 5.9 Model Examination Questions
- 5.10 Glossary
- 5.11 Further Readings

5.0 OBJECTIVES

After studying this unit, you will be able to:

- Define Coping
- Describe Coping mechanisms
- Explain Adaptive and Maladaptive Coping Mechanisms
- List out the Coping Strategies

5.1 INTRODUCTION

In today's scenario with people feeling more and more stressed out as they grapple with competing priorities, demanding schedules, engrossed in accumulating wealth, stress is more the rule

than the exception. These stressors can have adverse impact on health. The key in managing stress does not lie in avoiding it. Stress is an inevitable element in the fabric of modern life. Although research has tended to focus on the negative effects of stress, studies have shown that stress can lead to personal growth and self-improvement.

5.2 STRESS MANAGEMENT STRATEGIES

Stress Management:

Identifying unrelieved stress and being aware of its effect on our lives is not sufficient for reducing its harmful effects. Just as there are many sources of stress, there are many possibilities for stress management. However, all require work toward change: changing the source of stress and / or changing reaction to it. Stress Management, therefore, can involve making changes in the external factors which confront us or with internal factors which strengthen our ability to cope with what comes our way.

Stress Management Strategies:

Stress management strategies mainly focus on two aspects, one is on the individual and the second is the environment.

The Individual


Change Perceptions and Reactions: Everyone is different, with unique perceptions of, and reactions to, stressful events. There is no single level of stress that is optimal for all people. Most of the stress experiences are self-generated. How we perceive life, whether an event makes us feel threatened or stimulated, encouraged or discouraged, happy or sad, depends to a large extent on how we perceive ourselves.

One of the best and important methods of dealing with stress is changing the irrational thinking. It involves altering the patterns of irrational thinking to reduce maladaptive emotions and behaviour. The other way is trying to view stressful situations from a positive perspective to reduce the impact of stress.

The Environment

Change the Environment in which Stressor Exists: Not all stress can be avoided, and it is not healthy to avoid a situation that needs to be addressed. However, most of the stressors can be avoided or eliminated by bringing change in the environment. By analyzing the schedule, responsibilities, and daily tasks the stressors can be reduced. It is necessary to distinguish between the “shoulds” and the “musts” and dropping tasks that are not truly necessary. If stressful situations cannot be avoided, it can be altered. Figuring out what has led to the stressful situation will be helpful to change things so that the problem does not present itself in the future.

Hence, stress management strategies focus on confronting stress rather than sidestep it. This requires training people to engage in action oriented, rational, reality based constructive coping.

Stress Management Strategies	<p>Video Link</p> <p>https://www.youtube.com/watch?v=B3O1T3mzhRs&list=P_LjKv4J9tOrjs8Mkm_gQxl1jZkQT2xJ6hr&index=29&t=5s</p>	<p>Scan with QR Code</p> 
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5.3 WHAT ARE COPING MECHANISMS?

Coping means one’s own conscious effort, to solve personal and interpersonal problems, in order to master, minimize or tolerate stress and conflict. The term ‘coping’ generally refers to adaptive or constructive coping strategies to reduce stress. In contrast, other coping strategies may be called as maladaptive, if they increase stress.

The term ‘coping’ is mostly associated with ‘reactive coping’, that is, the coping response to a stressor. This differs from ‘proactive coping’, in which a coping response aims to prevent a future stressor. The effectiveness of the coping effort depends on the type of stress, the individual, and the environment. Coping responses are partly controlled by personality traits, and partly by social environment.

Definition

Susan Folkman and Richard Lazarus define coping as “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing”. Coping skills are ways in which external or internal stress is managed, adapted to or acted upon. Coping is an activity to seek and apply solutions to stressful situations.

What Are Coping Mechanisms?

Coping mechanisms are the strategies people often use in the face of stress and/or trauma to help manage painful or difficult emotions. Coping mechanisms can help people adjust to stressful events while helping them to maintain their emotional well-being.


Significant life events, whether positive or negative, can cause psychological stress. Difficult events, such as divorce, miscarriage, the death of a loved one, or the loss of a job, can cause most people to feel grief or distress. But events that are considered positive as getting married, having a child, and buying a home can lead to significant amounts of stress. To adjust to this stress, people may utilize a combination of thoughtful, and emotional and behavioural strategies, depending on the stressful situation. We can use coping mechanisms for stress management or to cope with anger,

loneliness, anxiety, or depression.

Difference between Coping Mechanisms and Defense Mechanisms

- Defense mechanisms mostly occur at an unconscious level, and people are generally unaware that they are using them. Defense mechanisms can change a person's internal psychological state
- Coping mechanisms are conscious and purposeful. These are used to manage an external situation that is creating problems for an individual.

Coping Styles can be active or avoidant. Active coping involve an awareness of the stressor and conscious efforts to reduce the stress. Avoidant coping styles are characterized by 'ignoring' or avoiding the problem

Coping with Stress	Video Link https://www.youtube.com/watch?v=N7ww9Xpa0k&list=PLjKv4J9tOrjs8Mkm_gQxl1jZkQT2xJ6hr&index=21	Scan with QR Code 
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5.4 TYPES OF COPING MECHANISMS

Adaptive Coping Mechanisms are positive and improve functioning resulting in achievement and self-fulfilment. Adaptive coping mechanisms are generally considered as healthy and effective ways of managing stressful situations.

5.4.1 Adaptive Coping Techniques

- Support: Talking about a stressful event with a supportive person can be an effective way to manage stress. Seeking external support instead of self-isolating and internalizing the effects of stress can greatly reduce the negative effects of a difficult situation.
- Relaxation: Any number of relaxing activities can help people cope with stress. Relaxing activities may include practicing meditation, progressive muscle relaxation or other calming techniques, sitting in nature, or listening to soft music.
- Problem-solving: This coping mechanism involves identifying a problem that is causing stress and then developing and putting into action some potential solutions for effectively managing it.
- Physical activity: Exercise can serve as a natural and healthy form of stress relief. Running, yoga,

swimming, walking, dance, team sports, and many other types of physical activity can help people cope with stress and the after effects of traumatic events.

5.4.2 Maladaptive Coping Mechanisms

Maladaptive coping mechanisms will reduce symptoms while maintaining and strengthening the disorder. Maladaptive techniques are ineffective and counterproductive. Maladaptive coping may work for a short term but not effective for a long term period.

Maladaptive Coping Techniques

- **Escape:** Escape is closely related to avoidance. This technique is used to flee from the anxiety provoking situation. To cope with anxiety or stress, some people may withdraw from friends and become socially isolated. They may absorb themselves in a solitary activity such as watching television, reading, or spending time online.
- **Dissociation:** is the ability of the mind to separate and compartmentalize thoughts, memories, and emotions. This is often associated with post traumatic stress syndrome.
- **Unhealthy self-soothing:** Some self-soothing behaviours are healthy in moderation but may turn into an unhealthy addiction if it becomes a habit to use them to self-soothe. Some examples of unhealthy self-soothing could include overeating, binge drinking, or excessive use of internet or video games.
- **Compulsions and risk-taking:** Stress can cause some people to seek an adrenaline, rush through compulsive or risk-taking behaviours such as gambling, unsafe sex, experimenting with drugs, theft, or reckless driving.
- **Self-harm:** People may engage in self-harming behaviours to cope with extreme stress or trauma.

Check Your Progress

Note: (a) Space is given below for writing your answer

(b) Compare your answer with the one given at the end of this unit. 1Q.

Define coping

.....
.....

2Q. What is coping mechanism?


.....
.....

3Q. List two Adaptive Coping Techniques

.....
.....

4Q. Explain Maladaptive Coping Techniques.

.....
.....

Types of Coping Mechanisms	Video Link https://www.youtube.com/watch?v=9toXzelp278&list=PLjKv4J9tOrjs8Mkm_gQx1jZkQT2xJ6hr&index=22	Scan with QR Code 
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5.5 COPING STRATEGIES

Coping strategies can be classified as:

1. Appraisal Focused Coping - which is adaptive cognition?
2. Problem Focused Coping - which is adaptive behavioural / conation
3. Emotion Focused Coping - which is adaptive affection?

5.5.1 Appraisal Focused Coping Strategies

Appraisal focused coping strategies occur when people modify their ways of thinking by denial of problem or distancing oneself from the stressor. People may alter their thinking by changing their goals and values.

Appraisal focused coping strategies involve reappraising and challenging our assumptions. When we respond to any stressful event, we assume and believe that we are responding to the plain reality. Unfortunately, it is not true. The truth is that we are really responding to our interpretation of the experience, which can be very different from the reality. Hence it is essential to challenge the assumptions as we first view the event.

5.5.2 Problem Focused Coping Strategies

Problem focused coping strategies attempt to deal with the cause of the problem. It is aimed at changing or eliminating the source of stress. Problem focused coping strategies involve facing the problem head on. Folkman & Lazarus identified three problem focused coping strategies namely, information seeking, taking control and evaluating the pros and cons of action. Problem focused coping strategies rely on using active ways to directly tackle the situation that cause the stress by the following activities.

1. Analyze the situation - Pay attention to all details.
2. Work harder to find alternative solutions

3. Apply what you have already learned to your daily life.
4. Talk to a person that has a direct impact on the situation.

Problem Focused Coping Techniques

Psychoanalytic theories propagate that **defense mechanisms** are powerful coping strategies to deal with stress. The most commonly used techniques are given below.

- **Affiliation** : involves dealing with stress by befriending or finding social support
- **Humour**: Making light of a stressful situation may help people to maintain the perspective and prevent the situation from becoming overwhelmed.

Sigmund Freud, a well known psychoanalyst, advocated that humour is an excellent defensive strategy. When one laughs during a tough situation then one feels free of associated stress. The individual highlights the comic aspects in a stressful situation. Laughter & humour creates a sense of relief of stress. Research studies have shown that humour plays a greater role as stress moderator among women than men.

- **Sublimation**: allows an indirect resolution of conflict. Essentially this allows channelling of troublesome emotions into a socially acceptable outlet.
- **Positive Reappraisal**: redirects thoughts to good things leading to personal growth.
- **Displacement**: When an individual redirects emotional feelings from one situation to another which is less stressful.
- **Repression**: Repression is an attempt to suppress or remove all thoughts and feeling of a stressful event.
- **Reaction formation**: This is an attempt to remove unacceptable thoughts by replacing them with the exact opposite situation.
- **Acting out**: when an individual takes maladaptive counterproductive action in a stressful situation.

5.5.3 Solution Focused Coping Strategies

There are times we can do nothing to change a situation, but often we find an opportunity to take action and actually change the circumstances. These types of solution focused coping strategies can be very effective for stress relief. Generally, a small change is all that is required to make huge shift in stress reaction. In such situations one change can lead to other changes, so that chain reaction of positive change is created, opportunities are opened up and life changes significantly. A less stressed mind can easily choose the most beneficial course of action.

Solution Focused Techniques

- Time Management - when one feels overwhelmed by busy schedules.
- Conflict Resolution - Strategies to mitigate the stress in a relationship

5.5.4 Emotion Focused Coping Strategies

Emotion Focused Coping is a mechanism to alleviate distress by minimizing, reducing or preventing the emotional components of a stressor. Emotion focused coping is oriented towards managing emotions that accompany the perception of stress, It aids in becoming less emotionally reactive to the stressor.

These include coping strategies like maintaining a sense of humour and cultivating optimism, where the situation does not change but our perception of it changes. These strategies are very useful in situations where we have no control, but we can change our reactions so that stress is diffused. We need to view stressors as a challenge instead of threat.

The focus of emotion focused coping is to change the meaning of the stressor or transfer attention away from it in order to reduce negative emotions associated with the stressful event. To illustrate, reappraisal or avoidance of negative emotional component of the stressor.

Emotion focused coping is well suited for conditions that are uncontrollable like terminal illness, disability, or loss of loved one. Emotion focused coping strategies are useful for reducing stress when used for short period of time, but become detrimental when used over long periods of time.

Emotion Focused Coping Techniques

Emotion Focused Coping Techniques for stress relief are

- Journaling
- Reframing
- Cognitive distortions
- Meditation

Journaling

Journaling is an emotional outlet for stressful feelings. It enables to brainstorm solutions to problems. It helps to cultivate more positive feelings so that one feels less stressed. Journaling has benefit of wellness and stress management.

Reframing

Re-framing is a technique to change the way we look at things in order to feel better about them. Re-framing does not change the external reality, but helps to view things in a different way and less stressful. Reframing includes the following activities.

- Positive thinking
- Forget powerlessness, dejection, despair, failure
- Focus on strengths
- Looking for opportunities
- Making change

Cognitive Distortions

Cognitive distortions are thoughts that cause individuals to perceive reality inaccurately to reduce the negative impact of stressful situation

Meditation

Meditation helps to relax our body which can reverse our stress response. It focuses on calming body and mind. It is a positive and healthy stress buster. Those who practice meditation tend to be less reactive to stress.

Folkman & Lazarus identified five coping techniques as:

- Escape - avoidance
- Accepting responsibility
- Self control
- Positive reappraisal

Coping is a process rather than an event. Thus, an individual may alternate between several of the above coping strategies in order to cope with a stressful event.

Coping Strategies	Video Link https://www.youtube.com/watch?v=q06OEugs1u8&list=PLjKv4J9tOrjs8Mkm_gQxl1jZkQT2xJ6hr&index=23	Scan with QR Code 
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5.6. COPING MECHANISMS AND MENTAL HEALTH

Effective Coping skills can help improve mental and emotional well-being. People who are able to adapt to stressful or traumatic situations by means of productive coping mechanisms are less likely to experience mental health disorders, like anxiety and depression.

People who persistently default to maladaptive coping mechanisms may eventually have negative impact on mental health and are likely to suffer from mental illnesses like anxiety, alcoholism, substance abuse or drug addiction.

It is imperative that if a person finds it difficult to use effective coping skills, it is better to seek professional help.

Prevention and Resilience Building: Decreasing stressful behaviours is a part of prevention. Some of the common strategies and techniques are: Self-monitoring, material reinforcement, social

reinforcement, social support, self - help groups, contacting with significant others.

Practice for a long life of resilient living-Indian Perspective on Coping

In the western world, coping is seen as an ability to “push through” to keep going at all costs- skipping meals, missing sleep, neglecting friends and outdoor activities - whatever it takes to meet the high expectations one sets for oneself. In our country, coping is like being really honest with one and those closest to us. It means saying “no” and being able to do what is close to one’s heart without any qualms. We need to rework our expectations for our self and our life, earning how much truly one can rather than being greedy for amassing wealth by unfair means to achieve a high stature in society.

The most powerful resource we have at our disposal is our self. We often get enmeshed with our problems and forget to acknowledge our strengths. We need to invest and nurture in our character strengths, like determination, grace, compassion, clarity of mind and creativity. These strengths are helpful coping behavioural strategies which can impact brain structure and functions and keep us stress free.

Tips for Efficient Coping

Coping is a very complex process, that varies according to many variables such as the situation, the evaluation of the situation, and the resources available.

1. Be positive!
2. Be Optimistic
3. Be Organized
4. Be Assertive
5. Be objective
6. Accept yourself
7. Make connections
8. Deal effectively with mistakes
- 9 Deal effectively with successes
- 10 . Develop self-discipline and control

Check Your Progress

Note: (a) Space is given below for writing your answer

(b) Compare your answer with the one given at the end of this unit.5Q.


Name three coping strategies.

.....
.....

6Q. What is Appraisal Focused Coping Strategy?

.....
.....
7Q. Write two defense mechanisms used in Problem Focused coping strategy.

.....
.....
8Q. Write two Emotion Focused Coping Techniques.

Coping mechanisms and mental health	Video Link https://www.youtube.com/watch?v=HBGTcp9nOQk&list=PLjKv4J9tOrjs8Mkm_gQxl1jZkQT2xJ6hr&index=24	Scan with QR Code 
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5.7. SUMMARY

Stress is inevitable element in the fabric of modern life. The key to managing stress involves confronting it rather than avoiding it. Stress management strategies focus on engaging in action oriented, rational, reality based constructive coping.

Coping means one's own conscious effort to solve personal and interpersonal problems in order to master, minimize or tolerate stress. Coping mechanisms are the strategies people use in the face of stress to help manage painful or difficult situations.

Adaptive coping mechanisms are positive and improve functioning while maladaptive coping is ineffective, counterproductive and can have negative consequences. There are three types of coping strategies namely, Appraisal Focused Coping, Problem Focused Coping and Emotion Focused Coping Strategies.

Appraisal Focusing Coping occurs when people modify their ways of thinking. Problem Focused Coping attempts to deal with the cause of the problem. It is aimed at eliminating the source of stress. Emotion Focused Coping is a mechanism to alleviate distress by minimizing emotional component of the stressor. Prevention by resilience building and future oriented proactive coping are the best ways of dealing with stress.

5.8. CHECK YOUR PROGRESS – MODEL ANSWERS

- 1A. Susan Folkman and Richard Lazarus define coping as “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing”.
- 2A. Coping mechanisms are the strategies people often use in the face of stress and/or trauma to help manage painful or difficult emotions.
- 3A. Support: Talking about a stressful event with a supportive person can be an effective way to manage stress. Relaxation: Any number of relaxing activities can help people cope with stress. Relaxing activities may include practicing meditation, progressive muscle relaxation or other calming techniques, sitting in nature, or listening to soft music.
- 4A. Escape: Escape is closely related to avoidance. This technique is used to flee from the anxiety provoking situation. Self-harm: People may engage in self-harming behaviours to cope with extreme stress or trauma.
- 5A. Coping strategies can be classified as:
 1. Appraisal Focused Coping - which is adaptive cognition?
 2. Problem Focused Coping - which is adaptive behavioural / cognition
 3. Emotion Focused Coping - which is adaptive affection?
- 6A. Appraisal focused coping strategies occur when people modify their ways of thinking, by denial of problem or distancing oneself from the stressor.
- 7A. Humour: Making light of a stressful situation may help people to maintain the perspective and prevent the situation from becoming overwhelmed. Sublimation: allows an indirect resolution of conflict. Essentially this allows channelling of troublesome emotions into a socially acceptable outlet.
- 8A. Journaling is an emotional outlet for stressful feelings. It enables to brainstorm solutions to problems. It helps to cultivate more positive feelings so that one feels less stressed.
Journaling has benefit of wellness and stress management. Reframing is a technique to change the way we look at things in order to feel better about them. Re-framing does not change the external reality, but helps to view things in a different way and less stressful.

5.9. MODEL EXAMINATION QUESTIONS

1. Answer the following questions in about 10 lines each

1. What is coping?
2. Explain merits of Adaptive Coping.
3. Maladaptive Coping may work for short term but not effective for long term period. Discuss.

II. Answer the following questions in about 20 lines each

4. What are Coping Strategies?
5. Describe Emotion Focused Coping Strategies
6. Delineate the role of defense mechanisms in coping strategies.

5.10. GLOSSARY

- **Coping:** Deal effectively with something difficult
- **Stress Management:** a wide spectrum of techniques aimed at controlling a person's level of stress.
- **Coping Mechanisms:** Coping skills which are positive and healthy to deal with stress.
- **Adaptive Coping:** Coping strategies people use in the face of stress to manage painful emotions.
- **Maladaptive Coping:** Coping skills that are negative unhealthy and dysfunctional
- **Resilience:** Ability to recover quickly from difficulties

5.11. FURTHER READINGS

1. Anjali Ghanekar (2018) Managing Stress: Best Practices, Everest Publishing House.
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3. Folkman, S., 2013 Stress: Appraisal and coping. In Encyclopaedia of behavioural medicine, pp. 1913 - 1915, Springer New york.
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UNIT- 6: STRESS REDUCTION TECHNIQUES

Contents

- 6.0 Objectives
- 6.1 Introduction
- 6.2 Autogenic training
 - 6.2.1 Requirements of autogenic training
 - 6.2.2 Indications and contraindications
- 6.3. Principle of relaxation
 - 6.3.1 Progressive muscle relaxation
- 6.4 Bio-feedback
- 6.5 Meditation
 - 6.5.1 Mindfulness Meditation
- 6.6 Summary
- 6.7 Check your Progress – Model Answers
- 6.8 Model Examination Questions
- 6.9 Glossary
- 6.10 Further readings

6.0 OBJECTIVES

After studying this unit, you should be able to:

- Describe of various stress reduction techniques
- Explain the theoretical basis underlying these techniques.
- Describe requirements for successful learning of these techniques
- Enumerate the applications of these techniques


6.1 INTRODUCTION

Most of our life is effortful. We plan our goals and we actively take actions and exert effort to achieve those goals. We reflect on the past and anticipate the future. In addition, life is moving and changing. We face variety of demands and challenges in our life. Some are expected and some are sudden. We feel confident and capable of dealing with few demands and feel we do not have enough resources to meet few other demands. To deal with these demands and succeed in life, continuous

planning and changing effort are required. This continuous planning and effort may take toll on our body, mind and soul resulting in experience of stress. we relax when these efforts of life take their toll on our body, mind, and soul. We let go and cease active, goal-directed planning, effort, and appraisal. We focus on just one simple thing. Relaxation

reduces stress. Relaxation renews our mind and body. It improves our health and increases our productivity. There are various stress reduction techniques that aid in reducing stress and renewing our mind and body. This unit describes four such techniques.

1. Autogenic training
2. Relaxation
3. Bio-feedback
4. Meditation

Stress Reduction Techniques	<p>Video Link</p> <p>https://www.youtube.com/watch?v=a7ZCx-IM_Gs&list=PLjKv4J9tOrjs8Mkm_gQxl1jZkQT2xJ6hr&index=25</p>	<p>Scan with QR Code</p> 
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6.2 AUTOGENIC TRAINING

German psychiatrist Johannes Heinrich developed Autogenic training (AT) in 1932. AT is a relaxation technique used to relax body using our mind's ability. It has been frequently used in clinical practice to treat clients with various psycho-physiological problems like tension, headache, migraine, and moderate levels of hypertension, coronary heart disease, bronchial asthma, somatoform pain disorder and anxiety disorders. In healthy individuals, AT results in personal growth and development, increased knowledge of oneself, more effective adjustment and prevention of ill-health.

Auto means 'self' and genic means 'being' so autogenic is a way of 'being yourself'. Autogenic means self-generating or produced from within. This involves inducing a relaxed feeling of warmth and heaviness throughout the body on your own by saying various verbal phrases aimed at encouraging physical and emotional calmness. It is a form of self-hypnosis resulting in restoring homeostasis in the body. AT results in (1) reduced muscle tension in the body; (2) changed style or way thinking; (3) changed content of thinking.

6.2.1 Requirements of autogenic training:

Autogenic training teaches the body and the mind to relax. It is based on four requirements.

1. Reduced external stimulation, i.e. a quiet environment with dim lighting.
2. An attitude of passive concentration, i.e., a state of mind which is relaxed, non-effortful and not concerned with the end result. This means not bringing or making any changes, rather, just allowing the exercise work. If, while engaged in passive concentration, distracting thoughts enter the mind, they can be ignored or gently dismissed. Thoughts which carry insightful images, however, can be seen as a valuable product of the exercise. Passive concentration is a key requirement in other approaches such as meditation and progressive relaxation.
3. The repetition of relaxation-inducing phrases based on six main themes: a. heaviness in the arms and legs, b. warmth in the arms and legs, c. calm and regular heartbeat d. calm breathing, e. warm solar plexus, f. cool forehead. These phrases are repeated in a specific pattern to emphasize their effect and to draw the client's attention away from the external environment. Suggestions of heaviness can be strengthened by images of lead, and those of warmth by images of sunshine or warm water (Rosa 1976). The phrases may be repeated in the following pattern:

I am completely calm (once)

My right arm is heavy (six times) I am
completely calm (once)

My right arm is warm (six times) I am
completely calm (once)

My heart beats calmly and regularly (six times) I am
completely calm (once)

My breathing is calm and regular ... it breathes me (six times) I am
completely calm (once)

My abdomen is flowingly warm (six times) I am
completely calm (once)

My forehead is pleasantly cool (six times) I am
completely calm (once)

These formulas should not be spoken aloud; they are to be repeated gently in one's mind. Alternatively, one can picture or visualize seeing that statement written can also be read by or imagine as being instructed by the other person. Speaking these statements aloud would interfere with learning of AT.

Mental contact with the body part to which the phrase refers,

Central to AT is the principle of client control: the trainer describes the method, but it is the trainee who carries it out. To reinforce this notion, the phrases are written in the first person. The instructor reads the relevant phrase using a slow and soothing tone and the trainee repeats it mentally

or vocally three times. About 30 seconds are assigned to each phrase and a further 35–40 seconds for continued focusing of attention by the trainee.

After working through the allotted phrases, a cancellation procedure is carried out as a safeguard against any deep-trance state. The whole routine is then repeated three times. This marks the end of the lesson and followed by a discussion and debriefing session with the client. Schultz & Luthe (1969) took 6 months to complete the instruction. The need to save time and money has, however, led to reductions in length, and now the full program is completed in a few weeks. The phrases themselves may be interspersed with relevant messages, for example, ‘I feel at peace’ or ‘I am relaxed’.

AT practice results in relaxed and trance-like states where mental defenses are lowered. During the trance state the client may introduce self-affirming statements or affirmations. These can express confirmations of his/her worth or may reinforce his/her determination to make certain changes in her behavior. Examples include I believe in myself (for those lacking in confidence), I have control over what I eat (for compulsive eaters), smoking is an unhealthy habit (for people who wish to quit smoking), my mind is quiet and serene (for anxious individuals). Using these statements when mental defenses are lowered results in these statements becoming internalized.

6.2.2 Indications and contraindications:

AT is indicated in individuals with functional vegetative dysfunctions, functional components of organic disorders, pain, psychosomatic and neurotic symptoms, exaggerated reactions of fear or anxiety, or sensitivity etc. AT is indicated in individuals who indicated traumatic experiences verbally or on assessment sheet, who are high on emotional excitement level and who report persistent occurrence of differentiated mental images during AT.

AT is contraindicated in persons with poor ego-strength (an individual’s ability to maintain their identity and sense of self in the face of pain, distress, and conflict). AT is not recommended for children under the age of five, people who lack motivation, or those with severe mental or emotional disorders. AT practice is known to reduce hypertension in most and increase hypertension in few. If you have high or low blood pressure, you should check with your medical doctor to be sure that AT is regularizing it. Before starting AT, it is advisable to have a physical exam done by your medical doctor regarding physiological effects AT will likely have. Individuals with serious diseases such as diabetes, hypoglycemic conditions, or heart conditions should be under the supervision of a medical doctor while in AT.


Check Your Progress

Note: (a) Space is given below for writing your answers

(b) Compare your answer with the one given at the end of this unit. 1Q.

What is Autogenic Training?

.....

Autogenic Training	<p>Video Link</p> <p>https://www.youtube.com/watch?v=vF1JlBmjBpc&list=PLjKv4J9tOrjs8Mkm_gQxl1jzkQT2xJ6hr&index=26</p>	<p>Scan with QR Code</p> 
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6.3 PRINCIPLES OF RELAXATION

The key to all forms of relaxation is sustained passive simple focus, the opposite of active, goal-directed planning, effort, and appraisal we use to succeed. The key to relaxation is sustaining attention while diminishing overt behavior and covert or cognitive activity. To elaborate, all forms of relaxation, both secular and spiritual, involve the basic attention, the act of sustaining passive simple focusing. Sustaining, uninterrupted, the state of passive simple focus is made easier by practicing a formal relaxation technique.

Research has shown that all forms of relaxation lead to following states of mind or relaxation states (Smith, 1999).

- Sleepiness (feeling “drowsy, napping”).
- Disengagement (feeling “distant, far away, indifferent”).
- Physical Relaxation (feeling “physically limp, warm, and heavy”).
- Mental Quiet (“Mind is silent, quiet, free of thought”).
- Mental Relaxation (feeling “at ease, peaceful”).
- Strength and Awareness (feeling “energized, confident, focused, clear, aware”).
- Joy (feeling “happy, joyful; having fun”).
- Love and Thankfulness (feeling “love for others, generally thankful”).
- Prayerfulness (feeling “spiritual, reverent, prayerful”).

The above-mentioned states not only are the benefits of relaxation, they are also necessary to make relaxation work. Relaxation exercise will have little effect if it doesn’t produce appropriate set of relaxation states.

Success of relaxation exercise also depends upon relaxation related cognitions. Following are the beliefs related to relaxation that determine the course and benefits of relaxation training. These are somewhat philosophical perspectives conducive to deeper and more generalized relaxation.

Following are such beliefs identified in research.

- Optimism (“View the world with optimism.”)
- Acceptance (“Accept things that cannot be changed.”)
- Honesty (“Be honest with yourself and others.”)
- Taking It Easy (“Know when to let go and take it easy.”)
- Love (“Relate to others with love and compassion.”)
- Inner Wisdom (“Trust the healing wisdom of the body.”)
- God (“Trust God’s love and guidance.”)
- Deeper Perspective (“Put your concerns in deeper perspective.”)

There are certain negative attitudes such as “relaxation is laziness,” “relaxation is hypnosis”. They contribute to avoiding relaxation or prematurely abandoning a relaxation program. Progressive muscle relaxation is one of the evidence based and frequently used form of muscle relaxation. This technique is described below.

6.3.1 Progressive Muscle Relaxation:

Progressive relaxation is a group of techniques for reducing physiological manifestations of anxiety. It involves teaching a person to become aware of muscle tension and to release quickly that tension. One common system of progressive relaxation involves tensing and releasing various muscle groups until a deeply relaxed state can be achieved by simply recalling the feeling of relaxed muscles.

One cannot experience psychological stress and the feeling of relaxation and well-being in one’s body at the same time. Progressive muscle relaxation reduces pulse rate, blood pressure, and the startle reflex, as well as reducing perspiration and respiration rates. Deep muscle relaxation, when successfully learnt, can be used as an anti anxiety pill.

Edmund Jacobson, a Chicago physician, published the book Progressive Relaxation in 1929. He described the deep muscle relaxation technique as requiring no imagination, willpower, or suggestion. His technique is based on the premise that the body responds to anxiety-provoking thoughts and events with muscle tension. This physiological tension, in turn, increases the subjective experience of anxiety. Deep muscle relaxation reduces physiological tension and is incompatible with anxiety: The habit of responding with relaxation blocks the habit of responding with anxiety.

Jacobson’s original progressive relaxation procedure in its original form takes many months or even years to learn. Joseph Wolpe (1958) developed a short form for these procedures that included verbal suggestions to relax. He used this shortened form of relaxation as part of his systematic desensitization technique which he developed to treat phobias. He found that in the relaxed state, clients were able to tolerate and respond adaptively to situations they were afraid of. This Shortened form can be learnt in a matter of days or weeks.

Theoretical basis:

Jacobson (1929) theorized that continuous experience of stress results in chronic tension. This chronic tension produces excessive strain on the musculature and sustained increase in central nervous system activity which is associated with development of various pathological conditions. Deep muscle relaxation reduces psychological distress by decreasing the central nervous system activity.

Jospeh Wolpe (1958) theorized that an individual cannot experience anxiety and relaxation at the same time as they physiologically incompatible. Relaxation is an incompatible response that reduces anxiety or stress. The physiologist Ernst Gelhorn gave a comprehensive explanation of how progressive muscle relaxation work. He theorized that anxiety/ stress is associated with increased activity in sympathetic nervous system and the reticular system. Input into the reticular system and sympathetic nervous system comes from fibers in the skeletal muscles. progressive relaxation reduces autonomic arousal (e.g., decreased heart rate and blood pressure) by reducing input to the reticular system and therefore, the sympathetic nervous system. It results in reduced cognitive activity, alertness and feeling of nervousness.

Procedure:

Progressive relaxation practice to be done in a quiet, dimly lit room with little possibility of disturbance. This can be practiced lying on a bed or sitting in a chair that completely supports the body, making possible tension and relaxation of all required muscle groups. The client is encouraged to wear loose-fitting clothing to prevent the distraction of uncomfortable attire.

Progressive relaxation training involves teaching the client to tense and relax a series of 16 muscle groups: (a) right hand and forearm; (b) right biceps; (c) left hand and forearm; (d) left biceps; (e) forehead; (f) upper cheeks and nose; (g) lower cheeks and jaws; (h) neck and throat; (i) chest, shoulders, and upper back; (j) abdominal or stomach region; (k) right thigh; (l) right calf; (m) right foot; (n) left thigh; (o) left calf; and (p) left foot.

To begin, client is asked to focus on the first muscle group and tense this muscle group for 5 to 7 seconds and relax them for 20 seconds. Client is asked to focus on the feeling of tension in muscle group tensed when it is tensed and on feeling of relaxation and soothing when muscle group is relaxed. This procedure is repeated maximum 4 times with each muscle group until complete relaxation is achieved in that muscle group before moving on to the other muscle group. Client is asked to indicate whether relaxation is achieved or not by lifting a finger. Therapist uses suggestion such as “loose and relax”, “observe the sensations of relaxation”, “notice what it is like to have tension/relaxation in these muscles” etc. to facilitate the attention of the client on the muscular experience. After all muscle groups are completed

therapist allows the client to continue in the state of relaxation and then the termination process begins. The therapist guides the client out of the relaxed state by asking the client to begin moving muscle groups and asking them to count backwards from 20 to 1 in their mind. Relaxation is a skill that cannot be mastered without practice. Therefore, the client should be encouraged to practice twice a day for

15 to 20 min

Application:

Relaxation was found to be effective in anxiety management, pain management, managing stress, treating insomnia, enhancing health, increasing work productivity and sports performance. And relaxation is used in just about every helping profession—psychology, medicine, nursing, counseling, sports, and many others.


Check Your Progress:

Note: (a) Space is given below for writing your answers

(b) Compare your answer with the one given at the end of this unit.2Q.

Write the Application of Progressive Muscle Relaxation.

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Progressive Muscle Relaxation	Video Link https://www.youtube.com/watch?v=jfaDosNdBcQ&list=PLjKv4J9tOrjs8Mkm_gQx1jZkQT2xJ6hr&index=27	Scan with QR Code 
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6.4 BIO-FEEDBACK

Biofeedback is a treatment technique which uses different instruments to measure various physiological processes and translates them in to visual and auditory signals which then are presented in a meaningful form as feedback to the individual. The individual then uses this feedback to bring changes in their body processes in order to improve their health. Bio-feedback results in bringing involuntary body systems under voluntary control. Bio- feedback therapy is a non-drug treatment in which patients learn to control bodily processes that are normally involuntary, such as muscle tension, blood pressure or heart rate. In bio-feedback, the patient is connected to electrical sensors that help him/her receive information (feedback) about his/herbody. Bio-feedback is a unique treatment in that it requires use of instrumentation and knowledge of anatomy and physiology.

During a biofeedback session, electrodes are attached to the patient’s skin. Finger sensors can also be used. These electrodes/sensors send signals to a monitor, which displays a sound, flash of light, or image that represents patient’s heart and breathing rate, blood pressure, skin temperature, sweating, or muscle activity. When a person is under stress, these functions change. The heart rate of

the person speeds up, muscles tighten, blood pressure rises, starts sweating, and the breathing quickens. The patient can see these stress responses as they happen on the monitor, and then get immediate feedback as he tries to stop them. A biofeedback therapist helps the patient to practice relaxation exercises to control different body functions. For example, he might use a relaxation technique to turn down the brainwaves that activate when he has a headache. Eventually, patients learn how to control these processes without the use of extra equipment. Major instruments used in bio-feedback are electromyography (EMG).

Thermistor Electroencephalograph (EEG). The EMG is used to measure muscle tension and it measures electrical energy generated when contract muscles; Thermistor is used to measure skin temperature and sweat gland activity. Sweat gland activity reflects the activity of the sympathetic nervous system uncontaminated by the parasympathetic nervous system. The thermistor is attached to finger or toe. Electroencephalograph (EEG) is used to measure the activity of the different parts of the brain.

Theoretical basis:

Bio-feedback is based on learning theory of operant conditioning. In bio-feedback the information provided by the system is a consequence of the behavior. With proper instructions, individuals will perceive the feedback signal that shows changes in the physiology as reinforcement and will alter their physiological/body processes to bring the reinforcing stimulus into their environment. Bio-feedback is also based on information theory which states that a variable cannot be controlled unless the information about the variable is available to the controller”. A client can control the physiological process about which he/she has information about.

Application:

Bio-feedback is an established treatment in disorder such as ADHD, anxiety disorders, asthma, chronic back pain, diabetes mellitus, essential hypertension, fecal and urinary incontinence, fibromyalgia, irritable bowel syndrome, motion sickness, muscle rehabilitation, reynaud’s disorder, tension and migraine headaches. There is also substantial research support for bio-feedback in the treatment of insomnia, seizure disorders, esophageal spasm and writers’ cramp.


Check Your Progress:

Note: (a) Space is given below for writing your answers

(b) Compare your answer with the one given at the end of this unit.3Q.

What is the application of Biofeedback Technique?

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Biofeedback	<p>Video Link</p> <p>https://www.youtube.com/watch?v=vcb6FSYMvZM&list=PLjKv4J9tOrjs8Mkm_gQx1jZkQT2xJ6hr&index=28</p>	<p>Scan with QR Code</p> 
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6.5 MEDITATION

One ancient practice that has shown tremendous transformations is the practice of meditation. It is a practice that is done by an individual that trains the mind and induces an altered state of consciousness.

Meditation is the intentional practice of non-judgmentally paying attention on one thing at a time. Exactly what that thing might be is relatively unimportant and varies from one tradition to the next. Mindfulness meditation is the evidence-based meditation practice and it has been widely used in stress management and treatment of various psychological disorders. Mindfulness has its roots in Eastern contemplative traditions and is most often associated with the formal practice of mindfulness meditation. In fact, mindfulness has been called the “heart” of Buddhist meditation (Kabat-Zinn, 2003).

6.5.1 Mindfulness Meditation:

John Kabat-Zinn (1994) developed mindfulness meditation. He defined mindfulness as “paying attention in a particular way on purpose in the present moment and non-judgmentally”. This definition talks about three components of mindfulness meditation. They are a) on purpose, b) paying attention c) in a particular way.

The purpose refers to having intention of why one is doing meditation. The purpose can be stress management, self-regulation, self-exploration or self-liberation. Research has shown that people achieve the goal with which they practice mindfulness meditation. Paying attention refers to observing the operations of one’s moment-to moment, internal and external experience. It involves learning to attend to the contents of consciousness, moment by moment. In a particular way refers to having an attitude of openness, non-judgmental and compassionate attitude. It involves observing the experience as it is without any judgement, pre-conceived ideas and biases.

Mechanisms of mindfulness meditation:

Mindfulness results in desired benefits through bringing shift in one’s perspective towards one’s experiences, facilitating acceptance of their experiences rather than struggling with them and reacting

to them, producing relaxation response, developing cognitive, emotional and behavioral flexibility as opposed to rigidity and exposure to various irrational and negative thoughts in a detached manner without getting stuck in them. It brings changes in how one relates to one's experiences. This results in seeing them as just experiences not them. That is "I am not my thought", "I am not my pain", "negative thoughts and emotions are just part of me, but they are not me.

Requirements for successful mindfulness meditation:

Success of mindfulness depends on regular practice as it is a skill. Like other stress reduction techniques, success of mindfulness also depends on 1. a relatively quiet environment

2. a mental device that provides a constant stimulus 3. a comfortable position 4. a passive attitude and 5. Openness

Mindfulness is the basic human ability to be fully present, aware of where we are and what we're doing, and not overly reactive or overwhelmed by what's going on around us. Practicing mindfulness involves breathing methods, guided imagery, and other practices to relax the body and mind and help reduce stress.

How to Do It

1. Find a quiet and comfortable place. Sit in a chair or on the floor with your head, neck, and back straight but not stiff.
2. Try to put aside all thoughts of the past and the future and stay in the present.
3. Become aware of your breath, focusing on the sensation of air moving in and out of your body as you breathe. Feel your belly rise and fall, and the air enter your nostrils and leave your mouth. Pay attention to the way each breath changes and is different.
4. Watch every thought come and go, whether it be a worry, fear, anxiety or hope. When thoughts come up in your mind, don't ignore or suppress them but simply note them, remain calm and use your breathing as an anchor.
5. If you find yourself getting carried away in your thoughts, observe where your mind went off to, without judging, and simply return to your breathing. Remember not to be hard on yourself if this happens.
6. As the time comes to a close, sit for a minute or two, becoming aware of where you are. Get up gradually.

Application:

Mindfulness has been successfully used in stress management and is an established treatment in various psychiatric disorders such as depression, anxiety, somatoform disorders, borderline personality disorder, substance addictions, and various behavioral issues. It has also been successfully used in migraine headache, chronic pain etc.


Check Your Progress:

Note: (a) Space is given below for writing your answers

(b) Compare your answer with the one given at the end of this unit.4Q.

Define Mindfulness Meditation.

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Mindfulness	Video Link https://www.youtube.com/watch?v=CKWCrHudt9k&list=PLjKv4J9tOrjs8Mkm_gQxl1jZkQT2xJ6hr&index=30	Scan with QR Code 
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6.6 SUMMARY

In this chapter, stress reduction techniques, autogenic training, relaxation, bio-feedback and meditation were discussed. As all these techniques are skills to be learned, success of these techniques depends upon regular and scheduled practice. The common requirements for the success of these techniques are a quiet environment, a passive focus, a favorable attitude towards the technique, and openness. All the stress reduction techniques discussed in this unit are found to be effective in stress and anxiety management and have been established in the treatment various psycho-physiological disorders and psychiatric conditions.

6.7 CHECK YOUR PROGRESS – MODEL ANSWERS

- 1A. Auto means ‘self’ and genic means ‘being’ so autogenic is a way of ‘being yourself’. Autogenic means self-generating or produced from within. AT is a relaxation technique used to relax body using our mind’s ability. This involves inducing a relaxed feeling of warmth and heaviness throughout the body on your own by saying various verbal phrases aimed at encouraging physical and emotional calmness. It is a form of self-hypnosis resulting in restoring homeostasis in the body. Autogenic Training results in (1) reduced muscle tension in the body; (2) changed style or way thinking; (3) changed content of thinking.
- 2A. Relaxation was found to be effective in anxiety management, pain management, managing stress, treating insomnia, enhancing health, increasing work productivity and sports performance. And

relaxation is used in just about every helping profession—psychology, medicine, nursing, counseling, sports, and many others.

3A. Bio-feedback is an established treatment in disorder such as ADHD, anxiety disorders, asthma, chronic back pain, diabetes mellitus, essential hypertension, fecal and urinary incontinence, fibromyalgia, irritable bowel syndrome, motion sickness, muscle rehabilitation, reynaud’s disorder, tension and migraine headaches. There is also substantial research support for bio-feedback in the treatment of insomnia, seizure disorders, esophageal spasm and writers’ cramp.

4A. John Kabat-Zinn (1994) developed mindfulness meditation. He defined mindfulness as “paying attention in a particular way on purpose in the present moment and non- judgmentally”. This definition talks about three components of mindfulness meditation.They are a) on purpose, b) paying attention c) in a particular way.

6.8 MODEL EXAMINATION QUESTIONS

I. Answer the following questions in about 10 lines each

1. What are the Indications and contraindications of Autogenic Training?
2. Explain Progressive Muscle Relaxation Technique.
3. Describe Mechanisms of mindfulness meditation.

II. Answer the following questions in about 20 lines

1. Discuss the Biofeedback Technique.
 2. Enumerate the Principles of Relaxation.
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6.9 GLOSSARY

- **Therapy:** treatment application of various treatment techniques
- **Relaxation:** is about resting your mind and body. It is a useful method for managing anxiety, stress and the fight/flight response.
- **Autogenic Training:** is a relaxation technique used to relax body using our mind’s ability.
- **Biofeedback:** Biofeedback therapy is a non-drug treatment in which patients learn to control bodily processes that are normally involuntary, such as muscle tension, blood pressure, or heart rate.
- **Progressive Muscle Relaxation:** One method of reducing muscle tension that people have found helpful is through a technique called progressive muscle relaxation. In PMR exercises, you tense up particular muscles and then relax them, and then you practice this technique consistently.

- **Meditation:** is the intentional practice of non-judgmentally paying attention on one thing at a time.
- **Mindfulness:** as “paying attention in a particular way on purpose in the present moment and non-judgmentally”.

6.10 FURTHER READINGS

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