

MANAGING STRESS

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School of Social Sciences
Indira Gandhi National Open University, Delhi

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Block I	Introduction to Stress
Unit 1	Stress: An Introduction
Unit 2	Models of Stress
Unit 3	Factors Contributing to Stress Proneness
Unit 4	Effects of Stress
Block II	Stress Management
Unit 5	Coping with Stress
Unit 6	Stress Management Techniques I
Unit 7	Stress Management Techniques II
Unit 8	Stress Management Techniques III

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BPCS 186 : MANAGING STRESS

The course on Managing Stress (BPCS 186) is a 4 credits course offered under Bachelors Degree Programme of IGNOU. It is a Skill Based Elective offered in the IVth Semester. The main objectives of this Course are to acquaint learners with the concept, nature and manifestation of stress and to help them learn the strategies of managing stress. The course is divided into two Blocks. Each of these Blocks represents a specific theme which is discussed in terms of Units. The Units are arranged in a logical sequence so as to cover the main aspects of each theme.

Before proceeding to read the units, you are advised to go through instructions about how to read the course material. Given below is the explanation of the organization and sequencing of a Unit.

Organization and Sequencing of a Unit

The following is the structure of each Unit:

- 1.0 Objectives
- 1.1 Introduction
- 1.2 Section (Theme of the section)
 - 1.2.1 Subsection of 1
.....
- Check Your Progress I
- 1.3 Section (Theme of the section)
 - 1.3.1 Subsection of 2
.....

Check Your Progress II

Let Us Sum Up

References

Key Words

Answers to Check Your Progress

Unit End Questions:

As the scheme suggests, each unit is divided into sections for easy reading and better comprehension. The numbering and length of each section and subsection may vary from one unit to the other, depending upon the depth of information in each unit. Each section is indicated by BOLD CAPITALS and each sub-section by a relatively smaller but bold typeface. Divisions within the sub-sections are in relatively smaller bold typeface so as to make it easy for you to understand.

Let us now discuss each section of a Unit.

Objectives

We begin each Unit with the section Objectives. It tells you briefly about the objectives of the Unit and what you will learn after you study the Unit.

Introduction

The section Introduction will mainly focus on introducing the theme of the present Unit.

Illustrations

There are several illustrations in each unit in the form of figures and diagrams. The main purpose of these illustrations is to make the study comprehensive and interesting.

Check Your Progress

We have given self-check exercises under the caption Check Your Progress at the end of main sections. You can provide your answers in the space given below each question/ exercise. You will be tempted to have a glance of the main text as soon as you come across an exercise. But we do hope that you will resist this temptation and turn to the main text only after completing the answers. You should read each unit and note the important points in the margin provided in the course material. This will help in your study. It will also help you to answer the self-check exercises and the assignment questions, as well as help in revising your course before appearing for your Term End Examination (TEE).

Let Us Sum Up

This section of each unit under the heading Let Us Sum Up summarises the whole Unit for the purpose of ready reference and recapitulation.

References

We have given a list of references at the end of each Unit. This is a list of books and articles used by the course writers to prepare the Units. This reflects that your course material is based on a wide spectrum of literature available on a particular theme, related to your course. This also informs you of the wide literature available in the particular area of study. If interested in widening your knowledge, you may look for the mentioned references. Each reference mentions the name of the author, year of publication, title of the book/article, name of publisher and place of publication. Suggested readings help you to increase your level of understanding of a particular theme in each Unit.

Key words

The key words at the end of the Unit explain the basic ideas, technical terms and difficult words.

Answers to Check Your Progress

Answers to Check Your Progress are given in this section.

Unit End Questions

Besides Check Your Progress, we have given Unit End Questions in each unit. Practicing these questions will help you in answering assignments and Term End Examination Question Paper, though the pattern and style of questions asked may vary.

Audio and Video Aids

Some Units have been selected for the audio and video programmes to supplement the printed material. This will help you to understand the Units with greater clarity.

Apart from this, you may also access IGNOU's FM radio channel, Gyanvani (105.6 FM), which is available across many cities in India, for regular programmes, related to themes on Psychology. You can listen to the live discussions by faculty and experts on the topic of the day and interact with them through telephone, email, and through chat mode.

You may also watch Gyandarshan TV channel (free to air educational channel), for programmes related to topics on Psychology. The schedule of Gyanvani and Gyandarshan is displayed on www.ignou.ac.in. The radio and TV channels may also be accessed on Gyandhara, webcast facility for Gyanvani and Gyandarshan, provided by the University.

Assignments

You will receive a set of assignments for the whole programme. These are Tutor Marked Assignments, which are to be submitted to the respective Study Centre after completion. These assignments will be evaluated by an academic counsellor from your Study Centre. Ensure that you complete all your assignments because the grades that you get in each of these assignments are included in the final evaluation of your degree. Before answering the assignments, read all the Units and additional material (if available).

Guidelines for assignments

While working on an assignment, kindly ensure the following points,

1. Clearly write your Enrollment number.
2. Answer them in your handwriting and in your own words (do not copy the sentences from the course material or any other source).
3. Write clearly and neatly so that it is easy to read your answers.
4. Leave margins on one side of your answer-sheets so that evaluator may write his/ her comments on your performance.
5. Organise your answers well based on the question asked.
6. You will submit the assignments at your Study Centre on or before the date mentioned as per the admission cycle. Kindly check the dates from www.ignou.ac.in or your Regional Centre website.

Term End Examination (TEE)

Consider the following points while answering TEE.

1. Questions need to be answered in one's own words and they need to be focused based on the question asked.
2. Answer the questions keeping in mind the word limit.
3. Organise answers well based on the question asked and also keep in mind any bifurcation given in the marks.
4. Ensure that you mention correct question numbers for respective answers.

Preparation of Course Material

The syllabus of course material BPCS 186 is designed by an Expert Committee (see page 2 of this course) and prepared by Course Preparation Team which comprises the author(s) of units, content editor(s), language editor, and the course coordinator. The expert committee selected the themes and sub-themes of the blocks and units, keeping in view the prescribed syllabi of UGC (CBCS model). The authors of units have provided their expertise in elaborating them in the form of the main text of each unit. The content editor has carefully examined the course contents and has made an attempt to make the material clear and comprehensible.

For any query or feedback related to the course, you may kindly contact the Course Coordinator at,

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COURSE INTRODUCTION

Dear Learner,

Managing Stress (BPCS 186) is a 4 credits course offered under Bachelors Degree Programme of IGNOU. It is Skill Based Elective offered in the IVth semester.

To provide an overview of this course, the course structure is divided into two blocks.

Block 1: Block 1 of this course is divided into four Units; Unit 1, 2, 3 and 4.

Unit 1 is titled 'Stress: An introduction' and this unit will serve as a basis to rest of the units that will be covered in this course. The unit will cover the concept, nature, sources and measurement of stress. Discussion on the concept and nature of stress will provide a fair idea about the term and will set a framework for comprehension of other topics and subtopics discussed in this course. Sources of stress mainly focus on frustration, conflict of motives and pressure, that can be termed as general sources of stress. Measurement of stress is relevant and necessary for effective diagnosis of stress. There are various ways in which stress can be measured. Varied methods of measurement like physiological measures, psychological tests, checklist and interview will be discussed under this unit.

Unit 2 will deal with models of stress and will cover the Fight or Flight response by Cannon, General Adaptation Syndrome put forth by Selye, Cognitive Appraisal Model by Lazarus and his colleagues, Person-Environment Fit Model that was proposed by French, Harrison and Caplan, Genetic Constitutional Theory and the Diathesis- Stress Model.

Unit three mainly focuses on the factors contributing to stress proneness including Type A personality, hostility, perfectionism, procrastination and learned helplessness/ learned pessimism. Various moderators of stress will also be discussed in this unit. The moderators play an important role in relationship between the stress and corresponding reactions. These moderators may lead to individuals experiencing high or low stress. Various moderators of stress including personality, locus of control, social support, optimism and pessimism and gender and culture will be covered in the unit.

Unit four will highlight the effect of stress. Mainly the effect of stress on health, performance and productivity and on relationships will be covered in this unit.

Block 2: This block constitutes Unit 5, 6, 7 and 8.

Unit 5 is related to coping with stress and covers coping and coping strategies. In this unit not only the concept of coping will be discussed but various coping strategies will also be highlighted.

Unit 6, 7 and 8 will cover various stress management techniques. In the previous block we studied about stress as a concept and in the present block we will cover how to manage and deal effectively with stress.

Unit 6 will cover relaxation techniques, meditation, Yoga, mindfulness and biofeedback.

Unit 7 will mainly cover cognitive restructuring and time management.

And Unit 8 will cover interpersonal skills and problem solving.

Some suggestions and tips to enhance your study of this course are as follows:

- Ensure that the basic concepts, given in this course, are clear. If you don't understand the terms, read again. The first unit is a foundation to rest of the units, so ensure that you read and learn this unit first.
- After you read each section, try to attempt the Check Your Progress for that section and cross check your answers from Answers to Check Your Progress given in the later section of the unit. This will provide you with a feedback on what you have learned and what you need to further focus on and understand.





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BLOCK**1****BLOCK 1 INTRODUCTION TO STRESS**

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UNIT 1 : STRESS : AN INTRODUCTION*

Structure

- 1.0 Objectives
- 1.1 Introduction
- 1.2 Concept of Stress
- 1.3 Nature of Stress
 - 1.3.1 Types of Stress
 - 1.3.2 Symptoms of Stress
- 1.4 Sources of Stress
- 1.5 Measurement of Stress
- 1.6 Let Us Sum Up
- 1.7 References
- 1.8 Key Words
- 1.9 Answers to Check Your Progress
- 1.10 Unit End Questions

1.0 OBJECTIVES

After reading this Unit, you will be able to:

- explain the concept of stress.
- describe the nature of stress.
- discuss the sources of stress.
- describe measurement of stress.

1.1 INTRODUCTION

Nirav was a very studious boy. He pursued MBA and was a topper in his institute. He was also able to secure a good job as a manager in one of the leading multinational companies. Nirav was very excited about his new job. Though, as he started working, his parents and friends started noticing change in Nirav's behaviour. He was always irritated, angry, barely interacted with any one, was not eating and sleeping adequately. His colleagues also noticed the change in his behaviour as they felt that otherwise effective and jovial Nirav was becoming secluded and that was affecting his performance at work.

Samina was eldest child in her family and was a bright student. She wanted

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to become a doctor when she grew up. However, her mother fell very sick and Samina had to leave her studies and take care of her ailing mother and her three younger siblings. Subsequent to death of her mother, Samina was not same as before. She started falling sick often and doctors could find no physiological reasons for her sickness. She also lost interest in her studies and in fact did not even bother to appear for her examination.

Ravi was sure that he will be promoted to senior manager's post after this year's performance appraisal. He had worked very hard and felt that he deserved the promotion. However, as the news with regard to promotions in his department was announced, he was shocked to see that he was not promoted. Ravi felt very frustrated after this news as he felt that his work and sincerity were not appreciated by his superiors. He lost interest in his job and his productivity started declining. The frustration experienced by him also affected his family relationship and he started having fights with his spouse. This led to further frustration and anger and Ravi ended up having a psychological breakdown.

Above are three different examples of individuals who experienced stress in one way or other in their lives. Nirav was stressed due to the job pressure that he experienced, with which he was not able to cope, and that had an impact on his wellbeing. A very negative and tragic life experience of losing a parent led Samina to experiencing stress that affected her physiological wellbeing. Stress as a result of frustration experienced by Ravi led him to become psychologically distressed and experiencing a psychological breakdown. The three examples also imply that there are various reasons why a person may experience stress and the symptoms of stress as displayed by the individuals also vary. Though, one thing can be stated clearly, that is, if stress is not identified and managed in time or on regular basis it can have detrimental effects on the individual. His / her functioning and productivity will decrease and it can also have a negative impact on the significant people in his/her life like parents, spouse, children, friends and even colleagues. Stress has a negative impact on both psychological and physiological wellbeing of a person and thus needs to be dealt with adequately using suitable intervention strategies. Though, before the techniques of stress management are discussed, it is important to understand what is stress, its nature, its symptoms and sources.

In the present unit we will make an attempt to understand the concept of stress and will also focus on the symptoms and sources of stress. Further, measurement of stress will also be discussed.

1.2 CONCEPT OF STRESS

After reading the above examples you may have developed some idea about what is stress. In the present section of this Unit we will discuss about the concept and nature of stress so as to develop a better understanding about this term.

The term stress has been derived from 'stringere' that is a Latin word and means 'to draw tight' (Cox, 1978). It has today become a very commonly used term in every context whether school, workplace, day to day life

and so on. We often come across people who say that they are stressed or experiencing stress in their lives. We ourselves experience stress often.

The origins of stress can mainly be traced to physical sciences (Schafer, 1998). During the 17th century it was exceedingly used to denote affiliations and hardships experienced by individuals and during the 18th century it came to be described mainly in terms of pressure, strain or force (Cartwright and Cooper, 1997). The initial conceptualisation of stress mainly focused on stress as an external stimulus. Though later it came to be described as a response of an individual to certain disturbances. The study carried out by Cannon can be mentioned in this context, where he mainly studied the fight and flight reaction. The focus of the study by Cannon was on the effect that stress has on animals as well as humans. Cannon also observed physiological changes in the participants of his study and he attributed these changes, as displayed by individuals, to stress.

Hans Selye (1974) described stress as a response of the body to certain demand that is made on it and he further stated that this response was non-specific. Baum et al. (1981) have defined stress as a “process in which environmental events or forces, called, stressors, threatens an organism’s existence and wellbeing”.

Schafer (1998, pg. 6) defined stress as “arousal of mind and body in response to demands made on them”.

Both the above definitions focus on the demand and an individual’s response to the same. Thus, the onus here is on the response of the individual. Though the first definition focuses only on body the second definition brings in the important aspect of mind, implying that stress is a response of both body as well as mind.

Yet another definition of stress was given by Lazarus and Folkman (1984, pg. 19). They define stress as “a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his/ her resources and endangering his/ her wellbeing”. This definition emphasises the relationship between person and the environment, though here the stress is presented in a negative light, stress is not always negative and may have its own advantages. Lazarus and Folkman put forth the transactional model of stress and coping that focuses on how an event is interpreted or appraised by an individual, which in turn will determine the stress experienced by the individual. This model highlights that stress and coping with stress as being interrelated processes.

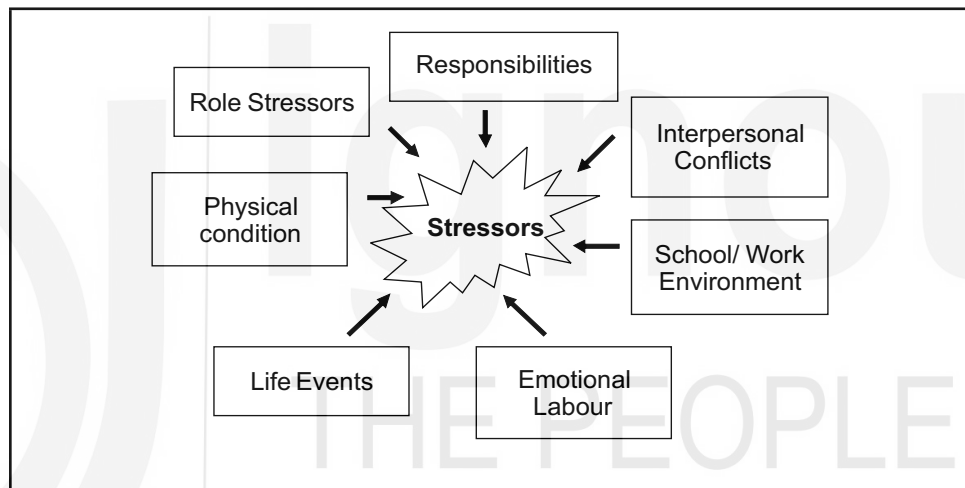
Truxillo et al. (2016, pg. 440) defined stress as “the body’s reaction to a change that requires a physical, mental or emotional adjustment or response”. This definition has further elaborated the response as being physical, mental or emotional in nature.

The above definitions mainly looked at stress from a western perspective. If we describe stress from an eastern perspective, it denotes absence or lack on inner peace (Seaward, 2014). And thus, the stress managing techniques would also focus on achieving the inner peace.

Introduction to Stress

While discussing the concept of stress it is also important to understand the term stressor, that can be described as situation, event, person or anything that leads to the stress response. Gerrig and Zimbardo (2005, pg. 430) defined stressor as a stimulus event that places a demand on an organism for some kind of adaptive response". At a given point of time an individual may have various stressors in his/ her life. It could be an upcoming official event, an impending report, examination and so on. Stressors can also be described as varied external and internal stimuli that may lead to stress. Stressors can be categorised into physical, psychological, environmental, social and as life events. Stressors could range from adjusting to change, financial issues and problems, life events like separation, divorce, illnesses or death of a loved one, managing varied roles and responsibilities, facing frequent challenging situations and even technological changes and development. Some of the stressors that an individual may have in one's life are shown in figure 1.1.

Fig. 1.1: Showing various Stressors



Check Your Progress I

- 1) Define Stress

1.3 NATURE OF STRESS

Stress as such is like salt and pepper and a life without stress would be without motivation, as stress often motivates us to work in certain direction. Thus, without any stress in life, any individual will not be motivated to perform or carry our varied activities. As, more salt than required can make food taste bad. In a similar manner, stress beyond optimal level can have a negative effect on the individual and will interfere with his/ her day today functioning. When stress experienced exceeds the optimal level of an individual, the individual may find it exceedingly difficult to cope with it and it can have detrimental effects on the wellbeing (both psychological and

physiological) and performance and productivity of the individual. Stress is not altogether negative and does have numerous advantages.

It is therefore important that stress is managed and is kept below the optimal level.

In the present section of the Unit, we will discuss about the types and symptoms of stress.

1.3.1 Types of Stress

Stress can be categorised into different types as follows:

- 1) **Eustress:** Stress can be good stress that is explained as 'Eustress'. Eustress can be defined as "good stress, caused by a positive response to a desired stressor, such as a wedding or a new job" (Truxillo et al. (2016, pg. 441).
- 2) **Neustress:** When stress is not helpful nor harmful, it can be described as 'Neustress' (Schafer (1998, pg. 7).
- 3) **Distress:** This is the third category of stress that most people commonly relate stress with. 'Distress' occurs when the arousal experienced by the individual is very high or very low (Schafer (1998, pg. 8). Distress can also be categorised into acute and chronic stress. Acute stress can be termed as stress that is intense but does not last for a prolonged period of time. Whereas, chronic stress may not be as intense but may exist for a prolonged period of time.
- 4) **Hyperstress:** Excessive stress is termed as 'Hyperstress'.
- 5) **Hypostress:** Insufficient stress is termed as 'Hypostress'.

1.3.2 Symptoms of Stress

Stress can have an impact on various aspects of life that include behaviour, cognition, emotions as well as physical health. Though stress will have a different effect on different individuals and each individual will react to stress in a different way, there are certain symptoms that can be related with stress. These are discussed as follows:

Physical symptoms: The physical symptoms of stress include low levels of energy, stomach upset, headaches and migraines, pain and aches, chest pain, rapid heartbeats, lack of sleep, dryness in mouth, experiencing tension in muscles, frequent infections and so on.

Emotional symptoms: The emotional symptoms include, displaying frustration, getting irritated or agitated easily, feelings of worthlessness, feeling lonely and even depressed.

Psychological symptoms: The cognitive symptoms related to stress include worrying constantly, experiencing racing thoughts, lack of organisation in thinking, forgetting, not able to focus, lack of judgement or poor judgement and also pessimism.

Behavioural symptoms: The behavioural symptoms of stress include

Introduction to Stress

deterioration in performance effectiveness, indulgence in substance use, prone to accidents, nervous mannerism, poor time management, displaying checking rituals, changes in appetite, procrastination, eating faster, even talking or walking faster, impaired speech and so on.

Table1.1: Symptoms of Stress

PHYSICAL	PSYCHOLOGICAL	EMOTIONAL	BEHAVIOURAL
<ul style="list-style-type: none">– Rapid Pulse– Pounding Heart– Increased Perspiration– Tensing of arm and leg muscles– Shortness of breath– Gritting of teeth– Headaches– Indigestion– Numbness– Dry mouth– Pain– Cold sweat– Abdominal cramps	<ul style="list-style-type: none">– Feeling upset– Inability to concentrate– Irritability– Loss of self confidence– Worry– Difficulty in making decisions– Racing thoughts– Absent mindedness	<ul style="list-style-type: none">– Anxiety– Depression– Anger– Guilt– Jealousy– Shame– Impatient– Suicidal feelings	<ul style="list-style-type: none">– Deterioration in performance effectiveness– Smoking or use of alcohol or other recreational drugs– Accident Proneness– Nervous Mannerism (foot tapping, nail biting)– Increased or decreased eating/ Anorexia– Increased or decreased sleeping/ sleep disruption– Phobias– Eating/ walking/ talking faster– Poor time management– Impaired speech– Checking rituals

Thus, the symptoms of stress can be categorised into the above main four categories, but it is to be remembered that individual differences do exist in the symptoms displayed by different individuals.

Check Your Progress II

1) What is neustress?

2) What are the cognitive symptoms of stress?

3) Explain the physical symptoms of stress?

Stress: An Introduction

1.4 SOURCES OF STRESS

As we have developed a clear idea about the concept and nature of stress, we will now move on to the sources of stress.

As such, the sources of stress can be categorized into three main sources, namely, Frustration, Conflict of motives and Pressure (Coleman, 1970).

Frustration: Frustration can be described as occurring when a goal oriented behaviour of an individual is thwarted. As stated by Mangal (1984, pg. 46) “a wide range of environmental obstacles, both physical and social and the internal factors in the form of personal limitations, biological conditions and psychological barriers may lead to frustration of our needs, motives and efforts”. For example, Ravi expected his promotion, however, when he did not receive the same, he experienced frustration.

Conflict of Motives: The next source is conflict of motives that can cause stress as an individual has to choose between alternatives and decision making in this regard can lead to stress. Conflict of motives can be of four different types, approach - approach conflict, avoidance - avoidance conflict, approach - avoidance conflict and double approach - avoidance conflict.

- 1) **Approach-approach conflict:** In this type of conflict the individual has to choose between two goals that are positive and are similar. For example, an individual may have to choose between two similar job opportunities.
- 2) **Avoidance- avoidance conflict:** The next type of conflict of motives is avoidance- avoidance conflict. Here again there are two goals that are similar but as opposed to approach- approach conflict, the goals here are negative. For example, an individual may have to take decision whether he/ she wants to remain unemployed or take up a mediocre job that he/ she is not interested in.
- 3) **Approach- avoidance conflict:** Here there is a single goal which is both positive and negative. For example, an individual taking up a job abroad may be excited about the opportunity but also has to face the fact that he/ she will have to stay away from the family. Thus, this goal has both negative and positive consequences and thus the individual may experience stress.
- 4) **Multiple approach-avoidance conflict:** It may so happen that the conflicts faced by us are quite complex and they are combinations of approach and avoidance conflicts. In this conflict the individual has to choose between the options that have both positive and negative

Introduction to Stress

consequences. For example, a student may have to choose between two educational opportunities, one of pursuing music that he/ she is interested in which will make his/her parents unhappy and the other of pursuing engineering, which will make his/ her parents happy but he/ she is really not interested in it.

Pressure: Pressure is yet another source of stress that can be external or internal. External pressures are result of demands from the environment, responsibilities and obligations that are mainly social in nature as well as demands and expectations of the significant persons in our lives. With regard to internal pressures, Mangal (1984, pg. 46) states that “Internal pressures are caused by our own self for maintaining the picture of ourselves - as we think we could and should be”. An example of external pressure is when a child is pressurised by parents to do well in examination and an example of internal pressure is when a child himself/ herself feels that he/ she needs to study and do well in examination.

Thus, any stress can be categorised into the above three sources, though a person may experience stress due to more than one or all the three sources as well.

Besides the above sources, stress can also be as a result of personality factors that may make an individual prone to stress. Past experiences, basic temperamental factors, perception of control over the situation causing stress play an important role in determining the reaction of individual to stress (Parmeswaran and Beena, 2004). In the context of personality, the type A and type B personalities can be discussed. Individuals with Type A personality display hurriedness, restlessness and are often involved in carrying out various activities at the same time. They are also competitive, anxious and are often achievement oriented. The individuals with type B personality, on the other hand, display behaviour that is relaxed. It can be said that individuals with type A personality are comparatively more prone to stress when compared with individuals with type B personality (Parmeswaran and Beena, 2004).

Further, certain life events, like death of a near or dear one, divorce, pregnancy, child leaving home, change in conditions of living, retirement, marriage, losing one's job and so on can also lead to stress (Nolen- Hoeksema, 2009).

Frustration, conflict of motives and pressure can be termed as broad sources of stress. Though stress can also result due to ineffective interpersonal relationships or interpersonal conflicts, family related issues, lack of work life balance, work pressures and work overload and even environmental pressures that could be due to noise pollution, crowding and so on.

Let us now discuss some of the specific sources of stress.

Life events: Stress can be caused due to varied life events. These could be death of a loved one, divorce or separation, losing one's job, marriage and so on. These could be termed as significant life events in one's life that may put pressure on the adjustment and coping resources of the person as they expose the individual to certain new and unique challenges. Thus, life events can lead to stress which in turn can have detrimental effects on the

day to day functioning as well as physical and psychological health of the individual.

Stress: An Introduction

Daily hassles: Similar to life events, daily hassles can also create stress. Daily hassles like lack of time, work overload, daily roles, responsibilities and duties and so on can lead to stress.

Interpersonal relationships: Stress can also be caused due to issues related to interpersonal relationships. Interpersonal relationships could be in the context of family, work or it could be with peer groups. Conflicts could occur between individuals that can have an impact on the interpersonal relationship, which in turn may lead to stress. Issues in interpersonal relationship could range from misunderstandings to violence and abuse and can have negative impact on the physical and psychological wellbeing of the person.

Stress as a result of social conditions: Social conditions in which the individual exists can also lead to development of stress. These social conditions can be related to crowding, discrimination, technological developments and changes, pollution and so on. The individual today exists in a world that is much more complex. There is globalisation, increased competition, and high amount of social pressure. These have a negative impact on the individual and makes him/ her prone to stress.

Check Your Progress III

1) What is frustration?

2) Explain stress as a result of social conditions.

1.5 MEASUREMENT OF STRESS

Measurement of stress is a prerogative for effective diagnosis of stress. There are various ways in which stress can be measured. These are discussed as follows:

1) **Physiological measures:** Physiological measures could serve great purpose in identifying and understanding stress experienced by an individual. While discussing the models of stress in the next unit, we will discuss at length the physiological changes that take place as the individuals experience stressful situations. The physiological

Introduction to Stress

responses in terms of increase in blood pressure, rapid pulse rate, breathing rate and so on can be measured to understand the stress experience by the individual. This can be done by using various instruments and machines, for instance a Polygraph. Further, stress can also be measured with the help of biochemical measures, as hormones, like epinephrine, norepinephrine, cortisol and so on, are released as stress is experienced. Though, physiological measures seem to be effective in detecting stress, there are a number of limitations. Firstly, the physiological changes may occur due to some other reasons and not stress. Secondly, the whole process of taking the physiological measure could create stress in the individual, as either blood test is taken or the individual is plugged to a machine. Further, the tests could also be costly and time consuming.

- 2) **Psychological tests:** A psychological test can be explained as a measure of sample of behaviour that is objective and systematic in nature. Various psychological tests that are standardised, reliable and valid can be used to measure stress. Such psychological tests could be self-report inventories. In self report inventories, the individual is expected to provide responses to certain statements and based on the responses interpretations can be made. One main advantage of self-report inventory is that the individual will answer them on his/ her own and as he/ she is in a better position to understand the stress experienced, he/ she will be able to report adequately. They are simple, less costly and easy to administer. Though, there could be issues related to social desirability and language. Individual may not understand the language in which the test is available or he/ she may not comprehend certain statements or words.
- 3) **Checklist:** A checklist can also be used to measure stress. For instance, a checklist can be used for major life events. The individual is asked to check the major life events from a list that the individual has undergone in a given period of time. The list of major events is carefully prepared and includes representation of major life events that may occur in any individual's life. The major life events could include, death of a near or dear one, divorce, transfer and so on. Any major event in one's life can put pressure on the individual's coping resources as he/ she is trying to adapt to the situation. Also, if an individual is undergoing number of major life events at the same time, the stress that he/ she will experience is much more.
- 4) **Interview:** Yet another method for measurement of stress is interview, where in-depth information is collected from the individual face to face. Interview can be structured, unstructured or semi-structured. Though with the help of interview method a lot of relevant information can be collected, it is a very time-consuming method as well as costly. Further, interviewer needs to be adequately trained in interview methods.

It is also possible that the above methods are used together to get an adequate picture of stress experienced by the individual.

- 1) List the limitations of physiological measures.

- 2) What is a psychological test?

1.6 LET US SUM UP

To summarize, the term stress has been derived from ‘stringere’ that is a Latin word and means ‘to draw tight’ (Cox, 1978). It has today become a very commonly used term in every context whether school, workplace, day to day life and so on. We often come across people who say that they are stressed or experiencing stress in their lives. We ourselves experience stress often. Stress is like salt and pepper and a life without stress would be without motivation. Stress often motivates us to work in a certain direction and therefore stress is not altogether negative and does have numerous advantages. Hans Selye (1974) described stress as a response of the body to certain demand that is made on it and he further stated that this response was non-specific. Various definitions of stress were also discussed in this Unit that mainly described stress in terms of demand and an individual’s response to the same. The concept of stressor was also described that can be explained as a situation, event, person or anything that leads to the stress response. Stressors can be categorised into physical, psychological, environmental, social and as life events. Various types of stress including eustress, neustress and distress were also discussed in the Unit. The Unit then moved on to explain the various symptoms of stress that were categorised into behavioural symptoms, cognitive symptoms, emotional symptoms and physical symptoms. Further, the sources of stress mainly, frustration, conflict of motives and pressure were also explained. Lastly, the Unit focused on the measurement of stress, that is a prerogative for effective diagnosis of stress. There are various ways in which stress can be measured. Varied methods of measurement like physiological measures, psychological tests, checklist and interview were discussed.

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1.8 KEY WORDS

Conflict of motives: Conflict of motives is a source of stress that occurs when an individual has to choose between alternatives and decision making in this regard can lead to stress in the individual.

Frustration: Frustration can be described as occurring when a goal oriented behaviour of an individual is thwarted.

Interview: In interview, in-depth information is collected from the individual face to face.

Pressure: Pressure is a source of stress that can be external or internal. External pressures are result of demands from the environment, responsibilities and obligations that are mainly social in nature as well as demands and expectations of the significant persons in our lives. Internal pressures are caused by our own self for maintaining the picture of ourselves- as we think we could and should be.

Psychological test: Psychological test can be explained as a measure of sample of behaviour that is objective and systematic in nature.

Stress: Stress is a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his/ her resources and endangering his/ her wellbeing.

Stress: An Introduction

Stressor: Stressor can be described as situation, event, person or anything that leads to the stress response.

1.9 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress I

1.) Define Stress

Hans Selye (1974) described stress as a response of the body to certain demand that is made on it and he further stated that this response was non-specific.

Schafer (1998, pg. 6) defined stress as “arousal of mind and body in response to demands made on them”.

Check Your Progress II

1) What is neustress?

When stress is not helpful nor harmful, it can be described as neustress

2) What are the cognitive symptoms of stress?

The cognitive symptoms related to stress include worrying constantly, experiencing racing thoughts, lack of organisation in thinking, forgetting, not able to focus, lack of judgement or poor judgement and also pessimism.

3) Explain the physical symptoms of stress?

The physical symptoms of stress include, low levels of energy, stomach upset, headaches and migraines, pain and aches, chest pain, rapid heartbeats, lack of sleep, dryness in mouth, experiencing tension in muscles, frequent infections and so on.

Check Your Progress III

1) What is frustration?

Frustration can be described as occurring when a goal oriented behaviour of an individual is thwarted.

2) Explain stress as a result of social conditions.

Social conditions in which the individual exists can also lead to development of stress. These social conditions can be related to crowding, discrimination, technological developments and changes, pollution and so on. The individual today exists in a world that is much more complex. There is globalisation, increased competition, and high amount of social pressure.

Check Your Progress III

- 1) List the limitations of physiological measures.

The limitations of physiological measures are as follows:

- (a) The physiological changes may occur due to some other reasons and not stress.
 - (b) The whole process of taking the physiological measure could create stress in the individual, as either blood test is taken or the individual is plugged to a machine.
 - (c) The tests could also be costly and time consuming.
- 2) What is a psychological test?

Psychological test can be explained as a measure of sample of behaviour that is objective and systematic in nature.

1.9 UNIT END QUESTIONS

- 1) Explain the concept of stress.
- 2) Discuss the various types of stress.
- 3) Explain various symptoms of stress.
- 4) Describe the sources of stress.
- 5) Explain various ways in which stress can be measured.

UNIT 2 : MODELS OF STRESS*

Structure

- 2.0 Introduction
- 2.1 Objectives
- 2.2 Models of Stress
 - 2.2.1 Fight or Flight response
 - 2.2.2 General Adaptation Syndrome (GAS)
 - 2.2.3 Cognitive Appraisal Model
 - 2.2.4 Person- Environment Fit Model (P-E Fit)
 - 2.2.5 Psychodynamic Theory
 - 2.2.6 Genetic Constitutional Theory
 - 2.2.7 Diathesis- Stress Model
- 2.3 Let Us Sum Up
- 2.4 References
- 2.5 Key Words
- 2.6 Answers to Check Your Progress
- 2.7 Unit End Questions

2.0 OBJECTIVES

After reading this Unit, you will be able to,

- discuss various models of stress.

2.1 INTRODUCTION

To suggest an intervention or treatment for any problem, first of all it is necessary to comprehend the problem. For instance, if a person has fever, why the person has fever? Is it a mere flu or Malaria or some other illness? will determine the treatment plan that the person will receive. In the case of stress as well, we need to understand what kind of stress the individual is undergoing, what are its sources and so on. Thus, further probing in to what is stress is important. In the previous Unit, we discussed about stress, its concept and nature. Further, we also focused on the sources and measurement of stress. In the present Unit we will highlight various models of stress that will help us understand the concept of stress in much better manner.

2.2 MODELS OF STRESS

Various models of stress are discussed as follows:

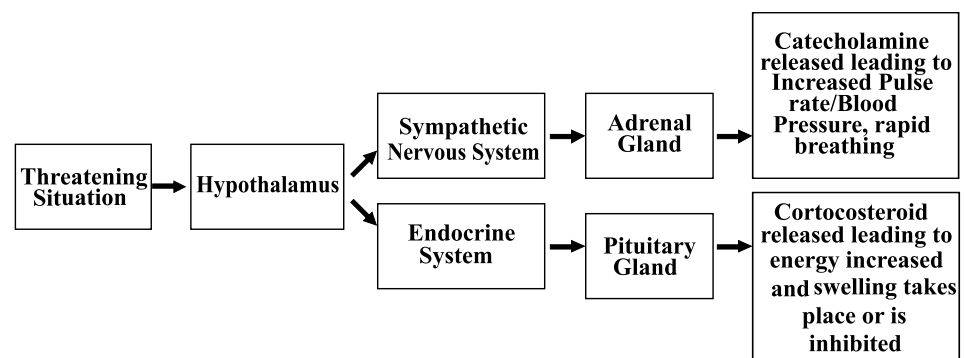
*Prof. Suhas Shetgovekar, Faculty, Discipline of Psychology, SOSS, IGNOU

2.2.1 Fight or Flight Response: Cannon initially termed stress as the emergency response and further elaborated that stress had its source in fighting emotions (Nelson and Quick, 2012). Cannon put forth the fight or flight response with regard to stress. According to Cannon stress is an outcome of an environmental demand that was external and that led to an imbalance in the natural steady state of an individual. He further stated that body encompasses natural defence mechanisms that play a role in maintaining the homeostasis or the natural steady state of an individual. Cannon was also interested in sympathetic nervous system activation in an individual when in stressful situation.

Thus, when an individual faces a situation that is threatening, he/ she will either get ready to fight the threat or may flight or run away from the situation. The individual will experience certain physiological changes that gets him/ her ready to fight or flight. These physiological changes include sweating, dry mouth, tensed muscles and so on. There is also increase in blood pressure and pulse rate. Besides the breathing may also become rapid and pupils may widen. Basically, in this moment, the individual's body will transfer the energy from body systems that are not required to respond to the situation to the body systems that are required to function in order to respond to the situation at hand. The stimulation of sympathetic nervous system and endocrine system takes place. For instance, if a person suddenly comes across a snake, his/ her response would be either of fight or flight and in this case his/ her body will prepare the person for this situation. Thus, there is a disequilibrium that disturbs the homeostasis of the body. Though, once the situation is over and there are no more challenges or threats, the body will go back to normal and homeostasis will be restored. The physiological changes taking place in fight or flight response can be understood with the help of figure 2.1.

The flight and fight response is advantageous as it helps deal instantly with the situation. In a long run, experiences of stress in this manner can have negative impact on the bodily and affective functioning of a person (Ghosh, 2015).

Fig. 2. 1. : Physiological Changes during fight or flight response.



The fight or flight model has also been at the receiving end of criticism as individual differences may exist in the way people respond to threat

situations. For instance, gender difference may exist in the blood pressure changes experienced during stress (Sanderson, 2013). Further, women may in fact not display a fight or flight response but may display 'tend and befriend' response that was described by Taylor as a response to stress, that involves seeking social support during such situations (Sanderson, 2013).

2.2.2 General Adaptation Syndrome (GAS): Hans Selye put forth three stages that are experienced by an individual when he/ she is in a situation that is stressful.

Stage one: The first stage is that of 'alarm reaction' that is denoted by a decreased resistance to stress. This stage is similar to that of fight or flight response. During this stage, the autonomic nervous system and endocrine system are activated by the hypothalamus. Further, the epinephrine and norepinephrine are released by the adrenal glands. This can be termed as a countershock, where the defence mechanisms of an individual are activated. These defence mechanisms are activated as a result of enlargement of adrenocortical that leads to discharge of adrenalin and thus leading to increase in functions related to respiration and cardiovascular activities. Thus, similar to fight or flight response, the body is prepared to face the threatening situation. There is also increase in energy production that is as a result of cortisol produced by adrenal glands. Adrenal glands are stimulated by Adrenocorticotrophic hormone (ACTH) that is released by the pituitary gland. Similar to fight or flight response, the individual's body will transfer the energy from body systems that are not required to respond to the situation to the body systems that are required to function as a response to the situation at hand. Thus, functions related to digestion, immune system and even reproductive system do not receive any energy during this stage.

Stage two: In the second stage, that is 'resistance', the adaptation is maximum and the equilibrium is restored. During this stage, there is an adaptation on part of the individual and he/ she resists the stimuli that create stress, though resistance to other stimuli decreases. During this stage as well, a lot of energy is required, thus, the nonessential functions related to digestion, immune system and even reproductive system do not receive any energy. Thus, the individual continues experiencing physiological changes such as increased pulse rate and blood pressure, rapid breathing and so on. These activities are mainly directed towards restoration of the equilibrium or balance. Though, if the stress is still experienced and the defence mechanisms are inactive then the individual will experience the third and last stage. The duration of this stage will depend on the nature, degree and intensity of the stressor that the individual is exposed to as well as the condition of the individual when he/ she is exposed to the stressor.

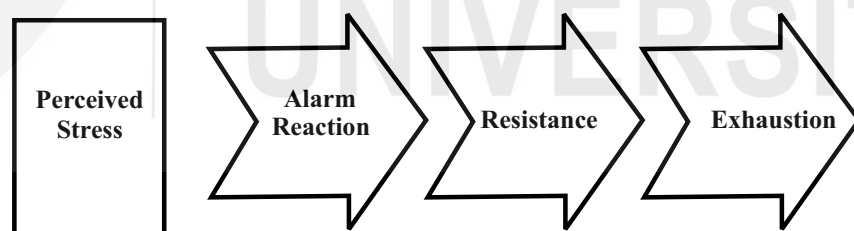
Stage three: The last stage is that of 'exhaustion' where there is a collapse of adaptive mechanisms (Cartwright and Cooper, 1997). Exhaustion occurs as a result of collapse in adaptation mechanisms and due to decrease in the physiological resources. When an individual experiences stress for a long period of time, the individual's physiological resources deplete and this can have a negative impact on the physical health of the individual and the

individual may become susceptible to various illnesses and health related issues.

Though GAS provides valuable inputs with regard to stress, it does not focus on the psychological or cognitive reactions to stress (Ghosh, 2015). Further, researches carried out later on stress also indicated contrary results with regard to the release of hormones as stated by Selye. The researches indicated that the release of certain hormones may differ based on the nature and intensity of the emotions experienced by the individual. Thus, the difference may exist in the physiological reactions and changes based on the stressor. Further, the duration of exposure to stressor may also play a role. In this context, we can also discuss about acute and chronic stress.

Acute stress is for a limited period of time. Example could be an examination or interview. These may not have significant effect on the individual as these are met with allostatic response from the body, meaning there are physiological changes such as increase in blood pressure, release of hormones and transfer of energy, but as the stressful situation is over, the body will go to its normal state (Sanderson, 2013). With regard to chronic stress though, the stress will exist for a longer duration and thus have detrimental effect on the physiology of the individual experiencing such a stress. Examples of chronic stress are living in a violent relationship, continued stress due to work overload and so on. In such a case, there is cumulative stress experienced by the individual and thus equilibrium is maintained by the body that leads to certain physiological responses that can negatively affect the immune system, cardiovascular functioning and will have a negative impact on health of the individual (Sanderson, 2013). Refer to figure 2.2 for stages in GAS.

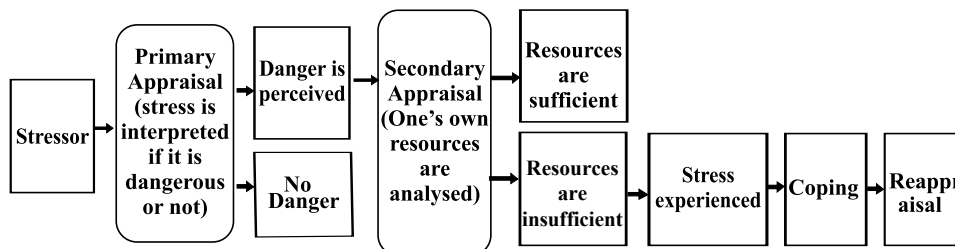
Fig. 2.2: Stages in General Adaptation Syndrome.



2.2.3 Cognitive Appraisal Model: This model relates to the perspective put forth by Lazarus and his colleagues. Lazarus believed that stress occurs as a result of an interaction between the individual and the environment. He also focused on the cognitive appraisal that is carried out by an individual while determining whether a situation/ event is stressful or not. He further stated that individual differences exist in the way in which the cognitive appraisal is carried out. The term cognition denotes various mental processes like thinking, reasoning and deciding besides attention, perception, memory, problem solving and creativity (Ghosh, 2015, pg. 113). The cognitive appraisal model states that as the individual faces a stressful situation, they carry out appraisal of the situation in terms of primary appraisal and secondary appraisal. Primary appraisal is done on the basis of the negative effect of the stress on the physical and psychological aspects of

the individual. And secondary appraisal is done on the basis of whether the individual possesses adequate resources to deal with the stressful situation and avoid its detrimental effects. Thus, as proposed by this model, the reaction of an individual, whether physiological, psychological, affective or behavioural will depend on both primary and secondary appraisals. figure 2.3 explains the cognitive appraisal model.

Fig. 2.3: The Cognitive Appraisal Model



As can be seen in figure 2.3, as an individual faces a stressor, a primary appraisal is carried out in which whether the stress is a threat or danger or not is determined. If the stressor is found to be dangerous then secondary appraisal is carried out in which the resources of the individual are analysed on the basis of whether they are sufficient or insufficient to deal with the stress. If the resources are insufficient, stress is experienced which is then followed by coping and then there is reappraisal of the stressor.

2.2.4 Person- Environment Fit Model (P-E Fit): This model was proposed by French, Harrison and Caplan in 1982 (Ghosh, 2015). The main assumption of this model is that individual differences exist with regard to needs and abilities and stress is created when there is a misfit between the demands that an individual is exposed to and the resources that he/ she possesses. An employee who is well prepared for one of the important presentations in his/ her organisation will look at this as an opportunity and not threat and thus will not experience any significant stress. But if the demands of the environment are high and the employee feels that he/ she does not possess adequate resources or ability to carry out the presentation, then he/ she will experience stress.

2.2.5 Psychodynamic Theory: The psychodynamic theory also explains stress. Freud described signal anxiety and traumatic anxiety. Signal anxiety can be said to occur when an external and objective danger that is consistent with relationship between stressor and strain is present and traumatic anxiety is anxiety that occurs within an individual and is related to the repressed sexual drives and instincts that are aggressive within the individual (Ghosh, 2015). Traumatic anxiety can lead to development of psychopathology. And though the anxiety may undergo a process where the ideas that are conflicting are converted to ideas that pose no harm, the energy emerging from the conflict may lead to strain in terms of physical symptoms experienced by the individual.

Further, we can also discuss about the explanation of stress given by Levinson that is based on the psychoanalytic theory by Freud. According

Introduction to Stress

to Levinson, two main elements of personality, namely, ego ideal and self-image interact with each other and lead to stress. Ego ideal can be described as expression of an individual's perfect self, whereas self-image is the way an individual perceives himself/ herself (negatively or positively). Stress, thus, is an outcome of the gap between the ego ideal and self-image. Thus, this approach mainly focuses on how stress can result due to the unconscious personality factors in an individual.

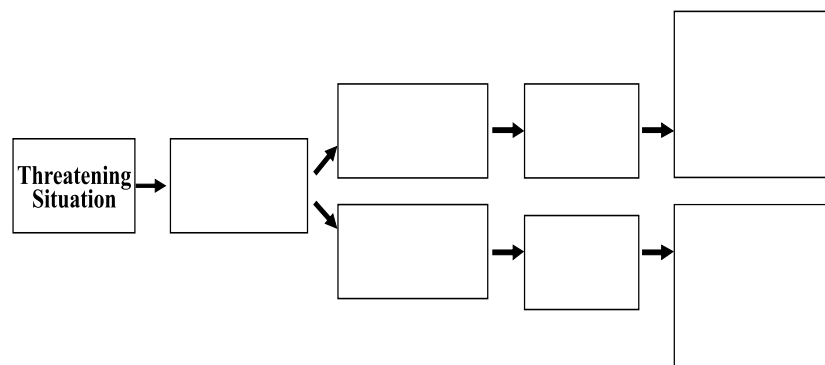
2.2.6 Genetic Constitutional Theory: The main focus of this theory is on how stress is resisted and coped with the help of genotype and phenotype. To understand the terms genotype and phenotype, genotype denotes the genetic constitution of individual and phenotype is the physiological characteristics of the individual (Ghosh, 2015).

2.2.7 Diathesis- Stress Model: The genetic constitutional theory mainly focuses on how genetic predisposition can make an individual prone to stress. The diathesis- stress model, on the other hand, focuses on the role of both genetics and environment in determining whether the individual will experience stress or not. This theory also proposes that heredity and environment go hand in hand and compliment each other in determining stress. For instance, an individual may experience breathing problem when he/ she is exposed to prolonged high levels of stress. But in absence of any stress he/ she may not experience any breathing problem, despite of the breathing problem being genetic in nature.

Check Your progress I

- 1) Explain Genetic Constitutional Theory.

- 2) Complete the figure of physiological changes during fight or flight response.



2.3 LET US SUM UP

To summarise, in the present unit we discussed about various models of stress. The very first model discussed was that of fight or flight response. Cannon initially termed stress as the emergency response and further elaborated that stress had its source in fighting emotions. According to Cannon stress was an outcome of an environmental demand that was external and that led to an imbalance in the natural steady state of an individual. Thus, when an individual faces a situation that is threatening, he/ she will either get ready to fight the threat or may flight or run away from the situation. The individual will thus experience certain physiological changes that gets him/ her ready to fight or flight. The model was explained with the help of a figure. The next model discussed was the General Adaptation Syndrome put forth by Selye. According to Selye, there are three stages that are experienced by an individual when he/ she is in a situation that is stressful, namely, alarm reaction, resistance and exhaustion. These stages were discussed in detail with the help of a figure. The next model discussed was cognitive appraisal model. This model is relates to the perspective put forth by Lazarus and his colleagues. Lazarus believed that stress occurs as a result of an interaction between the individual and the environment. He also focused on the cognitive appraisal that is carried out by an individual while determining whether a situation/ event is stressful or not. The cognitive appraisal model states that as the individual faces a stressful situation, they carry out appraisal of the situation in terms of primary appraisal and secondary appraisal. Primary appraisal is done on the basis of the negative effect of the stress on the physical and psychological aspects of the individual. And secondary appraisal is done on the basis of whether the individual possesses adequate resources to deal with the stressful situation and avoid its detrimental effects. The next model discussed was the person-environment fit model that was proposed by French, Harrison and Caplan in 1982 (Ghosh, 2015). The main assumption of this model is that individual differences exist with regard to needs and abilities and stress is created when there is a misfit between the demands that an individual is exposed to and the resources that he/ she possesses. The psychodynamic theory was also discussed. This theory focuses on signal anxiety and traumatic anxiety and how traumatic anxiety can lead to development of psychopathology. And though the anxiety may undergo a process where the ideas that are conflicting are converted to ideas that pose no harm, the energy emerging from the conflict may lead to strain in terms of physical symptoms experienced by the individual. The next model discussed was the genetic constitutional theory. The main focus of this theory is on how stress is resisted and coped with the help of genotype and phenotype. Thus, the theory states that how an individual resists stress will depend on his/ her genetic predisposition. The the last model, that is the diathesis- stress model focuses on the role of both genetics and environment on whether the individual will experience stress or not. This theory also proposes that heredity and environment go hand in hand and compliment each other in determining stress.

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Selye, H. (1974). *The Stress of Life*. New York: McGraw-Hill.

2.5 KEY WORDS

Cognitive Appraisal Model: This model relates to the perspective put forth by Lazarus and his colleagues. Lazarus believed that stress occurs as a result of an interaction between the individual and the environment. He also focused on the cognitive appraisal (primary and secondary appraisal) that is carried out by an individual while determining whether a situation/ event is stressful or not.

Diathesis- Stress Model: The diathesis- stress model, focuses on the role of both genetics and environment on whether the individual will experience stress or not.

Fight or Flight Response: Proposed by Cannon, fight or flight response states that when an individual faces a situation that is threatening, he/ she will either get ready to fight the threat or may flight or run away from the situation. The individual will thus experience certain physiological changes that gets him/ her ready to fight or flight.

General Adaptation Syndrome (GAS): This was introduced by Selye and includes three stages that are experienced by an individual when he/ she is in a situation that is stressful, namely, alarm reaction, resistance and exhaustion.

Genetic Constitutional Theory: The main focus of this theory is on how stress is resisted and coped with the help of genotype and phenotype. The

genetic constitutional theory mainly focuses on how genetic predisposition can make an individual prone to stress.

Models of Stress

Person- Environment Fit Model (P-E Fit): This model was proposed by French, Harrison and Caplan in 1982 (Ghosh, 2015). The main assumption of this model is the individual differences exist with regard to needs and abilities and stress is created when there is a misfit between the demands that an individual is exposed to and the resources that he/ she possesses.

Psychodynamic Theory: The psychodynamic theory also explains stress, in which Freud described signal anxiety and traumatic anxiety. Signal anxiety can be said to occur when an external and objective danger that is consistent with relationship between stressor and strain is present and traumatic anxiety is anxiety that occurs within an individual and is related to the repressed sexual drives and instincts that are aggressive within the individual.

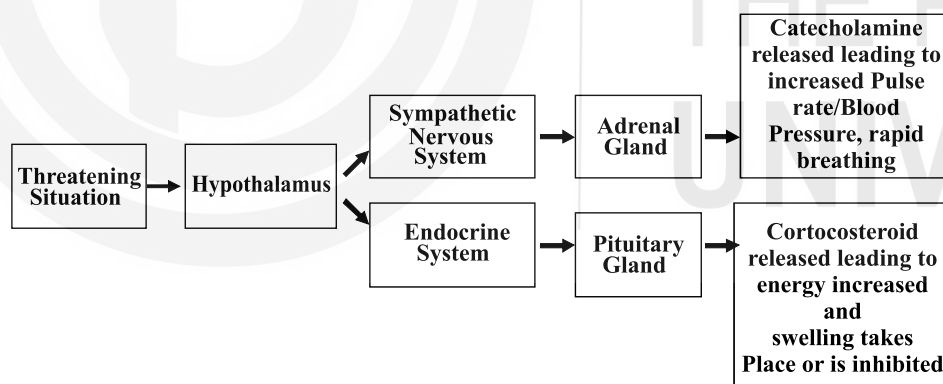
2.6 ANSWERS TO CHECK YOUR PROGRESS

Check Your progress I

- 1) Explain Genetic Constitutional Theory.

The main focus of this theory is on how stress is resisted and coped with the help of genotype and phenotype. The theory states that how an individual resists stress will depend on his/ her genetic predisposition.

- 2) Complete the figure of physiological changes during fight or flight response.



2.7 UNIT END QUESTIONS

- 1) Explain the Fight or Flight response.
- 2) Discuss the General Adaptation Syndrome with the help of a diagram.
- 3) Discuss in detail Cognitive Appraisal model.
- 4) Describe the Person-Environment fit model of stress.



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UNIT 3 : FACTORS CONTRIBUTING TO STRESS

PRONENESS*

- 3.0 Objectives
- 3.1 Introduction
- 3.2 Factors contributing to Stress Proneness
 - 3.2.1 Type A Personality
 - 3.2.2 Hostility
 - 3.2.3 Perfectionism
 - 3.2.4 Procrastination
 - 3.2.5 Learned Helplessness/ Learned Pessimism
- 3.3 Moderators of Stress
- 3.4 Let Us Sum Up
- 3.5 References
- 3.6 Key Words
- 3.7 Answers to Check Your Progress
- 3.8 Unit End Questions

3.0 OBJECTIVES

After reading this unit, you will be able to

- explain the factors contributing to stress proneness
- discuss the moderators of stress.

3.1 INTRODUCTION

Shalini would fall sick every time she had her school examinations. She would prepare very hard and try to learn all the relevant topics, but one day before the examinations, she would fall sick with either fever or stomach upset or some other illness, as a result of which she would not be able to answer her examinations. When a medical doctor was consulted, the Doctor could not find any medical reason. Shalini's cousin who was a clinical psychologist suspected that the reason could be psychological rather than physiological and that Shalini could be falling sick because of stress that she was experiencing before the examination.

You as well may have come across certain individuals who are more prone to stress and those who are not so prone to stress. Thus, it can be said that individual differences exist in the way people deal with stress and some could be more prone to stress than others due to varied factors.

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In the previous Units, we discussed about the concept, nature, and measurement of sources of stress (Unit 1) as well as various models of stress (Unit 2). In the present unit we will discuss about stress proneness and will also focus on the factors contributing to stress proneness as well as the moderators of stress.

3.2 FACTORS CONTRIBUTING TO STRESS PRONENESS

Let us try to first understand what is stress proneness. Stress proneness in simple words can be described as a tendency of a person to take more stress. Such individuals are more likely than others to experience stress. The opposite of stress proneness is stress resistant and such individuals are less likely to experience stress.

Let us now look at some of the factors that can contribute to stress proneness:

3.2.1 Type A Personality

Schafer (2004, pg. 178) describes personality as “person’s enduring set of habits of thinking, feeling and acting”. Personality traits can be said to determine not only the way an individual reacts to stress but also how he/she will cope with the stressful situation. Type A personality is often linked to high levels of stress as individuals with type A personality perceive stress as threatening and their reactions to stressful situations are intense and faster. On the other hand, individuals with type B personality display lower stress reactivity. Thus, individuals with type A personality are more prone to varied physical and psychological problems that may occur as a result of stress experienced by them.

Let us discuss further about type A personality, that can be termed as one of the factors that can make an individual more prone to stress. Individuals with this type of personality are in a hurry to achieve certain objectives. They often like competition, they are highly alert and display perfectionism. They want to achieve much more than it may be possible within a certain time frame. Such individuals are also likely to be irritable, they lack patience and may also get angry faster. Some of the components of type A behaviour as stated by Schafer (2004) are as follows:

Status insecurity: Individuals with type A behaviour may display status insecurity, which is likely to stem from low self-esteem. Such individuals will constantly compare themselves with others and will find themselves to be inferior in their own eyes. They are also constantly striving to enhance their self-esteem. These individuals often have a very high expectation from themselves and are also highly critical about self. This will often drive them to achieve and accomplish as much as possible.

Urgency of time: The insecurities and low self-esteem experienced by a person with type A personality often leads him/her to gasp with time. Such individuals want to do many things within a certain period of time. Thus, they are in constant hurry to get things done and as a result they think faster, plan faster and carryout activities at a faster pace and this can be reflected in their day to day functioning as well. They also engage in polyphasic thinking and behaviour, that can be described as engaging in thinking and carrying out multiple activities/ things at a time (Schafer, 2004).

Hyper-aggressiveness: Individuals with type A personality may also display hyper-aggressiveness that is denoted by dominating behaviour without any regard to how others feel or any regard for their rights. This aggressiveness may also stem from low self-esteem that such individuals experience and due to the frustration experienced by them.

Free-floating hostility: An individual with type A personality is more likely to perceive others negatively and thus will not trust others and will be suspicious of them. This free-floating hostility is displayed by such an individual whenever he/ she feels something (coworkers laughing, slow sales person at a shop counter, directives by government and so on) is wrong.

Drive towards self-destruction: The lifestyle led by a type A individual can take a toll on them and they often seek escapism and thus in a way they may drive themselves on the path of self-destruction.

Individuals with type A are not only more prone to stress, as was mentioned earlier, but they may display lower satisfaction with regard to job, health, home and life. They may also experience lack of energy and may experience more affective tension and symptoms of distress.

3.2.2 Hostility

Schafer (2004, pg. 194) described hostility as “cynicism towards others’ motives and values, easily and frequently aroused anger, and a tendency to express that anger towards others.” Hostility in this context does not relate to anger that leads to violent behaviour. But this is the irritability and anger experienced by individuals who otherwise seem perfectly normal (Schafer, 2004). Such a hostility may be experienced in simple events in life, like someone spills tea on the office table, a family member does not fold clothes and they are left in the sitting chair and so on, for which individuals who are not hostile may barely react. Such individuals often engage in blaming others, which in turn can make them express anger towards that individual, which could lead to aggressive behaviours directed towards that person. Hostility is, thus, characterised by an attitude that is skeptical or cynical, recurring arousal of anger and manifestation of anger in terms of aggressive behaviour. The long-term effect of such hostility is negative as it not only affects one’s health but can also affect one’s social relationships. Links have been found between hostility and stress (Felsten, 1996; Hackett et al, 2015). Thus, hostility can also be termed as a factor that can make individuals more prone to stress.

3.2.3 Perfectionism

Yet another factor that can lead to stress proneness is perfectionism. Perfectionism can be described as expectations that an individual may have from self and others or both and these expectations are demanding in nature which seldom leaves chance for compromise. Perfectionism can be categorised into internal perfectionism (expectations from self) and external perfectionism (expectations from others). Individuals with internal perfectionism will have high expectations from themselves and this can not only affect their health but also their productivity. It can also negatively affect their relationship and self-esteem. Individuals who have external

perfectionism will often find fault with others and are never satisfied with how others work and this can lead them to experiencing frustration as well as hostility.

Following are some of the beliefs that are characteristic of an individual with perfectionism (Schafer, 2004):

- Anything that I do should be carried out perfectly.
- No mistakes should be made by me or others.
- There is always a correct way in which things should be done.
- I am failure if I don't do things perfectly.
- If I make a mistake, I am a total failure.

Such beliefs (all or nothing) can be termed as irrational as they are loaded with injunctions and they can push an individual on the path of distress. An individual having such beliefs is more likely to experience stress than a person with rational beliefs. For instance, an individual who believes, that if he/ she makes a single mistake then he/ she is a failure will experience prolonged sadness and anger with self and may not make any attempts in future. However, an individual who sees a mistake as a learning experience is more likely to make attempts in future and less likely to experience stress or anger. Besides experiencing stress, individuals with perfectionism are also more likely to procrastinate. They are also more defensive and choosy about stuff and things. Further, they may find it difficult to let go and discard things, thus leading to hoarding and they may also indulge in overdoing things.

3.2.4 Procrastination

We discussed earlier that perfectionism may lead to procrastination, but procrastination in itself is also a factor that could lead to stress proneness. Procrastination can simply be described as not doing things/ activities on time and keeping them for later. This can be because the things or those activities are viewed as not appealing/ pleasant or difficult. Procrastination can lead to stress because individuals who procrastinate will not only feel guilty and indulge in condemnation of self, but there could also be external repercussions (for example, examination fee not paid in time, delay in submitting an important report and so on). Procrastination either results from fear (for instance fear of failure or doing well or fear of pain or intimacy and so on), or it can result from laziness, where the individual develops habit of not putting effort or seeking comfort (Schafer, 2004).

3.2.5 Learned Helplessness/ Learned pessimism

The term learned helplessness was put forth by Seligman and it can be described as tendency to become helpless when frequently faced with events that cannot be controlled. Schafer (2004, pg. 215) defines learned pessimism as “the tendency to interpret bad events as personally caused, part of a permanent pattern, and pervasive into all parts of one's life and the tendency to interpret positive events as caused by luck or external forces, temporary, and limited to this one aspect”. The key points in this definition are:

Personalisation: Personalisation can be internal or external. Thus, when a negative event or situation is experienced, the individual will attribute it internally or externally. For instance, getting less marks in examination may be attributed internally (not studying hard enough) or externally (unfair evaluation).

Permanence: Permanence can be in terms of either permanent or temporary. The individual will either perceive the event as being permanent or temporary. For instance, if he/ she scored less marks in an examination, this can either be seen as something that will always happen or as just one event or setback in path of success.

Pervasiveness: This can be described as whether an interpretation is related to one or multiple dimension(s) of life. Thus, it can be either universal or specific. For instance, 'I scored less marks in one subject but scored well in others' or 'Getting less marks is yet another negative event in my life'.

A person with learned helplessness/ learned pessimism is more prone to experiencing stress and needs help to move towards learned optimism.

Check Your Progress I

- 1) List the components of type A behaviour.

- 2) What is procrastination?

3.3 MODERATORS OF STRESS

Besides the above factors, there are also certain moderators of stress that need to be mentioned. The moderators play an important role in the relationship between the stress and corresponding reactions. These moderators may lead to individuals experiencing higher or lower stress.

Locus of control (LOC): Locus of control is a concept that was proposed by Rotter in 1954 and can be explained as the belief system possessed by an individual with regard to whether the outcome of his/ her actions can be attributed to his/ her own actions or to events, objects, people outside his/ her control. Thus, individuals could either have an internal control orientation or an external control orientation. Relationship has been seen between LOC and stress and it was found that individuals with internal locus of control displayed better physical and psychological wellbeing (Ghosh, 2015).

Introduction to Stress

Individuals with internal locus of control perceive stressful situations as a challenge and not as a threat and thus are in a position to deal with stress in a better way.

Hardiness: Hardiness can be described as denoting a likeness for challenges, having a strong sense of commitment and control (Schafer, 2004, pg. 236). Individuals having high hardiness are optimistic and they see a stressful situation as an opportunity to grow. They also put in hard work because they enjoy doing so. Thus, individuals with high hardiness are in better position to deal with stress than individuals that have low hardiness.

Social support: This is one of the significant moderators of stress. A person experiencing stress will be able to deal with it in a better way if he/ she has adequate social support. Social support can be in form of material gifts, finance, food and so on, or in terms of information to comprehend the stress and coping strategies. Social support could also be emotional in nature. Social support not only lowers stress reactivity but individuals receiving social support are also less likely to suffer the negative effects of stress.

Optimism and pessimism: Optimistic individuals are found to be able to deal with stress adequately and thus may not get adversely affected by stress that they experience. Optimism can also be related to resilience that helps individuals to bounce back from stressful situations. On the other hand, individuals who are pessimistic can get affected by stress and are likely to develop the psycho-physiological disorders.

Gender and culture: Besides the above gender and culture may also play an important role as moderators of stress. Socialisation to a great extent may depend on gender as well as culture that can have an impact on not only the personality but also beliefs and attitudes of the individual. And personality, beliefs and attitudes can have an impact on how individual perceives, deals and copes with stress.

Check Your Progress II

- 1) What is locus of control?

3.4 LET US SUM UP

Individual differences exist in the way people deal with stress and some could be more prone to stress than others due to varied factors. Stress proneness in simple words can be described as a tendency of a person to experience more stress. Such individuals, are more likely than others to experience stress. The opposite of stress proneness is stress resistant and such individuals are less likely to experience stress. Various factors that contribute to stress proneness like type A personality, hostility, perfectionism, procrastination and learner

helplessness/ learned pessimism were discussed. Type A personality is often linked to high levels of stress as individuals with type A personality perceive stress as threatening and their reactions to stressful situations are intense and faster. Some of the components of type A behaviour include status insecurity, urgency of time, hyper-aggressiveness, free-floating hostility and drive towards self-destruction. Hostility can be described as cynicism towards others' motives and values, easily and frequently aroused anger, and a tendency to express that anger towards others. The long-term effect of such hostility is negative as it not only affects one's health but can also affect one's social relationships and links have also been found between hostility and stress. Yet another factor that can lead to stress proneness is perfectionism. Perfectionism can be described as expectations that an individual may have from self and others or both and these expectations are demanding in nature which seldom leaves chance for compromise. Perfectionism can be categorised into internal perfectionism (expectations from self) and external perfectionism (expectations from others). Procrastination is also a factor that could lead to stress proneness. Procrastination can simply be described as not doing things/ activities on time and keeping them for later. The last factor discussed was learned helplessness/ learned pessimism. Learned pessimism can be described as the tendency to interpret bad events as personally caused, part of a permanent pattern, and pervasive into all parts of one's life and the tendency to interpret positive events as caused by luck or external forces, temporary, and limited to this one aspect. The key points of this definition include personalisation, permanence and pervasiveness. While discussing factors contributing to stress proneness, the moderators of stress were also discussed. The moderators play an important role in the relationship between the stress and corresponding reactions. These moderators may lead to individuals experiencing higher or lower stress. Various moderators of stress including, locus of control, social support, optimism and pessimism and gender and culture were explained.

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3.6 KEY WORDS

Hardiness: Hardiness can be described as denoting a likeness for challenges, having a strong sense of commitment and control.

Hostility: Hostility can be described as cynicism towards others' motives and values, easily and frequently aroused anger, and a tendency to express that anger towards others.

Learned pessimism: Learned pessimism can be described as the tendency to interpret bad events as personally caused, part of a permanent pattern, and pervasive into all parts of one's life and the tendency to interpret positive events as caused by luck or external forces, temporary, and limited to this one aspect.

Locus of control (LOC): Locus of control can be explained as the belief system possessed by an individual with regard to whether the outcome of his/ her actions can be attributed to his/ her own actions or to events, objects, people outside his/ her control.

Perfectionism: Perfectionism can be described as expectations that an individual may have from self and others or both and these expectations are demanding in nature which seldom leave chance for compromise.

Procrastination: Procrastination can simply be described as not doing things/ activities on time and keeping them for later.

Type A personality: Individuals with this type of personality are in a hurry to achieve certain objectives. Individuals with this personality often like competition, they are highly alert and display perfectionism. They want to achieve much more than it may be possible within a certain time frame. Such individuals are also likely to be irritable, they lack patience and may also get angry faster.

3.7 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress I

- 1) List the components of type A behaviour.

The components of type A behaviour include status insecurity, urgency of time, hyper-aggressiveness, free-floating hostility and drive towards self-destruction.

- 2) What is procrastination?

**Factors Contributing
to Stress Proneness**

Procrastination can simply be described as not doing things/ activities on time and keeping them for later.

Check Your Progress II

- 1) What is locus on control?

Locus of control is a concept that was proposed by Rotter in 1954 and can be explained as the belief system possessed by an individual with regard to whether the outcome of his/ her actions can be attributed to his/ her own actions or to events, objects, people outside his/ her control.

3.8 UNIT END QUESTIONS

- 1) Discuss Type A personality as a factor contributing to stress proneness.
- 2) Explain hostility as a factor contributing to stress proneness.
- 3) Describe perfectionism and procrastination as factors contributing to stress proneness.
- 4) Discuss learned helplessness/ learned pessimism.
- 5) Discuss the various moderators of stress



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UNIT 4 : EFFECT OF STRESS*

Structure

- 4.0 Objectives
- 4.1 Introduction
- 4.2 Effect of Stress on Health
- 4.3 Effect of Stress on Performance and Productivity
- 4.4 Effect of Stress on Relationships
- 4.5 Let Us Sum Up
- 4.6 References
- 4.7 Key Words
- 4.8 Answers to Check Your Progress
- 4.9 Unit End Questions

4.0 OBJECTIVES

After reading this Unit, you will be able to,

- discuss the effect of stress on health.
- describe the effect of stress on performance and productivity.
- explain the effect of stress on relationships.

4.1 INTRODUCTION

Sameer's parents always had very high expectations from him. They wanted him to become an IAS officer. Though Sameer was more interested in pursuing his interest in music. He was an excellent guitar player. But giving in to the pressures of his parents he started preparing for the civil services examination. He tried to put in his best but over the period of time, he experienced fatigue, sleeplessness and also lost his appetite. He also started falling sick more often. Medical doctors could not find any physical cause for the symptoms displayed by Sameer. The stress (caused due to external pressure as well as conflict that he had in his mind with regard to pursuing his interest in music or becoming an IAS officer as per his parents wish) experienced by him had taken a toll on his health.

Tiska had recently been promoted to the post of deputy director of her institute. She was very excited about her new position. Though, the new position meant more responsibilities and workload. Despite of trying to put in her best, she felt that her immediate superior never seemed to be happy with her and would always find faults in her work. Tiska became increasingly irritable, would easily get angry with her subordinates and

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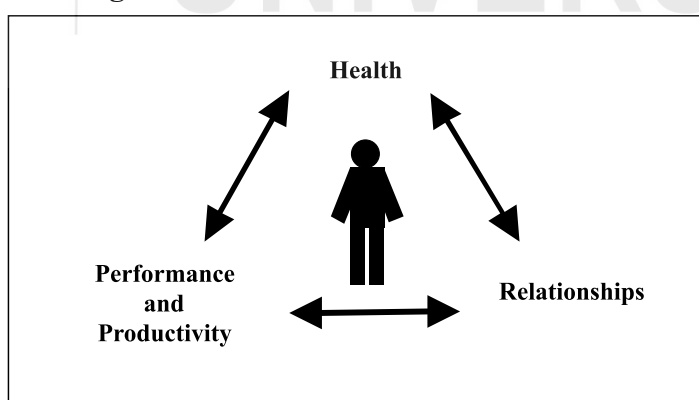
Introduction to Stress

colleagues and her interpersonal relationship with her family and friends was getting affected due to her behaviour. She also started experiencing breathing problems and was diagnosed with high blood pressure. The work pressure coupled with continuous criticisms and lack of appreciation from her immediate superior had affected the physical and psychological wellbeing of Tiska.

In the above examples, we can see that stress and stressful situations had an impact on the physical and psychological health of these individuals. The examples discussed earlier also reflect that there are individual differences in the way each individual will react to stress. You may have come across children who get so stressed before exams that they fall sick and children who do not experience much stress. Further, difference may also exist in the effect that stress has on the individuals. For instance, some may get affected psychologically, whereas, others may display more of physiological symptoms related to stress.

In the previous Units, that is Units one, two and three, we discussed about the concept, nature, sources, symptoms, and measurement of stress and even models of stress. We also discussed about various factors that contribute to stress proneness. Thus, by now you must have developed a fair idea about what stress is. In the present Unit, we will mainly focus on the effect of stress. Stress can affect individuals in different ways. In some individuals it may have an impact on their physical health and in others it may affect their psychological wellbeing. Thus, understanding the effect of stress is relevant. In the present Unit, we will mainly discuss about the effect of stress on health, performance and productivity and relationships. Needless to say, all these three are interrelated and the effect of stress on one of these can affect the other(s) as shown in figure 4.1. For instance, if a person falls sick often due to stress then his/ her productivity will decrease. Any issue that the person faces in relationship can lead to development of stress and that can have an impact on his/ her performance and productivity.

Fig. 4.1: Effects of stress are interrelated.



4.2 EFFECT OF STRESS ON HEALTH

Stress has an impact on the physical health of an individual. A number of illnesses like cardiovascular disorders, aches and pain, ulcers, hypertension, diabetes, asthma, hyperthyroidism, and even cancer can be attributed to stress.

Stress can have an impact on the immune system of the individual and thus the individual may become easily prone to varied infections and illnesses. Stress can also accelerate ageing. When an individual is experiencing stress, the resources and energy is diverted from immune system to systems in the body that play more important role in stress reactivity (as was also discussed under fight and flight response and GAS) and thus, individuals who experience stress for long period of time are prone to develop infections as their immune system is compromised.

Stress can lead to development of cardiovascular disorders in individuals. When there is perception of stress, one of the physiological changes that occurs is that pulse rate increases as well as there is an increase in the blood pressure. As such the heart tends to be on a rapid mode and works harder when stress is experienced. A stress for a long period of time will have the heart working overtime for a longer period of time and that can lead to development of cardiovascular disorders. Further, lifestyle of the individual, including diet and nutrition, physical exercise, consumption of alcohol and drugs and so on can also contribute to the development of such disorders.

Prolonged stress can also cause hypertension as sympathetic nervous system gets activated and blood pressure increases and remains increased for a longer period of time. And prolonged hypertension can again lead to development of cardiovascular disorders and could also lead to stroke and kidney related disorders. Glucose and fatty acids may also accumulate if an individual has hypertension for a long period of time and that in turn could lead to plaques in the artery. Further, the release of Catecholamine and Corticosteroid that take place when an individual is undergoing stress (this was discussed under fight or flight responses), can also have a negative impact on the arteries and heart.

We sometimes come across children who develop stomach upset before examination. This could also be attributed to stress experienced by them. As a result of prolonged stress, an individual could also develop ulcers, irritable bowel syndrome and inflammatory bowel diseases. Activation of sympathetic nervous system that takes place when stress is experienced could lead to excess production of the hydrochloric acid and pepsin which in turn could lead to peptic ulcers.

Stress is one of the factors that can also lead to individuals developing asthma. Asthma is denoted by breathing problem that occurs when the bronchial airways are blocked. This blockage could be due to mucus, inflation or spasms (Ghosh, 2015).

Prolonged stress could also lead to occurrence of cancer amongst the individuals. Migraine are headaches that an individual may experience for a prolonged period of time that occurs on one side of the head. Stress is one of the factors that can cause migraines in individuals. Stress also has a negative effect on the immune system.

Stress can also cause hyperthyroidism, as experiencing stress for a prolonged period of time can negatively affect thyroid, the gland that is responsible for metabolism as well as regulation of various physiological functions.

Introduction to Stress

Stress can not only affect the release of hormone from pituitary gland, that stimulates thyroid, but also reduces the conversion to T3 hormone, that is, Triiodothyronine (Lutz, 2019). Thus, the functioning of the thyroid can get affected. Various hormones are also released as stress is experienced and this can lead to increased levels of glucose in blood.

Further, stress can also cause anxiety and depression. When stress is experienced by an individual, there is a release of neurotransmitters (the chemicals that transmit signal between the neurons) Serotonin and Adrenalin. After the release of these neurotransmitters, stress related hormones are released and these can have an impact on area of brain relevant to memory and regulation of affect. When stress is experienced by an individual for a prolonged period of time, then there is a negative effect on the way these systems function and as a result the individual is prone to developing anxiety and depression. Further, depression can also be linked to extended activation of immune system, that is a result of stress experienced by an individual over a period of time (Crannage, 2018).

Extreme stress can also lead to development of Post Traumatic Stress Disorder (PTSD). PTSD may develop in an individual after he/ she experiences a traumatic situation. You must have heard about soldiers developing PTSD after a war or individuals developing PTSD after experiencing a natural calamity like earthquake or Tsunami. The symptoms of PTSD include flashbacks and uncontrollable thoughts about the traumatic event. This again has been linked to the disruption of functioning of stress related hormones and neurotransmitters that are normally released after stress is experienced (Crannage, 2018).

Stress can also lead to indulgence of the individual in unhealthy coping behaviour which can also involve substance use (alcohol, drug and so on). This in turn can not only lead to addiction but can have detrimental effect on health. Besides a person under stress may also engage in unhealthy lifestyle, like they may not exercise, maintain healthy diet and may even indulge in unhealthy eating behaviours.

Thus, it can be said that stress can have a negative effect on one's physical health as well as mental health. Further, it can also impact one's lifestyle and behaviour which in turn have adverse effects on one's overall health.

Check Your progress I

- 1) List any five illnesses that can be attributed to stress.

- 2) How can stress lead to development of cardiovascular disorders in individuals?

4.3 EFFECT OF STRESS ON PERFORMANCE AND PRODUCTIVITY

When we talk about performance and productivity, it could be overall performance and productivity of the individual and it could also be performance and productivity in the context of work. Before we go on to discuss performance and productivity in the context of work, let us discuss about how stress can impact cognitive functioning, that is a key to performance and productivity.

Stress can have a negative impact on cognitive functioning or performance of the individual, which can be for a short term or for long period of time. In fact, stress experienced over a long period of time may even lead to decline in cognitive functioning and is also linked to occurrence of dementia (Scott et al, 2015).

Prolonged stress can affect memory, attention and concentration of the individual. Individuals experiencing stress may also display ineffective decision making. Stress can also lead to worrying constantly, forgetting, lack of organisation, lack of judgement, racing thoughts and being pessimistic and all these in turn can have an impact on the overall performance and productivity of the individual.

Stress has a negative effect on the executive functioning of an individual that includes tasks like making plans, reasoning, management of one's life, problem solving and so on. And this can be attributed to the overload that is created by stress, where the resources of the individual are diverted towards coping with stress. Thus, an individual under stress may not be able to remember well, indulge in effective problem solving and may not be able to pay his/ her complete attention.

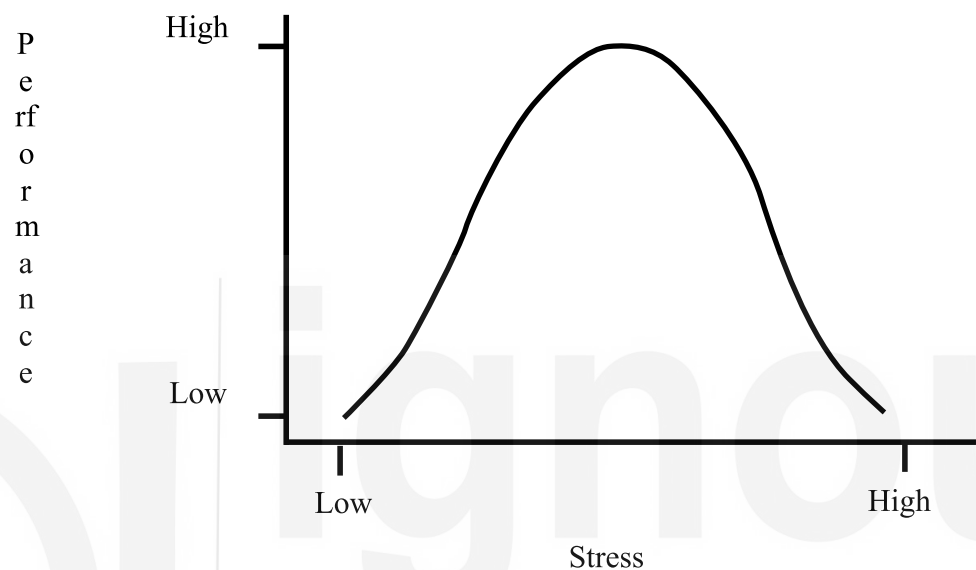
When an individual is experiencing stress, his/ her cognitive performance as well as ability to make decisions can get negatively affected. When experiencing stress the peripheral stimuli may be screened out by the individual and he/ she may indulge in decision making that is based on heuristics. Individuals under stress may also experience rigidity in their performance and display thinking pattern that is narrow. Under stress, individuals may also not be able to indulge in analysing complex situations or carry out manipulation of information (Kavanagh, 2005).

Stress that is experienced in day to day life can also result in negative mood that is experienced by the individual, which in turn may lead to the individual experiencing fatigue, which can further affect his/ her ability to pay attention (Scott et al, 2015).

While discussing about relationship between stress and performance, the hypothesis related to the inverted- U can be discussed. Inverted- U is also called as Yerkes-Dodson Law that denotes relationship between arousal and

performance. It was put forth by Robert Yerkes and John Dillingham Dodson in 1908. The diagrammatic representation of Inverted - U is given in figure 4.2. As can be seen in the figure as the stress increases, the performance also increases, however at certain point where stress continues to increase, the performance is affected and goes down. Thus, it can be said that stress plays an important role in performance, but as it goes beyond certain optimal level, the performance will get negatively affected.

Fig. 4.2: Inverted - U



Thus, stress can affect one's performance and productivity in varied spheres of life including academics, workplace and so on.

As discussed earlier, stress can have an impact on cognitive functioning, even leading to its decline. Students experiencing stress as well can experience such a decline in cognitive functioning and may not be able to pay attention to the subject matter and may also forget what they have learned. You must have seen this especially as a result of examination stress. The students may not be able to answer the examination well because they could not recall the information. And such students will not only experience stress from academics but they may face various stressors from different sources, for instance, pressure from parents, teachers and significant others, internal pressure to do well, stress due to competition and uncertainty about future and so on. All this can not only impact their health but also their cognitive functioning leading to detrimental impact on their performance and productivity.

Let us discuss about how stress can have an impact on performance and productivity at workplace. When employees experience stress for a longer period of time, the outcome could be affective exhaustion, decreased organisational commitment and higher turnover amongst the employees (Kavanagh, 2005). Decreased performance, job dissatisfaction and even absenteeism can be related with stress (Miner, 1992). Most often individuals under stress take more time to complete a task than an individual not experiencing stress. Individuals experiencing stress may also display poor time management. This is especially true when stress experienced is above

the optimal level of the individual, thus he/ she is not able to cope well and this can interfere with the way he/ she manages time. Inability to manage time and complete work as per deadlines can further cause stress. Such individuals may also display lack of punctuality which can cost the organization man-hours. Individuals experiencing stress may also remain absent from jobs for extended period of time (absenteeism). This could mainly be because of the negative impact that the stress can have on their physical and mental health.

Individuals under stress may also not be able to focus on their work activities and this again can affect the productivity and even cause accidents, especially, if the individuals' work activity involves working with machinery/ chemicals and so on.

Stress can also have a negative impact on teamwork and ability of individuals to function in groups (Kavanagh, 2005). Communication can also get hampered when individuals are under stress and the likelihood of individuals being prone to groupthink is also high. As a result of groupthink, the members of a group may reach a consensus decision which may not be correct or rational. Thus, stress can have a negative effect on interactions and relationships at workplace, which in turn can affect team work.

Employees may also experience technostress, stress that is experienced due to lack of ability to cope with advances in technology. Technostress can also negatively affect performance and productivity, not only because the individual is not able to understand the technology but also because his work goals and activities can get affected causing frustration.

In this context, we also need to discuss about yet another term that is 'Burnout'. Pestonjee (1999, pg. 23) defined burnout as "the end of stress experienced but not properly coped with, resulting in symptoms of exhaustion, irritation, ineffectiveness, discounting of self and others and problems of health (hypertension, ulcers and heart problem)". The employees thus can experience BOSS, that is Burnout Stress Syndrome. Development of BOSS in an individual could lead to decrease in energy level of the individual, decreased illness resistance, experiencing heightened dissatisfaction and pessimism as well besides lack of efficiency in carrying out one's work and also absenteeism (Pestonjee, 1992).

Thus, it can be said that stress can have a negative impact on the work life of the individual. Not only the quality of work of the individual experiencing stress will suffer but stress can also have an impact on the work life balance of the individual.

Check Your Progress II

- 1) What is inverted U?

Draw the Figure of Inverted-U below

2) What is Burnout?

4.4 EFFECT OF STRESS ON RELATIONSHIPS

Individuals are not islands but are interdependent on each other. They cannot function in isolation and rely on each other to carry out various activities as well as for support. Thus, one of the important dimensions of an individual's life is his/ her relationship with others. Stress can also have an impact on the individual's relationships.

As we have discussed in earlier Units, as stress is experienced by an individual, he/ she will become irritable and may also express anger. These can have an impact on his/her relationship with others. Further, individuals undergoing stress may withdraw themselves or may seem distracted or may display less affection towards significant individuals in their lives. Experiencing stress for a considerable period of time may also lead to depletion in coping resources, thus the person experiencing stress is also less patient with others.

Inadequate coping strategies employed by the individuals may also lead to behaviours that may negatively affect the individual's relationship with others. For instance, as a result of stress, the person may indulge in substance use (consumption of alcohol and drug use) and such behaviours over a period of time can negatively affect his/ her relationship with others.

Stress may also lead to interpersonal conflicts that again may result in negative effects on relationships. Individuals who are under stress may say certain things or make certain mistakes that they would otherwise refrain from doing. Even decision making and problem-solving abilities of the person get affected and certain decisions he/ she takes or problem solving strategies that he/ she may employ can affect his/ her relationship with others and develop interpersonal conflicts.

A person under stress may also become more sensitive and may be offended by certain things said by others, intentionally or unintentionally. All these could interfere with one's relationship with others and relationship problems may further lead to stress in the individual.

As was discussed in the earlier section of this unit, stress can also affect communication and thus the individual experiencing stress may not filter what he/ she wants to say and may indulge in using harsh and unpleasant language, which otherwise he/ she would have refrained from using. The outcome could be that the other person may feel bad or hurt. This as well can have an impact on relationships. Jobs and work-related activities have become more and more complex and the stress experienced at work is also high and this can have a spill over in the personal life of the individual.

Often, individuals bottle up their stress and do not deal with it or express it. In such a case, it is not possible for significant others in the person's life, especially the spouse, to understand what he/ she is going through and provide the required support. Further, stress can be termed as contagious, where when a partner is undergoing stress, the other partner will also experience stress (Shrout, 2018).

Besides the direct effects of stress, there are indirect effects of stress as well. For instance, individuals experiencing stress may not maintain a healthy lifestyle, are less likely to exercise, may not sleep or eat adequately and may also consume alcohol and indulge in smoking. These in turn will lead to development of various disorders and illnesses and also have negative impact on relationships.

The day to day experiences that we go through from traffic jams, pollution, fast pace of life, overuse of technology can lead to building up of stress within us and if these are not dealt with effectively, they can have an impact on not only one's health and wellbeing but also one's relationships. A vicious circle is created where stress has a negative effect on relationships and the relationship problems and issues in turn could lead to further stress in the individual.

Check Your Progress III

- 1) Highlight the indirect effects of stress.

4.5 LET US SUM UP

To summarise, stress has a negative impact on health of an individual. A number of illnesses like cardiovascular disorders, aches and pain, ulcers, hypertension, diabetes and even cancer can be attributed to stress. Stress can have an impact on the immune system of the individual and thus the individual may become easily prone to varied infections and illnesses.

Stress can also accelerate ageing. Further, stress can also cause anxiety and depression. Extreme stress can also lead to development of Post Traumatic Stress Disorder (PTSD) and other psychological disorders. Stress can also have an impact on cognitive functioning of the individual, that can be termed as a key component of performance and productivity. Prolonged stress can affect memory, attention and concentration of the individual. Stress can also lead to worrying constantly, forgetting, lack of organisation, lack of judgement, racing thoughts and being pessimistic and all these in turn can have an impact on the overall performance and productivity of the individual. While discussing about relationship between stress and performance, the hypothesis related to the inverted - U was discussed. The diagrammatic representation of Inverted - U was also given. The inverted - U denotes that as the stress increases, the performance also increases, however at certain point where stress continues to increase, the performance is affected and goes down. Thus, it can be said that stress plays an important role in performance, but as it goes beyond certain optimal level, the performance will get negatively affected. The effect of stress on academic performance was briefly discussed besides effect of stress on performance and productivity at workplace. When employees experience stress for a longer period of time, the outcome could be affective exhaustion, decreased organisational commitment and higher turnover amongst the employees. Decreased performance, job dissatisfaction and even absenteeism can be related with stress. Stress can affect not only focus of the individual but also his/ her communication pattern and interpersonal relationship at work. The term burnout was also discussed in this context. Lastly, we discussed about the effect of stress on relationships. Individuals are not islands but are interdependent on each other. They cannot function in isolation and rely on each other to carry out various activities as well as for support. Thus, one of the important dimensions of an individual's life is his/her relationship with others. Irritability, communication issues, inadequate coping and so on can take a toll on individuals' interpersonal relation. There are indirect effects of stress as well. For instance, individuals experiencing stress may not maintain a healthy lifestyle, are less likely to exercise, may not sleep or eat adequately and may also consume alcohol and even smoking. These in turn will lead to development of various disorders and illnesses and have negative impact on relationships. The day to day experiences that we go through from traffic jams, pollution, fast pace of life, overuse of technology can lead to building up of stress within us and if these are not dealt with effectively, they can have an impact on not only one's health and wellbeing but also one's relationships. A vicious circle is created where stress has a negative effect on relationships and the relationship problems and issues that may thus emerge in turn would lead to further stress in the individual.

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4.7 KEYWORDS

Burnout: Burnout can be described as the end of stress experienced, by not properly coped with, resulting in symptoms of exhaustion, irritation, ineffectiveness, discounting of self and others and problems of health (hypertension, ulcers and heart problem).

Inverted- U/ Yerkes-Dodson Law: Inverted - U describes the relationship between stress and performance, where as the stress increases, the performance also increases, however at certain point where stress continues to increase, the performance is affected and goes down.

Technostress: Technostress is stress that is experienced due to lack of ability to cope with advances in technology.

4.8 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress I

- 1) List any five illnesses that can be attributed to stress

Cardiovascular disorders

Asthma

Migrane

Irritable bowel syndrome

Cancer

- 2) Highlight how stress affects cognitive functioning.

Prolonged stress can affect memory, attention and concentration of the individual.

Check Your progress II

- 1) What is inverted U?

In Inverted - U, as the stress increases, the performance also increases, however at certain point where stress continues to increase, the performance is affected and goes down.

- 2) What is Burnout?

Burnout is the end of stress experienced but not properly coped with, resulting in symptoms of exhaustion, irritation, ineffectiveness, discounting of self and others and problems of health (hypertension, ulcers and heart problem).

Check Your progress III

- 1) Highlight the indirect effect of stress.

Individuals experiencing stress may not maintain a healthy lifestyle, are less likely to exercise, may not sleep or eat adequately and may also consume alcohol and even smoking. These in turn will lead to development of various disorders and illnesses and also have negative impact relationship. Thus, stress can have an indirect effect on the individual.

4.9 UNIT END QUESTIONS

- 1) Describe the effect of stress on health.
- 2) Discuss the effect stress can have on performance and productivity.
- 3) Explain how stress can impact on relationships.