

**Stress Management Techniques and Strategies to Deal with Stress****Dr. Dharmendra Kumar Singh***Assistant Professor. PG Dept of Psychology,**Rajendra College Chapra, Jai Prakash University Chapra. Bihar. India.***Corresponding Author: Dr. Dharmendra Kumar Singh****DOI - 10.5281/zenodo.17120775****ABSTRACT:**

Stress management consists of a wide spectrum of techniques and psychotherapies aimed at controlling a person's level of psychological stress, especially chronic stress, generally for the purpose of improving the function of everyday life. Stress produces numerous physical and mental symptoms which vary according to everyone's situational factors. These can include a decline in physical health, such as headaches, chest pain, fatigue, sleep problems, and depression. The process of stress management is a key factor that can lead to a happy and successful life in modern society. Stress management provides numerous ways to manage anxiety and maintain overall well-being. There are several models of stress management, each with distinctive explanations of mechanisms for controlling stress. More research is necessary to provide a better understanding of which mechanisms operate and are effective in practice.

Keywords: *Building of the Stress Management, Embracing Stress Counselling for Effective Stress Management, Transactional model, Acute stress, Chronic stress*

INTRODUCTION:**Building of the stress Management:**

There are different ways to measure stress levels. One way is through psychological testing. The Holmes and Rahe Stress Scale is used to rate stressful life events and how life stressors influence illness. The DASS (Depression Anxiety Stress Scales) contains a scale for stress based on self-report items. Changes in blood pressure and galvanic skin response can also be measured to test stress levels. A digital thermometer can be used to evaluate changes in skin temperature, which can indicate activation of the fight-or-flight response drawing blood away from the extremities. Cortisol is the main hormone released

during a stress response and measuring cortisol from hair will give a 60- to 90-day baseline stress level of an individual. This method of measuring stress is currently the most popular method in the clinic. Despite stress often being thought of as a subjective experience, levels of stress are readily measurable; using various physiological tests, similar to those used in polygraphs. An example of stress being measured is using nano EEG sensors in detecting stress.

Historical Foundation:

Psychology doesn't just stop at understanding stress; it equips us with tools to manage it effectively. Techniques like cognitive behavioural therapy (CBT) can help us challenge negative thought

patterns and develop coping mechanisms. Relaxation techniques like deep breathing and meditation can help calm the body's stress response. Psychologists can also help us identify unhealthy stress management habits, like emotional eating or procrastination, and replace them with healthier alternatives. By building a personalized stress management toolkit, we can learn to navigate challenges with greater resilience. Try your best to cope with the stress and when it is overwhelming, it is better to consult a psychologist.

Types of Stress:

As per Berens A. E., Jensen, S. K. G., & Nelson, C. A. (2017), Many stress management techniques cope with stresses one may find themselves withstanding. Some of the following ways listed help to reduce higher than usual stress levels temporarily or to compensate the biological issues involved; others face the stressors at a higher level of abstraction:

- Autogenic training
- Social activity
- Cognitive therapy
- Conflict resolution
- Cranial release technique
- Getting a hobby
- Meditation
- Mindfulness
- Music as a coping strategy
- Deep breathing
- Yoga Nidra
- Nootropics
- Reading novels
- Prayer

- Relaxation techniques
- Artistic expression
- Fractional relaxation
- Humour
- Physical exercise
- Progressive relaxation
- Spas
- Somatics training
- Spending time in nature
- Stress balls
- Natural medicine
- Clinically validated alternative treatments
- Time management
- Planning and decision making
- Listening to certain types of relaxing music[2][3]
- Spending quality time with pets
- Art Therapy/Coloring

HISTORICAL FOUNDATIONS:

- Walter Cannon and Hans Selye used animal studies to establish the earliest scientific basis for the study of stress. They measured the physiological responses of animals to external pressures, such as heat and cold, prolonged restraint, and surgical procedures then extrapolated from these studies to human beings.
- Subsequent studies of stress in humans by Richard Rahe and others established that stress is caused by distinct, measurable life stressors, and that these life stressors can be ranked by the median degree of stress they produce (leading to the Holmes and Rahe stress scale). Holmes and Rahe is focused on how

life's stressors can influence one's health and wellness. The scale was developed to measure the effects of stress on health using life change units, to quantify stress and its correlation to illness. Thus, stress was traditionally conceptualized to be a result of external insults beyond the control of those experiencing the stress. More recently, however, it has been argued that external circumstances do not have any intrinsic capacity to produce stress, but instead, their effect is mediated by the individual's perceptions, capacities, and understanding.

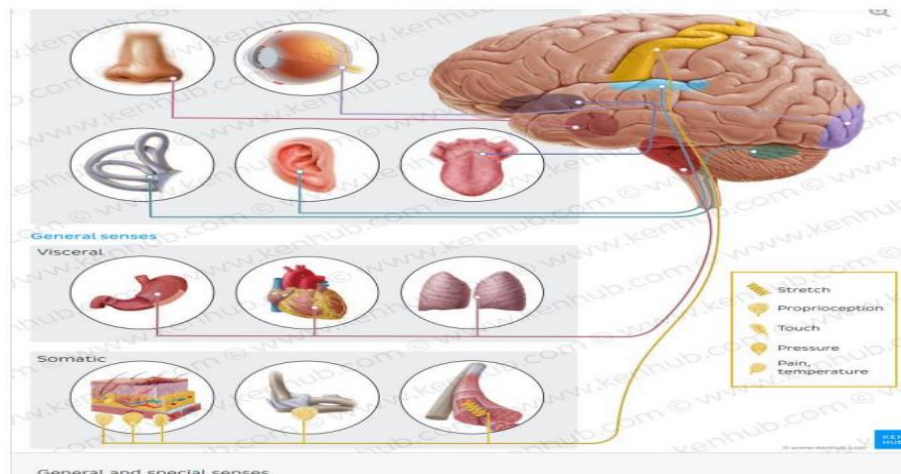
- There are several models of stress management, each with distinctive explanations of mechanisms for controlling stress. Much more research is necessary to provide a better understanding of which

mechanisms operate and are effective in practice.

DISCUSSION:

Transactional Model

In 1981, Richard Lazarus and Susan Folkman suggested that stress can be thought of as resulting from an "imbalance between demands and resources" or as occurring when "pressure exceeds one's perceived ability to cope". Stress management was developed and premised on the idea that stress is not a direct response to a stressor but rather an individual's resources and abilities to cope and mediate the stress response which are amenable to change, thus allowing stress to be controllable. (Biological embedding of childhood adversity: From physiological mechanisms to clinical implications. BMC Medicine, 15(1), 135)



Understanding Physiological Control:

- Homeostasis: Physiology revolves around the concept of homeostasis, the maintenance of a stable internal environment despite external changes. This involves regulating

factors like body temperature, blood pressure, and blood sugar levels.

- Nervous System: The nervous system uses electrical and chemical signals to quickly transmit information and coordinate bodily functions. It's

involved in reflexes, sensory input, and motor control.

- **Endocrine System:** The endocrine system uses hormones to regulate various physiological processes, including growth, metabolism, and reproduction.
- **Negative Feedback:** Many physiological control systems rely on negative feedback loops, where a change in a parameter triggers a response to return it to the normal range.
- **Sensors and Control Centres:** Control systems often involve sensors (receptors) that detect changes in a variable and control centres (like the brain) that process the information and initiate appropriate responses.
- **Effectors:** Effectors are the muscles or glands that carry out the responses initiated by the control centre

Transactional Model of Stress and Coping of Richard Lazarus:

To develop an effective stress management program, it is first necessary

to identify the factors that are central to a person controlling his/her stress and to identify the intervention methods which effectively target these factors. Lazarus and Folkman's interpretation of stress focuses on the transaction between people and their external environment (known as the Transactional Model). The model contends that stress may not be a stressor if the person does not perceive the stressors as a threat but rather as positive or even challenging. Also, if the person possesses or can use adequate coping skills, then stress may not actually be a result or develop because of the stressors. The model proposes that people can be taught to manage their stress and cope with their stressors. They may learn to change their perspective of the stressors and provide them with the ability and confidence to improve their lives and handle all the types of stressors. (Feder, M. E., Bennett, A. F., & Huey, R. B. (2000). Evolutionary physiology. Annual Review of Ecology and Systematics, 31(1), 315–341. 5. Gates)



METHODOLOGY AND MEASURING STRESS:**Pilot Stress Report Systems:**

Early pilot stress report systems were adapted and modified from existing psychological questionnaires and surveys. The data from these pilot-specific surveys is then processed and analysed through an aviation-focused system or scale. Pilot-oriented questionnaires are generally designed to study work stress or home stress. Self-report can also be used to measure a combination of home stress, work stress, and perceived performance. A study conducted by Fiedler, Della Rocco, Schroeder and Nguyen) used Sloan and Cooper's modification of the Alkov questionnaire to explore aviators' perceptions of the relationship between different types of stress. The results indicated that pilots believed performance was impaired when home stress carried over to the work environment. The degree of home stress that carried over to work environment was significantly and negatively related to flying performance items, such as planning, control, and accuracy of landings. The questionnaire was able to reflect pilots' retroactive perceptions and the accuracy of these perceptions. The questionnaire consists of items related to lifestyle changes and personality characteristics. After completing the questionnaire, the test group is divided into two groups: "at-fault" with mishap, and "not-at-fault" in a mishap. Then, questionnaires from these two groups

were analysed to examine differences A study of British commercial airline pilots, conducted by Sloan and Cooper (1986), surveyed 1,000 pilot members from the British Airline Pilots' Association (BALPA). They used a modified version of Alkov, Borowsky, and Gaynor's questionnaire to collect data on pilots' perceptions of the relationship between stress and performance. Being a subjective measure, this study's data was based on pilots' perceptions and thus rely on how accurately they recall past experiences their relationships to stress. Despite relying on subjective perceptions and memories, the study showed that pilot reports are noteworthy.

Types of Stress Stress in the Workplace:**Acute Stress:**

Acute stress is the most common form of stress among humans worldwide. It deals with the pressures of the near future or the very recent past. While acute stress is often interpreted as being a negative experience, it can actually be beneficial and even necessary for one's wellbeing because of its protective effects against potentially dangerous threats.] Slamming on the brakes while driving in order to avoid a car accident could be considered a moment of beneficial acute stress. Running or any other form of exercise would also be considered an acute stressor. Some exciting or exhilarating experiences such as riding a roller coaster is an acute stress but is

usually very enjoyable. Acute stress is a short-term stress and as a result, does not have enough time to do the damage that long term stress causes.

Chronic Stress:

Unlike acute stress, which only lasts for a moment, chronic stress lasts for longer time spans. It has a wearing effect on people that can become a very serious health risk if it continues over a long period of time.

Chronic stress can lead to memory loss, damage spatial recognition and produce a decreased drive of eating. Additional symptoms of chronic stress include aches and pains, insomnia or other sleep disturbances, changes in social behaviour's, low energy, emotional withdrawal or other changes in emotional responses, and unfocused thinking. Chronic stress has also been associated with other medical conditions such as hypertension, heart disease, diabetes, obesity, and arthritis.

The severity varies from person to person. Gender difference can also be an underlying factor. Women are able to take longer durations of stress than men without showing the same maladaptive changes. Men can deal with shorter stress duration better than women can. If men hit a certain threshold, the chances of them developing mental issues increase drastically.[32]

Chronic stress is a major health issue that affects people of all ages and can have profound effects on physical and mental health. It is a long-standing, unrelieved, and unavoidable stress, that

include busy work, school schedules, and complex relationships. Over time, chronic stress can alter the body's systems, leading to a variety of illnesses and conditions.

RESULTS:**Measurement Systems:**

The most used stress measurement systems are primarily rating scale-based. These systems tend to be complex, containing multiple levels with a variety of sections, to attempt to capture the many stressors present in the aviation industry. Different systems may be utilized in different operational specialties. The Perceived Stress Scale (PSS) – The PSS is a widely used subjective tool for measuring stress levels. It consists of 10 questions, and asks participants to rate, on a five-point scale, how stressed they felt after a certain event. All 10 questions are summed to obtain a total score. In the Jai Prakash University Chapra, Bihar, for example, it has been used with flight training students to measure how stressed they felt after flight training exercises. The Coping Skills Inventory – This inventory measures aviators' skills for coping with stress. This is another subjective measure, asking participants to rate, on a five-point scale, the extent to which they use eight common coping skills: Substance abuse, Emotional support, Instrumental support (help with tangible things, like child care, finances, or task sharing), Positive reframing (changing one's thinking about a negative

event, and thinking of it as a positive instead), Self-blame, Planning, Humour and Religion. An individual's total score indicates the extent to which he or she is using effective, positive coping skills (like humour and emotional support); ineffective, negative coping skills (like substance abuse and self-blame); and where the individual could improve. The Subjective Workload Assessment Technique (SWAT) – SWAT is a rating system used to measure individuals perceived mental workload while performing a task, like developing instruments in a lab, multitasking aircraft duties, or conducting air defence. SWAT combines measurements and scaling techniques to develop a global rating scale.. (Berretta, S., Heckers, S., & Benes, F. M. (2015). Searching human brain for mechanisms of psychiatric disorders. *Schizophrenia Research*, 167(1–3), 91–97.)

CONCLUSION:

Stress Management Programs:

As per Barnard, C. J. (1983). *Physiological mechanisms and behaviour*. In C. J. Barnard (Ed.), *Animal behaviour: Ecology and evolution* (pp. 11–59) Many businesses have begun to use stress management programs for employees who are having trouble adapting to stress at the workplace or at home. Some companies provide special equipment adapting to stress in the workplace to their employees, like colouring diaries and stress relieving gadgets. Many people have spill over stress from home

into their working environment. There are a couple of ways businesses try to reduce the stress levels of their employees. One way is through individual intervention. This starts off by monitoring the stressors of the individual. After monitoring what causes the stress, next is attacking that stressor and trying to figure out ways to alleviate them. Developing social support is vital in individual intervention, being with others to help you cope has proven to be a very effective way to avoid stress.[citation needed] Changing behavioural patterns, may in turn, help reduce some of the stress that is put on at work as well. Employee assistance programs can include in-house counselling programs on managing stress. Evaluative research has been conducted on EAPs that teach individuals stress control and inoculation techniques such as relaxation, biofeedback, and cognitive restructuring. Studies show that these programs can reduce the level of physiological arousal associated with high stress. Participants who master behavioural and cognitive stress-relief techniques report less tension, fewer sleep disturbances, and an improved ability to cope with workplace stressors. Another way of reducing stress at work is by simply changing the workload for an employee or even giving them more control as to when or where they work. Improving communications between employees is very effective for helping reduce stress. Making the employee feel like they are a bigger part of the company, by giving them a voice in

bigger situations shows trust and value in their opinion. Having all the employees cooperate with each other is an underlying factor which can take away much of workplace stress. Lastly, changing the physical qualities of the workplace may reduce stress. Changing things such as the lighting, air temperature, odor, and up to date technology. Intervention is broken down into three steps: primary, secondary, tertiary. Primary deals with eliminating the stressors altogether. Secondary deals with detecting stress and figuring out ways to cope with it and improving stress management skills. Finally, tertiary deals with recovery and rehabbing the stress altogether.

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