

Reviewing and Understanding Stress Relief: A Simple Guide to Effective Methods

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ABSTRACT: Stress is a person's physical mental and emotional reaction to a certain stimulus. The main causes include environmental stress, social stress, physiological stress, thoughts, and psychological stress. The types include Eustress, Distress, Acute stress, and Chronic stress. Physiological psychological responses include lack of focus, anxiety, impatience, depression, anxiety, drowsiness, disorientation, the feeling of losing control, panic attacks, palpitations, stomach ache, liver pain, vomiting, dizziness, hair loss, dandruff, sickness, headache, etc. variety of sources, including losing a close friend or family member, struggling financially, experiencing health issues, or failing in sports or academics, exams, etc. Management includes meditation, exercise, music listening, yoga, sleeping, etc.

KEYWORDS: Stress, Stress management, Physiological Responses, Psychological Responses

I. INTRODUCTION

Stress is defined as a person's physical, mental, and emotional reaction to a certain stimulus, often known as a "stressor". stress is our body's way of responding to any type of demand¹. Stress is a physiological and psychological reaction to environmental demands. It can be positive (eustress) or negative (distress)². Eustress is a constructive type of stress that encourages a person to keep working. When stress grew intolerable or difficult to manage, distress would appear³. An individual experience stress when they are faced with a circumstance that they feel unmanageable and overwhelming⁴.

Causes of stress

1.Environmental Stress: can subject you to various pressures that require adaptation, such as weather fluctuations, loud noises, congestion, pollution, traffic, substandard housing, and criminal activity⁵.

2.Social stress: We may experience several stressors due to the demands of the different social roles we play, such as caregiver, husband, parent, and employee. Social stressors include things like deadlines, money problems, job interviews, presentations, disagreements, demands on your time and attention, losing a loved one, divorce, and co-parenting⁶.

3.Physiological stress: Events and circumstances that affect our bodies are referred to as physiological stressors. Physiological stressors include teenage rapid development, menopause, illness, aging, childbirth, accidents, insufficient exercise, bad diet, and sleep difficulties⁷.

4.Thoughts: Depending on how our brain interprets the world, events might be stressful, difficult, painful, or joyful. Certain life circumstances are stressful, but whether or not they become an issue for us depends on how we view them⁸.

5.Psychological stress: Psychologists frequently divide the wide variety of stresses into four categories, there are four different sorts of stresses: big life events, micro stressors that occur every day, ambient stressors, and crises or disasters⁹.

Types of Stress

Stress has four types, Eustress, Distress, Acute stress, and Chronic stress.

1.Eustress: The "good" or "positive" stress that arises in enjoyable environments is known as eustress. Unexpectedly, some pressures can be beneficial. "Do you recall how you felt earlier

when you were thinking about the possibility of getting that amazing new job” and that's only one example of eustress. Additional instances include the excitement associated with buying a new house, getting married, or feeling great after working out. You can become more self-assured, capable, and driven with eustress. Even though "distress" is sometimes disregarded when discussing stress management, knowing constructive coping strategies will help you deal with it more skillfully¹⁰.

2. Distress: The negative or "bad" form of stress that results from viewing stress as painful, strange, unfair, or dangerous is called distress. Examples include losing one's job, experiencing a catastrophic injury, a long-term illness, divorce, depression, and a catastrophic injury¹¹.

3. Acute stress: Stress that lasts only a brief while is called acute stress. Either distress or eustress could be the cause. A presentation in front of an audience is one situation where acute stress could occur. Your pulse rate increases, your breathing quickens, and you start to perspire when under stress. These sensations pass quickly, and the body quickly heals. Acute stress is the most prevalent kind of stress. It is a result of both anticipated wants and pressures in the near future as well as past demands and conflicts. Acute stress can be exhilarating and exciting in moderation, but excessive amounts can be exhausting. stress, on the other hand, can cause psychological distress, tension headaches, upset stomach, and other symptoms¹².

4. Chronic stress: Long-lasting stress is referred to as chronic stress. Major events can trigger this kind of stress, but it can also develop when smaller stresses accumulate and you are unable to deal with them. Chronic stress can be caused by a long-term illness, long-term marital issues, or workplace layoffs or restructuring. The most dangerous type of stress for your health is ongoing stress since it raises your chance of burnout and other negative effects. Persistent stress is neither interesting or thrilling like acute stress can be. It's the kind of constant anxiety that wears people down year after year, day after day. Prolonged stress has a devastating effect on our bodies, minds, and lives. Over time, attrition leads to disaster. It's the stress that never-ending "troubles" have brought to the people of Northern Ireland; the stress that Arabs and Jews have experienced due to tensions in the Middle East; and the stress that the people of Eastern Europe and the former Soviet Union have experienced due to endless ethnic rivalries. When someone is unable to find a way out of a

challenging circumstance, chronic stress results. It's the stress brought on by constant pressures and demands that appear to go on forever. A person quits searching for solutions when they give up¹³.

II. PHYSIOLOGICAL RESPONSE TO STRESS

Stressed-out students might display a wide range of symptoms. They are now immediately identifiable. Students who are under stress often report feeling down, suffering stomach aches, difficulty falling asleep, difficulty relaxing, and even mental health problems. The three symptoms that research participants reported experiencing the most were headaches, exhaustion associated with burnout, and poor sleep quality. Other common symptoms were malaise, lack of concentration, anxiety, impatience, melancholy, anxiety, drowsiness, disorientation, sense of being out of control, panic attacks, palpitations, stomach ache, liver pain, vomiting, dizziness, premature greying of hair, and sickness. It's interesting to notice how different people's responses to stress affected their appetites: some said they felt less hungry, while a small percentage said they felt hungrier. Students who are under stress can exhibit a variety of symptoms that can now be easily recognized. Stressed-out students report feeling depressed, experiencing stomach aches, having trouble falling asleep, having trouble relaxing, and even experiencing mental health issues¹⁴.

Stress usually affects every system in the body, including the neurological, muscular, reproductive, gastrointestinal, endocrine, respiratory, and cardiovascular systems. Acute stress causes the heart to dilate, heart muscle contractions to become more intense, blood supply to the large muscles to be redirected, and heart rate to rise. In addition to working with the circulatory system to provide oxygen to the body's cells, the respiratory system eliminates waste carbon dioxide from the body. When there is a severe strain on the airway, breathing becomes rapid and difficult. The endocrine system increases the production of cortisol and other steroid hormones to set off the body's stress response. One way that stress affects the gastrointestinal tract is by the pace at which food moves through the intestines. Additionally, it could affect digestion and nutrition¹⁵.

The increased autonomic reaction causes blood pressure and heart rate to increase. During severe illness, catecholamine release lowers blood circulation in the gastrointestinal system. Adrenaline and norepinephrine plasma levels

redistribute blood volume during stressful situations in order to maintain the brain's blood supply. Anxiety, hemorrhagic shock, hypoglycemia, and exercise above the anaerobic threshold are just a few of the numerous events that can cause the sympathetic nervous system to become activated¹⁶. Epinephrine is also associated with immobilized terror, aggressiveness, escape, and activity. Stress hormones can be released in response to environmental or psychological stress, changing the body's physiology. The acute stress response known as "fight or flight" is triggered by this type of stimulation of the sympathetic nervous system. This enables someone to engage in combat¹⁵.

III. PSYCHOLOGICAL EFFECTS OF STRESS

Stress ranks as the second most common issue among students. Significant psychological morbidities, including stress, anxiety, and depression, were frequently and severely observed among them. Depression prevalence may be categorized by severity as follows: normal, mild, moderate, severe, and extremely severe. Anxiety prevalence can be similarly categorized as light, moderate, severe, and extremely severe¹⁷.

Several studies accordingly, conclude that psychological issues were indicated among medical students¹⁷. Stress, anxiety, and depression were very common among students¹⁸. Similarly in terms of gender, atypical depression was more common in men than in women. This outcome was consistently observed by the researcher Demirbatir et al., who likewise found no evidence of a significant correlation between gender and depression in Turkish medical and music college students. Whereas male nursing students in Hong Kong experienced depression at a higher rate than female students, also found higher depression levels among married nursing residents¹⁹ according to research by Cheung et al. However, research by Bore et al. discovered that although the differences were not statistically significant, Australian female medical students reported higher levels of depression than male students¹⁹.

IV. FACTORS CONTRIBUTING TO STRESS

Students at universities experience stress for a variety of reasons. Some are related to academic concerns, while others are caused by personal situations, like the environment, time, and money²⁰. Students might experience stress from a

variety of sources, including losing a close friend or family member, struggling financially, experiencing health issues, or failing in sports or academics²¹. Excessive stress in educational environments should be closely monitored because research indicates that it can have a detrimental influence on student's mental, physical, and academic well-being²⁰. Competition, a lack of free time for socializing or leisure activities, and timetables requiring complete devotion are all seen as characteristics of medical study, which can lower life happiness. There are other facets of a student's life outside their academics, even if these are probably some of the most significant (family, friends, leisure activities, etc.)²². University students have highlighted academic-related issues, external circumstances, and personal events as sources of stress. The most often stated cause of stress is academic-related stress. An increasing amount of research indicates that stress can have disastrous consequences like anxiety, sadness, and most frequently, a decrease in academic performance²³. Numerous common elements have been observed, even though research indicates that diverse pharmacy student populations have varied sources of stress. It should come as no surprise that academics are the main cause of stress for students²⁴. The amount of work that is expected of students, tests, and the nature of the coursework are some specific causes of academic stress. Stress related to money, including debt from both present and future, is almost as common. Family and other relationship stressors appear to be less prevalent than academic and financial stressors²³. discovered that the most common sources of stress among students were familial and other relationship-related stressors. Stress is also commonly linked to worries about one's future career and professional prospects, interactions between teachers and students, concerns about one's health, and worries about one's outside job²⁴. Although they are less common in the literature, pressure to excel, experience rotations, and dwindling postgraduate employment options could be additional sources of stress²³.

V. STRESS MANAGEMENT TECHNIQUES AND THEIR EFFECTIVENESS

The most popular student interventions provided by schools are academic advising and counseling; it was not made clear if these services were provided at the college or university level. It is still unknown how helpful counseling is for

students receiving these services, or how much difficulty they face. Yoga and fitness classes are also frequently included. Despite research in higher education demonstrating the effectiveness of

providing faculty with wellness support training. Programs like Mental Health First Aid could be used to assist in faculty training. It is crucial to remember that the timing of training—such as Mental Health First Aid—and whether or not it is mandated for all professors and staff might have an impact on its effectiveness. Due to the rise in stress, despair, and other mental health concerns among students, educator and staff play a vital role in mediating treatments and directing students to the resources²⁰.

The topics covered in these courses varied, but they all included subjects like substance addiction, time management, and money or finance which are thought to be crucial to understanding the causes of stress and how to reduce it. For instance, students can experience how journaling, breathwork, and grounding skills can improve their ability to cope with stressful situations through mindfulness lectures and workshops. Teachers who have proof of the beneficial effects of mindfulness on education are also crucial. It has been demonstrated that mindfulness helps students develop their ability to link ideas from other classes, be patient and present in the classroom, and enhance cognitive abilities including long-term memory retention²⁵.

Students in the healthcare industry typically use active, passive, or a combination of both coping techniques. Most of the studies recommended sleep as the most effective stress-reduction strategy. Additionally, students' second most popular stress-reduction strategies were deep breathing exercises, self-motivation, and peer support. The aforementioned strategies are proactive approaches to managing stress and align with the practices employed by medical students in Malaysia, Nepal, Saudi Arabia, and Iran, as well as by nursing students²⁷.

Designing stress prevention and management initiatives at the university to eliminate or reduce these stressors requires an understanding of the stresses that have an impact on student's academic performance and overall well-being. In addition, it is preferable to offer resources and a setting that will help students deal with the challenges that are a natural part of the academic setting. It is anticipated that the implementation of student-centered learning

mindfulness meditation in lowering stress and anxiety, less than half of schools use it²⁵.

Several study's findings also showed that only a small proportion of pharmacy schools are now

methodologies, counseling facilities, evaluation criteria modifications, and the creation of individual student tutors will all help reduce the stress that students feel. Additionally, it has been shown that using the mind-body stress reduction technique is an excellent way to manage stress²⁸.

Pharmacy schools must adhere to new standards set by the Accreditation Council for Pharmacy Education (ACPE), which also requires the schools to evaluate the possibility of a negative impact on programmatic outcomes and morale by measuring "perceived stress in faculty, staff, and students"²⁹.

Short relaxation methods, such as breathing exercises and mini-meditation, are advised for acute stress. Building supportive networks, getting regular exercise, listening to music, eating a balanced diet, practicing meditation, and using online therapy are all important aspects of managing chronic stress. Journaling, talking to friends or a therapist, and practicing mindfulness are some techniques for managing emotional stress. When long-term, chronic stress leads to burnout, it can be prevented by taking breaks, finding joy in one's work, taking up hobbies, and keeping a sense of humour³⁰.

Interventions addressing, for example, relaxation techniques and stress management techniques have been developed to help students manage stress and to lower the chance of adverse health-related outcomes²². Certain pupils may employ specific techniques to cope with their stress²⁰. Having family members as social support can help you feel less stressed. For example, research has shown that during medical school, socializing with coworkers helps in the reduction of stress. Medical students find it difficult to engage in family activities where they are emotionally attached and now they face a lack of time due to their studies²².

Exercise can lower stress hormones like cortisol and adrenaline while increasing the production of endorphins, which elevate mood and promote relaxation. Forty Regular participation in sports like football, badminton, and swimming can enhance the quality of life and reduce stress more successfully. The faculty or institution may take the lead by setting up weekly stress-relieving programs for the students, such as aerobics or physical

education, which would help them balance their personal and academic lives³¹.

VI. CONCLUSION

In conclusion, stress is our body's reaction to various situations, both positive and negative. It can arise from environmental factors like noise or pollution, social pressures such as deadlines or conflicts, physiological changes like illness or aging, our thoughts and perceptions, or psychological factors like major life events or every day worries. There are different types of stress: Eustress, which is good stress, and Distress, which is negative stress. Acute stress is short-term whereas Chronic stress lasts for a longer duration of time and can endure serious effects on health. Stress affects us physically and mentally, involving symptoms like headaches, poor sleep, fatigue, etc., and may affect our systems, from the heart and lungs to digestion, and interfere with the hormone level.

Students might face stress related to academic pressures, personal issues, financial worries, and various deadlines for submissions like assignments, seminars and field visit reports, etc. Hence it is essential that they are subjected to various stress management techniques including counselling and yoga etc. and it is now the need of the hour to appoint a counsellor in an institution to cope with the situation arising from stress in students.

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