

## ERGONOMICS FOR DEVELOPMENT STRESS MANAGEMENT IN THE WORKPLACE

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### ABSTRACT

There are several elements associated with stress during work hours that lead to workers' mental and physical deterioration. Individuals in modern life commonly experience unhappiness due to emotions of unfairness, loneliness, pressure, and pessimism. As a result, many people experience absenteeism, workplace mishaps, and even suicidal thoughts. Employee stress at work can also have a negative impact on an organisation's operations, resulting in higher absenteeism, poor work attitudes, and lower quality of work and productivity. It is crucial to know that such stress also has an impact on workers' families, communities, and the environment. Workers are social beings who cannot exist fully apart from their social life. This study investigates the advancement of ergonomics as a stress-reduction method for workplace stress management development, with the goal of attaining a harmonious work-life balance that takes into account social, cultural, and environmental factors.

**Keywords:** Ergonomics, Stress, Stress Management, Work-life balance.

### 1.0 INTRODUCTION

Humans try to fulfil their various needs for living by doing multiple mental and physical activities based on their ability and competencies. Meanwhile, to obtain these competencies, they must have training, education, and experience that drive motivation to improve their quality of life. The problem is, to fulfil it, they should face various internal and external challenges. Then, the spirit of motivation causes emotional pressure that manifests into mental and physical tension. At a certain level, mental strain is necessary, as it increases alertness, awareness, concentration and accuracy. On this basis, humans react mentally and physically, from task demands to the threat of danger. However, if this condition continues over a long period, it will lead to mental and physical fatigue. However, experiences of exhaustion vary, as each individual possesses distinct endurance levels, mental states, and physical capabilities. It also correlated with their life background, such as their childhood, education, socio-culture, and environment.

Obviously, in modern society, stress is an integral part of human lives; it is a necessary reaction to changes in everyday conditions and situations in an appropriate manner. Therefore, stress is not to be evaded. Indeed, it is needed to stay alive and create energy to sustain life. It is stress-activated in the body while sleeping organs should function. However, naturally, humans, besides themselves, demand peace with family, workplace institutions, society, and the

environment. The challenge is to differentiate between good and bad stress in daily life and cope with unnecessary stress to attain work-life balance.

Therefore, various efforts to deal with stress management in the workplace are very important. This encourages the development of various applied sciences support; one of them is ergonomics, which has experienced significant progress. Various ergonomic assessments and measurements for the company have been used as references and standards. And the advance in ergonomics recently is the presence of neuroergonomics.

## 2.0 MATERIALS AND METHODS

The study focused on reviewing the library used as a desk research method and online searching to collect data from scientific publication sources, including the support from some scientific researchers' publications to solve the related issues. The technique used is a descriptive-qualitative analogy to analyse the sources.

The phenomenon of stress in the workplace has long been a concern for managers or decision-makers. This has encouraged various efforts to overcome it and involves various related applied sciences. Applied sciences such as ergonomics, work psychology, sociology, and organisational behaviour have been instrumental in developing strategies to mitigate stress in the workplace. These approaches not only enhance employee well-being but also boost overall productivity and morale within organisation of the company. Therefore, stress management in the workplace is also increasingly developing. As organisations recognise the importance of creating a supportive work environment, they are implementing comprehensive stress management programmes that include training, empowering resources, and policies aimed at fostering resilience among employees. By prioritising mental health alongside physical well-being, companies can cultivate a more engaged and productive workforce, ultimately leading to long-term success.

### 2.1 Stress is Human Naturally

Naturally, every living creature is always driven by stress. As stated by Kroemer (2017), obviously, stress is part and parcel of our life; it is a necessary condition for all living creatures who must react to new situations in an appropriate way. It is also conveyed by Kroemer (2017) that life without stressors would not only be unnatural but also boring as well. Meanwhile, Selye (1976) put forward the physiological aspect of stress, saying that, indeed, it cannot be avoided since just staying alive creates some demand for life-maintaining energy. Furthermore, in detail, Selye (1976) revealed that even while man is asleep, his heart, respiratory apparatus, digestive tract, nervous system and other organs must continue to function. Anyway, everyone in this life cannot be liberated from stress, as Selye (1976) stated complete freedom from stress can be expected only after death. This description of stress is provided with a thorough grasp of stress stereotypes, which vary depending on the stimuli or sources of stress. Stress responses manifest themselves through viewpoint, attitude, conduct, and activities.

Intensive or prolonged stress frequently alters people's behaviour and emotions. Common symptoms include irritation, dissatisfaction, impaired concentration, unhealthy interpersonal connections, anxiety, and sadness. Stress can also cause abnormal behaviours such as heavy smoking, binge drinking, and drug usage. Work-related employee stress can also have a

negative impact on an organisation's operation by increasing absenteeism and poor work attitudes and decreasing job quality and productivity. As a result, stress can harm a person while also costing the employer money. According to Kroemer (2017), because stress is a subjective experience, stress management techniques must be tailored to each individual case.

## 2.2 Define Stress

The term 'stress' is multi-interpretable to different people; it depends on their problems and experiences. According to Selye (1976), stress is part of our daily human experience, but it is associated with a great variety of essentially dissimilar problems, such as surgical trauma, burns, emotional arousal, mental or physical effort, fatigue, pain, fear, the need for concentration, the humiliation of frustration, the loss of blood, intoxication with drugs or environmental pollutants, or even with the kind of unexpected success that requires an individual to reformulate his lifestyle. Medical studies have demonstrated that, despite the fact that each individual experiences unique challenges, they respond with predictable patterns of biochemical, functional, and structural changes that are largely concerned with any increase in vital activity, particularly adaptability to new settings. Furthermore, Selye (1976) stated that distinguishing between their widely differing specific effects and the common biologic response that they elicit is the key to a proper understanding of biologic stress. Therefore, the definition of biological stress introduced by Selye (1976) is the nonspecific response of the body to any demand.

Beside biological response, stress also influences psychological change, as revealed by Cohen et al. (1997), a process in which environmental demands tax or exceed the adaptive capacity of an organism, resulting in psychological and biological changes that may place persons at risk for disease. In its subsequent evolution, stress was revealed to have not only a biological or bodily effect but also a mental or spiritual impact, as defined by Seaward (2018), "Stress: The experience of a perceived threat (real or imagined) to one's mental, physical, or spiritual well-being, resulting from a series of physiological responses and adaptations."

However, Selye (1976) emphasised, in everyday life we must distinguish between two types of stress effects, namely, eustress (from the Greek eu or good – as in euphony, euphoria, eulogy) and distress (from the Latin dis or bad – as in dissonance, disease, dissatisfaction). Stress can yield both positive and negative consequences, contingent upon the circumstances. In other words, there are two distinct physical manifestations of stress that involve hormones and various chemicals in the body: positive stress and negative stress. Furthermore, Berlin and Adams (2017) revealed, when we are in a challenging situation but confident of being able to complete the task successfully, the adrenaline-kick is only temporary and can be called positive stress since it serves to increase our alertness and stimulate us with a manageable challenge. However, when they believe they are unable to succeed, particularly when this occurs on a regular basis, the stress becomes negative.

## 2.3 Physiological Stress

According to Liimatainen and Gabriel (2000), stress is not always a bad thing; some stress keeps us motivated and aware, whereas too little stress might cause problems. However, excessive stress can cause difficulties with both mental and physical health, especially over

time. Furthermore, Liimatainen and Gabriel (2000) observed that workplace stress is a negative physical and emotional response that occurs when job requirements are unaligned with the worker's abilities, resources, or demands. Job stress can cause bad health and even damage. Long-term job stress has been related to an increased risk of musculoskeletal illnesses, depression, and job burnout, as well as a variety of chronic diseases, including cardiovascular disease and cancer. Stress in the workplace is also influenced by firm managers' inability to give health and safety guarantees, which raises the risk of accidents and illness. However, according to Cox et al. (2000), stress is treated as a generalised and nonspecific physiological response syndrome.

## 2.4 Psychological Stress

Psychological stress is defined by Lazarus and Folkman (1984) as a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being. When examined further, a specific relationship denotes a two-way interaction between an individual and their surroundings. Everything in its immediate surroundings makes up the environment. Everything in its immediacy constitutes the environment. Interaction between husband and wife and their children, son/daughter-in-law and brother/sister-in-law, friends, coworkers, work devices and equipment, and the workplace environment. The potential for danger is inherent in all these elements for the individual. However, the impact of the environment also hinges on the individual's personality and perception, which shape their emotional responses during interactions with their surroundings. To determine the causes of stress, both the individual and the environment must be assessed, as outlined by Lazarus and Folkman (1984). This evaluation is critical in assessing the balance between environmental expectations and an individual's ability to meet those demands.

It is not only limited to understanding biological, physiological, and psychological stimuli or even positive and negative stress. Because this understanding cannot explain why the same stimulus causes different stress responses in each individual, even in the same individual sometimes the stress response is different (Matthews, 2001). In order to capture the dimensions of stress comprehensively, Hancock and Warm (1989) propose a model called the 'trinity of stress', which comes from (1) input, namely the composition of the physical characteristics of the task; (2) adaptation, in the form of a transactional perspective, namely individual responses to tasks; and (3) output, which shows an action performance efficiency in carrying out tasks.

A more specific psychophysiological stress explanation, when an individual responds to stress, is revealed by Wiholm (2006): All stressors, internal and external, activate a biological response of stress through the central nervous system (CNS), the endocrine and immune systems, or via the sympathetic nervous system (SAM – sympathetic adrenal medullary). The hypothalamus, pituitary-adrenal axis (HPA), and autonomic nerve system (ANS) are in charge of relaying information from stressful events to other organs. The information is transmitted via nerve impulses or blood circulation, altering the metabolism in the organs to assist the individual in dealing with the arousing scenario. Furthermore, to support that explanation of individual responses to stress, there are also hormone processes involved in it; in brief, Wilson (2001) describes the purpose of your adrenal glands as helping your body cope with stresses and survive; the adrenals are also known as the stress glands; it is their responsibility to help

your body deal with stress from any source, including injury, disease, work, and relationship issues. As stress increases, progressively higher levels of cortisol are required. Stress over a long period of time increases the hormone adrenaline in the blood. This causes increased blood pressure, upper body obesity, changes in voice, muscle pain, fatigue, irritation and hatred, and decreased sex drive. Stress is also related to human lifestyle and physiology changes. Therefore, if the situation continues in the long term, it increases biochemical reactions in the body, and the alert system increasingly warns the body by the emotional response that something good or bad just happened.

## 2.5 Neuroergonomics

Ergonomics science, according to the International Ergonomics Association (IEA) (n.d.), which was adopted from the IEA in 2000, is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data, and methods to design in order to optimise human well-being and overall system performance. And recently, ergonomics is a rapidly growing science, with its scope expanding to include new understanding about human behaviour that may be applied to workplace design. Such expansion demonstrates the rising sophistication of ergonomics research into human features and functions that are relevant to the design process. Karwowski et al. (2003) explained that the expansion from the physical (motoric) to cognitive to aesthetical and, recently, to affective (emotional) factors introduced the necessity to consider more and more the human brain's functioning and the ultimate supreme role of the brain in exercising control over human behaviour in relation to the affordances of the environment. These advancements have resulted in the formation of a new discipline of ergonomics, neuroergonomics, according to Parasuraman (2003), which is defined as the investigation of human brain activity in connection to work and technology. Furthermore, Parasuraman and Rizzo (2007) stated: The goal is not just to study brain structure and function, which is the province of neuroscience, but also to do so in the context of human cognition and behaviour at work, at home, in transportation, and in other everyday environments.

Therefore, neuroergonomics appears to have contributed a "scalpel" to the study of human actions linked with activities and workloads, such as surgical stress, weariness, and physical labour. As a result, better ergonomics can offer a more comprehensive solution, making stress management in business decisions more measurable and accurate. Given that stress is present in a wide range of human activities, it stands to reason that stress and associated neurobehavioural properties would be a main focus of neuroergonomics study. It begins with a brief overview of the primary conceptual approaches to stress research. Understanding stress influences and directs the development of novel neuroergonomic notions. It then covers individual differences in the effects of stress on people, as well as the ethical challenges associated with stress monitoring and management in the workplace. As a result, there are numerous hurdles to comprehending stress in neuroergonomics, particularly occupational stress. Furthermore, Hancock and Szalma (2007) revealed that several topics should be emphasised, which are concepts of stress, some theoretical background, stress and neuroergonomics research, validation of neuroergonomics stress measures, commonalities and differences between individuals, hedonomics and positive psychology, and ethical issues in neuroergonomics and stress.

## 3.0 RESULT

There are several research findings related to stress. Colovic (2014) stated, Stress is a combination of mental and physiological reactions that occur in response to pressures placed on individuals inside or outside of an organisation, and it can have both beneficial and adverse consequences. Colovic (2014) also revealed several studies confirm that 70% of Japanese workers have stress-related symptoms. Furthermore, Colovic (2014) stated a prevalent phenomenon of Japanese workers is 'Karoshi', which is death from overwork. Work addiction, often known as workaholism, is most common in advanced industrialised countries. It is also influenced by workers' backgrounds, such as personality, socioeconomic status, and the cultural environment in which they grew up. This trait makes it difficult to distinguish between internal and external work organisations since workers have a choice of job demands that are equal to their resources. It looks like juggling balls, and people only realise what happens when one ball falls.

Merllié and Paoli (2001) revealed that 28% of workers from 15 European Union countries experience work-related stress, which negatively impacts their health. Stress comes when a worker feels threatened by the burden or danger that he or she faces while performing his or her duties. Negative stress occurs when an employee believes he or she is overworked or lacks the ability to improve the situation. According to Sauter and Murphy (1995), workplace stress can be defined as a series of physiological, psychological and behavioural reactions that are detrimental to a person in situations where job requirements do not match his abilities, capacities and needs.

In several cases it was found that stress at a certain level is not always negative; it actually triggers an increase in work motivation. Tough activities are frequently interesting and fascinating, and successfully overcoming the challenge provides a sense of accomplishment: rewards, promotions, achievement recognition, praise, pleasant surprises, joyful events, amusing circumstances, unexpected good deeds, and remarks. According to Kroemer (2017), friendly praises can make people feel lively and invigorated. Therefore, good stress is part of a good life. This, of course, does not apply to everyone. So, what then becomes an indication is the impact on health caused by stress on the person concerned. Baker and Karasek (2000) revealed that stress has become an important concept in the development of knowledge regarding cerebrovascular disease, hypertension, peptic ulcers, Ambien, musculoskeletal complaints, absenteeism or absence from work, negative emotional reactions, and decreased work productivity. Furthermore, McEwen and Sapolsky (1995) stated prolonged or intensive stress affects performance, attention deficits (impaired concentration), and memory.

Although assessing the relative impact of work and non-work stressors is difficult since their impacts are not independent, it is critical to investigate interactions and transfer from one area to another. Even though the effects of interaction exist, it is not always apparent. When a stressful life event occurs at or away from work (for example, a traumatic accident or the death of a loved one), the carryover effects typically affect family, friends, coworkers, and colleagues' employees. While the effects of stressors in life are subtle and long-term, the repercussions are unclear and may be exaggerated. Continuous job stress can be destructive to family relationships, but it can also go untreated. According to a poll conducted by the Canadian Mental Health Association (CMHA) (1984), found that, 56% of respondents felt

‘some’ or ‘a great deal of’ interference between their jobs and home lives. Furthermore, CMHA indicated that of particular concern were the ‘length of time that the job required’ and the ‘irregularity of working hours’ (including shift work). And according to Cox et al. (2000), the interference affected family routines and events, child rearing, and household responsibilities, made employees moody at home, and conflicted with leisure activities and social life. This is what was discovered: proof of a close relationship between work and home, workers as members of their families, and society as a whole.

### 3.1 Stress in the Workplace

Workplace stress affects people in a variety of ways. According to Murphy (1995), for example, stress elicits physiological effects that can range from insomnia and panic attacks to heart disease and stroke. Similarly, occupational stress can affect cognitive and behavioural functioning, resulting in symptoms like poor decision-making and absenteeism. However, according to Rees and Redfern (2000), the probable impacts of stress are as diverse as the potential sources of stress. There are many sources that can potentially cause workplace stress. Furthermore, Berlin and Adams (2017) stated, It is essential to remember that workplace stressors are not just caused by obvious time restrictions; we may also be stressed by high demands, bad communication, emotional triggers and relational malfunctions like conflicts and interpersonal irritations.

Robbins (2005) identified three main categories of sources of stress in the workplace, namely environmental, organisational, and individual. The source in this category is frequently associated with uncertainty regarding economic, technological, social, and political factors. Individuals frequently have little control over these issues. And the workplace stressors are related to the numerous expectations that individuals face in the organisation of the company. These organisational obligations impose a burden on the individual, and when the individual is unable to cope, workplace stress develops. According to Fletcher (1991), these demands can be directly tied to job activities as well as aspects like various positions, regulations, rules, group norms, and leadership styles. Rowlands and Rees (2015) noted that the third source group, which encompasses individual variations, includes elements such as personal and family problems, as well as various personality traits that influence an individual's ability to handle professional pressure in the workplace.

Stress individually includes both mental and physical. This happens when work organisations evolve, as do the types of stress that exist in the workplace. Today, the most common form is mental stress, such as time constraints or a difficult task, rather than hard physical work or other sorts of physical stress. Since the technology involves more intensity in the workplace. In ergonomics, unlike in everyday language, the term “stress” refers to the entire range of effects on workers in the workplace, whereas “strain” is defined as the influence of stress on an individual’s physical and mental state. Therefore, tension is a natural human response to stress. It also implies that the same type of stress might cause varying degrees of strain in various people. If the strain happens for a long time, it causes injury or accidents in the workplace.

### 3.2 Stress Management

Stress management at the organisational level involves the careful selection of personnel for specific roles, taking into account their ability to handle stress. This approach aims to cultivate a healthy corporate and cultural environment. This process includes reorganisation, decentralisation, and the involvement of employees in decision-making. The input appears to be coherent, and the tone is consistent with the broader context of stress management in the organisational setting. However, it could benefit from slight rephrasing for clarity and flow. It also includes employee training programmes, matching employee responsibilities by the work, the identification of workplaces contributing to stress, and the effective management of time and priorities. Furthermore, workplace stress management comprises strategies and procedures designed to assist individuals in mitigating the adverse effects of work-related stress. The approach comprises identifying stressors, prioritising and managing time, using relaxation techniques, and maintaining a work-life balance. It is accomplished by personal practices, such as meditation, yoga, physical exercise, positive thinking, and healthy food, as well as spending time with loved ones or family to develop social support.

Boredom (feeling bored) is another important aspect of psychosocial health in the workplace. It is a mental state that arises when an individual perceives the amount of stimulation in their environment to be low and monotonous enough to cause them to lose concentration on the work at hand, usually due to a mismatch between task demands and an individual's level of competency or skill. According to Berlin and Adams (2017), the most negative state of boredom (from a motivational and alertness point of view) occurs when the task is not monotonous enough for the worker to think about other things entirely; if attention is slipping in and out of concentrating on the task because it is not entirely internalised as a routine skill, the worker may feel frustrated.

Most humans find it difficult to maintain vigilance, or prolonged attention, especially when stress is present in a work situation. Berlin and Adams (2017) revealed a related, purely emotional tension may occur when the worker feels inner conflict about whether they wish to continue performing the task to the set requirements or whether they want to be done with it. Therefore, according to Berlin and Adams (2017), this emotional tension may over time lead to job dissatisfaction and a deliberate decrease in performance quality. In this regard, neuroergonomics looks to play an essential role in gathering data from brain activity and neural networks associated with boredom at work. And based on the data, stress management tries to find the best solution to cope with the issues that cause negative stress for the worker. Since the worker is a dynamic asset to the corporation, they should be maintained appropriately for minimising the cost of the risk factors.

## 4.0 DISCUSSION

Hancock and Szalma (2007), referring to Selye (1976), state that, in contrast to the stimulus-driven view of stress, which might be considered a physics-based approach, a biologically-based approach defines stress in terms of the organism's physiological response patterns. In this light, Cannon (1932) conceptualised stress in terms of autonomic nervous system activation triggered by homeostatic challenges. According to Cannon (1932), external conditions (e.g., temperature, noise, etc.). Furthermore, Cannon (1932) asserts that internal deficits (e.g., low blood sugar) cause deviations from homeostatic balance. Threats to such balance produce physiological responses aimed at countering the threat. According to Asterita

(1985), Frankenhaeuser (1986), and Dunbar (1954), this response involves sympathetic activation of the adrenal medulla and the release of several hormones. Also, Cannon's response-based approach was also championed by Selye (1976), who defined stress in terms of a series of bodily defence reactions, set against any form of noxious stimulation. Environmental objects or situations that provoke such reactions are known as stressors. According to Selye's theory, physiological reactions to stresses are generic because they are consistent across stressors and settings.

There is a good chance that stressors, both acute and chronic, will interact in ways that cross the line between work and non-work. It is supported by Bacharach et al. (1991) and Burke (1986), revealing that, indeed, there is evidence to suggest that work stress can 'spill over' into home life. The erroneous belief that work and non-work activities are unrelated in their psychological, physiological and health effects has been described as the 'myth of separate worlds' by Kanter (1977). This myth can lead to a lack of understanding regarding the cumulative impact of stressors, ultimately affecting overall well-being. Recognising the interplay between work and home life is crucial for developing effective strategies to manage stress and promote a healthier work-life balance.

Most recent theories of stress and performance revolve around two fundamental ideas. Such as revealed by researchers, they either expressly contain or implicitly assume evaluation systems via which people appraise their surroundings and choose coping methods to deal with it (Hancock and Warm, 1989; Hockey, 1997; Lazarus and Folkman, 1984). Indeed, Lazarus and Folkman (1984) define psychological distress as a person's perception of his circumstances as physically or cognitively demanding (taxing), beyond his means, or harmful to his well-being. Furthermore, the consequences of negative stress are more likely to occur when people see an event as threatening (primary appraisal) and believe their coping skills are insufficient to deal with the stressor (secondary appraisal; see Lazarus & Folkman, 1984). However, both interactions in person-environment and assessment procedures are arranged at multiple levels (Matthews, 2001; Teasdale, 1999).

When humans discover something new or unfamiliar, it can take the form of a task or another. The initial reaction is suspicion, presumption, and assumption. Then there is a desire to learn more and appraise it. After that, there is a decision to accept or reject it. When he/she accepts it, he/she will adapt; otherwise, he/she will avoid it or confront it. Each stage of this response has its own level of stress. Even though this process applies in general, the procedure mechanism will be different for each person. Those behaviours, which were first introduced by Cannon (1932), in that harsh school, fear and anger have served as a preparation for action. Furthermore, Cannon (1932) discovered that fear has become associated with the instinct to escape, and anger or aggressive feelings with the instinct to attack. The phrase 'fear and anger' evolved into 'fight or flight', which is now widely used to characterise this occurrence.

A high-risk situation is one in which the individual performing the activity faces significant consequences if they perform well. Prototypical instances of cognitive weariness are aptitude, accomplishment, and ability examinations, as well as professional certification exams that can last a full day or many days. In general, high-stakes testing or task performance will result in increased arousal in participants (Sarason, 1959). According to Ackerman (2011), when greater arousal is combined with resource-insensitive tasks, task performance is expected to decrease

only somewhat. Furthermore, Ackerman (2011) revealed that high-risk scenarios are predicted to boost an individual's motivation to put up maximal effort on a task. Consequently, the effects on performance associated with higher levels of arousal and high levels of motivation may be more complex (Ackerman, 2011).

Ursin and Eriksen (2004) introduced the Cognitive Activation Theory of Stress (CATS), which emphasises cognitive processes and neurophysiological activation and arousal. According to Ursin and Eriksen (2004), CATS defines stress as four components: stress stimuli, stress experiences, generic non-specific physiological stress reactions (alarms), and stress response experiences. While Kalimo et al. (1997) argued that the physiological stress response is determined by the individual's assessment of the stressful situation. Furthermore, Kalimo et al. (1997) explained that the appraisal stage is divided into two parts: (1) primary appraisal, which is concerned with detecting the stressor and its consequences, such as whether the stressor is dangerous, a threat, or a challenge; and (2) secondary appraisal, which is concerned with dealing with stressors and developing defence strategies. Cox (1978) stated that if defences are ineffective, then stress increases the risk of functional damage. At this level, Ursin and Eriksen (2004) suggest that physiological responses (alarms) depend on estimates of the outcome of stressful stimuli and specific responses that allow them to survive. Estimates with positive results will have a low effect on arousal, but weak estimates where irregularities arise, then arousal production is strengthened (the stress response is strengthened). According to CATS theory, ill effects occur when defences are not strong enough, which will lead to feelings of helplessness and hopelessness (Kecklund and Åkerstedt, 2004).

Meanwhile, Hebb (1955) states that arousal theory is one of the most widely applied physiological response-based theories of stress and performance. And arousal level is a hypothetical construct that represents a (general) nonspecific indicator of the organism's overall level of stimulation (Hockey, 1984). Furthermore, arousal can be measured by electroencephalography (EEG) or autonomic nervous system activity markers such as galvanic skin responses (GSR) and electrocardiograms (ECG). It is revealed by Hancock and Szalma (2007) that, as a person becomes more aroused (excited), the EEG waveform increases in frequency and decreases in amplitude, and skin conductance and heart rate increase. And neuroergonomic analysis methods based on medical data certainly have a better level of accuracy than subjective measurements. However, the accuracy is still for the individual assessment, not in general.

Therefore, there is a solution to a coping strategy since stress is a subjective experience that is specifically developed by each individual. However, Kroemer (2017) proposes coping strategies, revealing that coping strategies may focus on individual emotions, such as by the cognitive re-evaluation of the situation (reframing the problem) and the use of humour, relaxation exercises, off-work activities, and hobbies. Furthermore, as Kroemer (2017) states, the person's physical health, nutrition, and habits (including smoking or drinking) may require attention, even a change in lifestyle. However, if the change is difficult to implement, people continue to feel burdened, and stress at work increases; a radical solution is required. As conveyed by Kroemer (2017), a radical solution is to quit the stressful job and look for work that is more suitable; this is feasible if another better job is at hand. There is another solution to facing the challenge through psychotherapy, as Seaward (2018) proposes that, in fact, the goal of psychotherapy is to get the client back on track through the process of self-awareness,

as painful as it may be. Furthermore, according to Seaward (2018), shifting from a protective mindset to more positive coping methods based on the power of our inner resources is regarded to be the most successful stress-management strategy.

## 5.0 CONCLUSIONS

Stress is a feeling of pressure that causes mental and physical tension. It has now become a significant concern in the world of work. The term stress describes a condition or state of a person uncomfortable with what they are facing. Therefore, it creates a backlash in him to overcome these conditions; not everyone can manage this reaction as well. Stress management at the organisational level entails carefully selecting personnel for specific roles depending on their stress tolerance, resulting in an ergonomic organisational environment and culture. There are many stress factors, such as the work environment, work attitudes, payment system (salary), monotonous work, shift work, and the behaviours or personality of other workers. Even though each worker reacts differently to changes in work situations, it can still cause stress and impact the other. However, stress at a certain level is not always negative; it actually triggers an increase in work motivation. Challenging tasks are frequently captivating and interesting, and when completed, there is a sense of accomplishment: rewards, promotions, achievement recognition, praise, joyful events, pleasant surprises, amusing situations, friendly words, and unexpected good deeds that make people feel alive and excited. It all depends on how workers accept stress in the workplace and manage it properly and healthily.

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