Chapter scheme

2.1 An Overview of Stress
2.2 Causes of Stress
2.3 Physiology of Stress response
2.4 Consequences of Stress
2.5 Life Event changes and their impact- Social readjustment rating scale
2.6 Workplace Stress
   2.6.1 Work overload / Underload
   2.6.2 The Most Stressful Jobs
   2.6.3 Workplace Stress- Alex Roney and Cary Cooper
   2.6.4 Identifying sources of Workplace stress and a strategy to deal with them
   2.6.5 Role Ambiguity and Role Conflict
   2.6.6 Job Insecurity and lack of Career Development
   2.6.7 Interpersonal Relationships
   2.6.8 Home Work Interface
   2.6.9 Workplace Interventions to Prevent Stress- Related Illness
   2.6.10What would constitute an ideal stress intervention?
2.7 Cost of Stress
   2.7.1 Corporate Cost
   2.7.2 Sources of Workplace Stress in the 1970’s and 1980’s
   2.7.3 Stress Prevention and Management
2.8 Occupational Hazards due to Stress
2.9 Strategies for Coping from Stress
   2.9.1 Workplace Interventions to Prevent Stress- Related Illness:
   2.9.2 Knowing about intervening in Stressful work environments –
   2.9.3 What would constitute an ideal stress intervention?
   2.9.4 Stress Prevention and Management:
   2.9.5 Ten Strategies for Coping and Thriving at work:
   2.9.6 Organizational Drivers for Managing Stress:
   2.9.7 Treating occupational stress: (Terry A Beehr)
2.10 Models on Stress Management
## List of Models

<table>
<thead>
<tr>
<th>No</th>
<th>Model Name</th>
<th>Page No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Categories and Consequences of Stress- Robbins, Millett et al</td>
<td>61</td>
</tr>
<tr>
<td>2</td>
<td>Maslach &amp; Leiter’s Framework for Employee Burnout</td>
<td>64</td>
</tr>
<tr>
<td>3</td>
<td>National Institute for Occupational Safety and health (NIOSH) model of Job Stress, Job Conditions That May Lead to Stress</td>
<td>65</td>
</tr>
<tr>
<td>4</td>
<td>The Cognitive and Conditional model of Occupational Stress- Dr Simon Dolan</td>
<td>67</td>
</tr>
<tr>
<td>5</td>
<td>Self Esteem, Depression and Narcissism- Dr Simon Dolan</td>
<td>68</td>
</tr>
<tr>
<td>6</td>
<td>A typology of cutback situations (Jick, 1985), Dr Terry A Beehr</td>
<td>69</td>
</tr>
<tr>
<td>7</td>
<td>Solution Focused Model of Stress: O’Connell Bill (2001)</td>
<td>70</td>
</tr>
<tr>
<td>8</td>
<td>MASH Model- Multisystem Assessment of Stress and Health</td>
<td>71</td>
</tr>
<tr>
<td>9</td>
<td>Indian Model of Burnout (Sharma)</td>
<td>72</td>
</tr>
<tr>
<td>10</td>
<td>Michigan State Model (ISR) Institute of Social Research</td>
<td>73</td>
</tr>
<tr>
<td>11</td>
<td>A model of work stress- Steven Palmer 2004.</td>
<td>74</td>
</tr>
<tr>
<td>12</td>
<td>Proposed Causal Model</td>
<td>76</td>
</tr>
</tbody>
</table>
2.1. An overview of Stress

"When you find yourself stressed, ask yourself one question:
   Will this matter in 5 years from now?
   If yes, then do something about the situation.
   If no, then let it go."

_Catherine Pulsifer_

There is no one definition of the term stress, yet we all seem to have some idea of what it constitutes. It may sometimes be defined as the psychological, physiological and emotional responses to threatening situations or events. This would seem to describe **acute stress**, a short period to time when something goes drastically wrong, when the individuals fight or flight, mechanisms mobilized in order to deal with the problem, then all subsequently returns to normal. If however the problem persists or the individual cannot deal with it then **chronic stress** ensues.

There is the suggestion that a certain amount of stress is necessary for everyone in order to keep functioning, some people may actively seek out stress. If their lives feel “flat” psychologists have tried to distinguish between positive stress, which has been termed **eustress**, and detrimental stress, termed **distress**. The distinction is not clear cut, because not everyone interprets the same events as positive or negative, stress is a personal issue. (Sheila Hayward, 1996)\(^5\).

_Ivancevich an Matteson_ defines stress simply as “The interaction of the individual with the environment.” There are three critical components of the definition: 1.It refers to a reaction to a situation or event, not the situation or event itself; 2.It emphasizes that stress can be impacted by individual differences; and 3.It highlights the phrase excessive psychological and/or physical demands, because only a special or unusual situations can really be said to produce stress.

The Health and Safety executives have defined stress as the reaction people have to excessive pressures and other types of demand placed on them. It generally arises when they worry that they are not able to cope. What is most interesting for the layman to know is that stress can manifest itself in behavioral ways such as poor concentration, or an
increase in alcohol intake, increased obsessive smoking and irritability. It can have certain physical effects. Headaches can increase in frequency and intensity, shoulders and neck may ache. There may be skin rashes, increased heart rate or even sweating. Resistance to infection may decrease, and there may be dizziness, long term psychological problem, marriage breakdowns, and physical ill health. The effects may diminish with the level of stress. However, it should be realized that prolonged stress can lead to nervous breakdown.

Is the work environment important?
The whole environment is important. There is the psychological environment by which individuals are less likely to become stressed when surrounded by pleasant behavior, rather than personality conflicts. With understanding the firm leadership, if the demands are perceived to be unreasonable, then the role of the organization role becomes important in maintaining friendly work environment. People need to be treated as people, and not made to feel like automatons or items on the balance sheet.

There is the general physical environment. A calm, pleasant, organized ambience, however busy workplace, is less conducive to stress than a disorganized, frenetic atmosphere, with uncontrolled hazards, noise and high temperatures, and managers who require unexpected extra work form employees at short notice, with no thought for the continuity and rhythm of normal work patterns.

Is a Feeling of Security Important?
In general people do not like swift or unexpected changes, they like to know where and how they stand in respect of their jobs, managers and work colleagues. They like to feel secure at work and in respect of salaries. Much comes back to recognized good management practices to make staff feel secure. There should be clear company and individual objectives which should be made known to and understood by all employees.

There should be facilities for staff to have a continuing input and to be informed about the development of the enterprise for which they work.
This is because one of the recognized ways in which pressure can be unconsciously put on an employee is through the feeling of impotence he or she feels concentrating the development of the job, or even the employing enterprise. Thus employees must feel they can make an individual’s contribution, and this is valued, and that they can be effective, whether they are full time, part time, or contractual employees. What happens when employees are not valued and are consistently subject to the sort of stress which undermines their self confidence?

Is There any General Rule for Managers?
It seems that the way in which the best managers operate is often governed by their own experiences, the principle of “do as you would be done by” and necessity. They are probably more prone than most in the organization to be placed in stressful situations, it is hard to make others redundant, or to discipline or dismiss someone, with whom at a personal level you might have considerable sympathy. A clear conscience does help.

It is always best to avoid problems wherever possible, and an increasingly important area is matching the person to the job. The use of specialized interviewing techniques are being used more and more to identify an applicant’s strengths and weaknesses, and these can be stressful for both the interviewer and the interviewee. The person recruiting has to be careful not to contravene any provisions relating to discrimination, whether racial, sexual, or since December 1996 in the UK on grounds of disability – and this can include previous mental illness.

Sources of Managerial Stress: Cooper and Marshall, (1978)\textsuperscript{116}
Stress in the job itself; stressors intrinsic to the job include workload, poor physical conditions, low decision making latitude etc.
Role based stress; associated with role conflict, role ambiguity and responsibility.
Relationships with others (i.e. superiors, colleagues and subordinates); interpersonal demands are potential stressors.
Organizational structure and climate; this includes restrictions on behavior and the politics and culture of the organization as sources of stress.

**Figure 4. Sources of managerial Stress; Cooper and Marshal (1978)**\(^{116}\)

**Person – Environment Fit**

The person environment fit model of stress, proposed by French, Caplan and Van Harrison (1982) quoted in Cary Cooper\(^{116}\), examined the interaction between the individual and the workplace environment. Identified as important were the extent to
which the employee’s abilities fitted the demands of the job, and how well the job
environment fitted the employees need, especially needs, especially the use of the skills
and abilities. This interactional model of stress did not allow for a number of other
variables in the workplace, which may influence an individual’s perception of how well
he or she fits into the environment.

**What is Job Stress?**

Job stress is something we all face as workers -- and we all handle it differently. There is
no getting around it. But, not all stress is bad, and learning how to deal with and manage
stress is critical to our maximizing our job performance, staying safe on the job, and
maintaining our physical and mental health. For workers like Melissa, infrequent doses of
job stress pose little threat and may be effective in increasing motivation and
productivity, but too much -- and too prolonged -- can lead to a downward spiral -- both
professionally and personally.

Some jobs, by definition, tend to be higher stress -- such as ones that are in dangerous
settings (fire, police), that deal with demanding customers (service providers), that have
demanding time pressures (healthcare), and that have repetitive detailed work
(manufacturing) -- but stress is not limited to any one particular job or industry.

The National Institute for Occupational Safety and Health (NIOSH) Source: (*http://www.cdc.gov/niosh/stresswk.html*), part of the U.S. Department of Health and Human Services, states that job stress, now more than ever, poses a threat to the health of
workers -- and the health of organizations. NIOSH defines job stress as the harmful
physical and emotional responses that occur when the requirements of the job do not
match the capabilities, resources, or needs of the worker. Stress also occurs when the
situation has high demands and the worker has little or no control over it. Job stress can
lead to poor health and injury.

**Job Stress Statistics** (*http://www.quintcareers.com/managing_job_stress, Dr Randall S
Hanson)
Numerous studies examining job stress sound an alarming bell about the mental and physical health of American workers:

- A Northwestern National Life study found that 40 percent of workers report their job is "very or extremely stressful." And that one-fourth of employees view their jobs as the number one stressor in their lives.
- A Families and Work Institute study ** found 26 percent of workers report they are "often or very often burned out or stressed by their work."
- A Yale University study found 29 percent of workers feel "quite a bit or extremely stressed at work."
- A Princeton Survey Research Associates study reports that three-fourths of employees believe the worker has more on-the-job stress than a generation ago.
- A Gallup Poll found that 80 percent of workers feel stress on the job, and nearly half reported that they needed help in learning how to manage it.
- According to an article in Shape Magazine, women are 60 percent more likely to suffer from job stress than men.

Four approaches to occupational stress (Beehr and Franz, 1987)

<table>
<thead>
<tr>
<th>Approach</th>
<th>Typical Stressor</th>
<th>Typical Outcome</th>
<th>Typical primary target of treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical clinical / Counseling psychology</td>
<td>Physical Psychological</td>
<td>Physical Strain Psychological Strain</td>
<td>Individual Individual</td>
</tr>
<tr>
<td>Engineering psychology Organizational Psychology</td>
<td>Physical Psychological</td>
<td>Job Performance Psychological Strain</td>
<td>Organization Organization</td>
</tr>
</tbody>
</table>

As depicted in the figure given below, dual career couples have several sources of dual career stress, some of which are unique to them and some of which they have in common with people who are not part of dual- career couples. Some they share with anybody
which is part of a couple, regardless of whether they are dual-career couples, some they share with all people who work regardless of whether they are part of a couple, and some they share only with other members of dual-career couples (Gupta and Jenkins, 1985).

*Quoted from Beehr⁶.*

Only two of the six cells in the figure are unique to dual-career couples, although the literature often does not recognize this explicitly, people who are part of couples can experience stress from their relationships regardless of whether they work (cells 2 and 5), this type of stress, by itself, is not in the typical areas of expertise of organizational researchers. Anyone who works can experience stress from the job role, regardless of whether he or she is part of a couple (cells 1 and 3), this type of stress has traditionally been within the areas of expertise of organizational researchers, only people who are part of a couple who both work in careers experience the unique dual-career stressors (cells 2 and 6).

**Sources of Dual-Career stress (Gupta and Jenkins, 1985) Quoted from Beehr⁶.**

<table>
<thead>
<tr>
<th></th>
<th><strong>Work Role</strong></th>
<th><strong>Family role</strong></th>
<th><strong>Inter-Role</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>From own role(s)</td>
<td>1 Experienced by job/career holders</td>
<td>2 Experienced by couples</td>
<td>3 Experienced by job/career holders</td>
</tr>
<tr>
<td>From interaction</td>
<td>4 Experienced by two-job/career</td>
<td>5 Experienced by couples</td>
<td>6 Experienced by two-job/career</td>
</tr>
<tr>
<td>with partner’s role(s)</td>
<td>or career couples</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Occupational stress has been studied from the perspective of a wide variety of disciplines and personal preferences and because of this; there is no universally accepted definition of the term.
2.2 Causes of Stress:

What are the causes of Stress?

It is easy to see how stress can be caused or increased at work. Ever higher targets; increased pressures to perform, greater workload, lack of job certainty or even job security; unmerited, or even injudicious merited criticism, uncertainty as to what is required of the employee; constant changes on work patterns or management – the list seems endless. All these were common causes of stress in the workplace. Less well appreciated are the cumulative effects of different stress factors, employers or the managers, often under pressure of time, do not always appreciated the importance of treating each of their employees an individual, and recognizing different needs.

The same applies in families, where partners are working and frequently tired and communication limited to “what is on the TV tonight?”. Transport difficulties to and from workplace their own sometimes significant irritations, and even dangers, particularly for shift workers.

Both family members and workplace managers must be available to watch, listen, understand and assist individuals when for example they are under extra pressures. Managers should seek to ensure that they know when an employee is subject to stress factors, “stressors” such as martial difficulties, financial worries, dependent relatives, house moves, bereavement, or other problems outside the workplace which are adding to the normal load of pressures. This sort of caring management attitude is likely to defuse potential stress hazards which could cause mistakes, resulting in bad workmanship or even injury to other employees.
**Causes of Stress within Organizations:**

(Organizational Stress- Jane Cranwell – Ward and Alyssa Abbey)

Examples of Causes of stress identified by Henley Stress Special Interest groups -

<table>
<thead>
<tr>
<th><strong>Self</strong></th>
<th><strong>Others</strong></th>
<th><strong>Work</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ways of working</td>
<td>Relationships</td>
<td>Style</td>
</tr>
<tr>
<td>Control</td>
<td>Motivation</td>
<td>Mental state</td>
</tr>
<tr>
<td>Environment</td>
<td>Flexibility</td>
<td>Attitude</td>
</tr>
<tr>
<td>Hours</td>
<td>Style</td>
<td>Personality</td>
</tr>
<tr>
<td>Overload</td>
<td>Tone</td>
<td>Preferred style</td>
</tr>
<tr>
<td>Ethics</td>
<td>Their awareness</td>
<td>Issues (finance)</td>
</tr>
<tr>
<td>Culture</td>
<td>Empathy</td>
<td>Disability</td>
</tr>
<tr>
<td>Skill match</td>
<td>Communication</td>
<td>Values</td>
</tr>
<tr>
<td>Skill requirements</td>
<td>Stability</td>
<td>Baggage</td>
</tr>
<tr>
<td>Politics</td>
<td>Reaction</td>
<td>Flexibility</td>
</tr>
<tr>
<td>Support</td>
<td>Boundaries of relationships</td>
<td>Locus of control</td>
</tr>
<tr>
<td>Remuneration</td>
<td>Expectations of others</td>
<td>Motivation</td>
</tr>
<tr>
<td>Management style</td>
<td></td>
<td>Confidence</td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td>Self-esteem</td>
</tr>
<tr>
<td>Expectation</td>
<td></td>
<td>Tolerance of change</td>
</tr>
<tr>
<td>Targets</td>
<td></td>
<td>Health</td>
</tr>
<tr>
<td>Stability / change</td>
<td></td>
<td>Cultural background</td>
</tr>
<tr>
<td>Organizational values</td>
<td></td>
<td>Expectations of job/ life</td>
</tr>
<tr>
<td>Bureaucracy</td>
<td></td>
<td>Experience</td>
</tr>
</tbody>
</table>

There are two schools of thought on the causes of job stress. According to one theory, differences in individual characteristics, such as personality and coping style, are best at predicting what will stress one person but not another. The focus then becomes on developing prevention strategies that help workers find ways to cope with demanding job conditions.

The other theory proposes that certain working conditions are inherently stress-inducing, such as fear of job loss, excessive workload demands, lack of control or clear direction, poor or dangerous physical working conditions, inflexible work hours, and conflicting
job expectations. The focus then becomes on eliminating or reducing those work environments as the way to reducing job stress.

2.3 Physiology of the Stress Response, Brannon Linda and Feist

The physiology of the stress response is extremely complex. When an individual perceives stress, the sympathetic division of the autonomic nervous system rouses the individual from a resting state in two ways; one -stimulating the sympathetic nervous system and second by producing hormones. The ANS activates in a rapid way, and all neural transmissions, whereas the action of the neuroendocrine system is lower. The pituitary release ACTH, which in turn affects the adrenal cortex. Glucocorticoid release prepares the body to resist the stress and even cope with injury by the release of cortisol, together the two systems form the physiological basis for allostatis, adaptive responses under conditions of change.

An elucidation of the physiology of stress does not completely define the meaning of stress, hence there are different models that have been constructed for better understanding to define and explain stress. (Brannon Linda and Feist (2007),
Physiology of Stress: (Linda Brannon and Jess Fiest- Health Psychology)

Figure 5: Division of Human Nervous System

Central Nervous System

Brain

Spinal Cord

Sensory Neurons (Afferent)

Motor Neurons (Efferent)

Somatic System
All motor nerves to skeletal muscles

Autonomic system
All motor nerves to smooth and cardiac muscles, glands

Sympathetic nerve pathways

Parasympathetic Nerve pathways
Figure 6: Sympathetic and Parasympathetic flow of Autonomic Nervous System
Figure 7: Brain and Adrenal Cortex

Prolonged stress leads to the secretion of the adrenal hormone cortisol. Cortisol (stress hormone) elevates blood sugar and increases metabolism. The body is then able to sustain prolonged activity and also reduces inflammation.

The Neuroendocrine System

The endocrine system consists of ductless glands distributed throughout the body, the neuroendocrine system consists of those endocrine glands that are controlled by and interact with the nervous system. Glands of the endocrine and Neuroendocrine system secretes chemicals known as Hormones, which move into the blood stream to be carried to different parts of the body specialized receptors on target tissues or organs allow hormones to have specific effects even though the hormones circulate throughout the body.
**The Pituitary Gland**

Located within the brain, the pituitary gland is an excellent example of the relationship between the nervous and endocrine systems. The pituitary is connected to the hypothalamus, a structure in the forebrain. These two structures work together to regulate and produce hormones. The Pituitary has been referred to as a Master Gland because it produces a number of hormones that affect other glands and prompts the production of other hormones. Of the seven hormones produced by the anterior portion of the pituitary gland, *adrenocorticotropic hormone (ACTH)* plays an essential role in the Stress Response, when stimulated by the hypothalamus, the pituitary releases ACTH which in turn acts on the adrenal glands.

**The Adrenal Gland**

The Adrenal Glands are endocrine glands located on top of each kidney, each gland composed of an outer covering, the adrenal cortex, and an inner part, the adrenal medulla, both secrete hormones that are important in response of stress.

The adrenocortical response occurs when ACTH from the pituitary stimulates the adrenal cortex to release glucocorticoids, one type of hormone. Cortisol, the most important of these hormones exerts a wide range of effects on major organs in the body (Kemeny, 2003), the hormone is so closely associated with stress that the level of cortisol circulating in the blood can be perceived as an index of Stress.

According to the definition given by the World health organization (WHO), the promotion of health includes all the measures that allow people, groups and organizations to have greater control over the factors that affect their health. The objective of these measures is to improve the health of people, groups, organizations and communities.
2.4 Consequences of Stress:

The Symptoms of Stress:

<table>
<thead>
<tr>
<th>Behavioral Signs of Stress:</th>
<th>Cognitive Signs and Symptoms:</th>
<th>Emotional signs of Stress:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Withdrawal</td>
<td>• Difficulty Making Decisions</td>
<td>• Denial</td>
</tr>
<tr>
<td>• Suspiciousness</td>
<td>• Confusion</td>
<td>• Fear</td>
</tr>
<tr>
<td>• Excessive Humor or Silence</td>
<td>• Difficulty Naming Familiar Items</td>
<td>• Depression</td>
</tr>
<tr>
<td>• Increased Smoking, Alcohol or Food</td>
<td>• Poor Concentration</td>
<td>• Grief</td>
</tr>
<tr>
<td>• Change in Activity Level</td>
<td>• Blaming Others</td>
<td>• Anger</td>
</tr>
<tr>
<td>• Angry Outbursts</td>
<td>• Memory Problems</td>
<td>• Worry</td>
</tr>
<tr>
<td>• Crying Spells</td>
<td>• Replaying Events Over &amp; Over</td>
<td>• Uncertainty</td>
</tr>
</tbody>
</table>

Physiological Signs of Stress:

<table>
<thead>
<tr>
<th>Immediate Changes</th>
<th>Long Term Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased cardiac output</td>
<td>Increased breakdown of protein</td>
</tr>
<tr>
<td>Increased circulation</td>
<td>Increased blood glucose</td>
</tr>
<tr>
<td>Increased BP, RR</td>
<td>Increased vascular constriction</td>
</tr>
<tr>
<td>Increased sweating</td>
<td>Decreased inflammatory response</td>
</tr>
<tr>
<td>Pupil dilatation</td>
<td>Decreased immune response</td>
</tr>
<tr>
<td>Decreased salivation</td>
<td>Increased fluid volume</td>
</tr>
<tr>
<td>Decreased gastric motility</td>
<td>Increased sodium &amp; fluid retention in kidneys</td>
</tr>
<tr>
<td>Increased blood sugar</td>
<td></td>
</tr>
<tr>
<td>Use of blood glucose</td>
<td></td>
</tr>
<tr>
<td>Decreased stored energy</td>
<td></td>
</tr>
<tr>
<td>Increased fatty acids</td>
<td></td>
</tr>
<tr>
<td>Increased metabolism</td>
<td></td>
</tr>
</tbody>
</table>
There are many other possibilities, there are subjective perception of stress which highlight some of your body’s stress responses, there are also physiological responses occurring within your body of which you may be unaware, and you may also be adapting your behavior in order to avoid or cope with your stressor (the things cause you to feel stressed), these may well be different for everyone, what makes one person feel stressed may not affect everyone.

There are two important factors relating to stressors, their controllability and their predictability. Broadbent (1971) suggested that people who were able to predict when a noise was likely to occur found it less stressful than when the same noise level occurred unpredictably, Stressors which we feel we can control are not perceived to be as threatening as those over which we can exert no control.

If an individual’s stressor occurs in the work situation, it is encountered on a daily basis, and there can be resultant health problems for the individual who is trying to cope with this, alternatively, the individual may stay away from work and the absenteeism then become a problem for the organization. The Confederation of British industries (CBI) estimated in 1994 that stress currently costs to the individual worker are equally devastating.

**Symptoms & Warning Signs of Job Stress**

While the causes can be something other than job stress, here are the most common symptoms and early warning signs of job stress and burnout:

- Apathy
- Negativism/cynicism
- Low morale
- Boredom
- Anxiety
- Frustration
- Fatigue
- Depression
- Alienation
- Anger/irritability
• Physical problems (headaches, stomach problems)
• Absenteeism

**Signs of Occupational Stress:**
Signs of occupational stress are an indication of problems with management systems, which should be seen as an opportunity for workplace performance and productivity improvement. The management of occupational stress should involve a process of

- identifying and assessing the actual and potential risks
- developing management strategies to eliminate or control these risks
- learning to understand our own responses to stressful situations and those of our colleagues

As a result of implementing a stress management program, which ideally forms part of an overall safety management program, there may be an opportunity to reduce the incidence of other workplace injuries, reduce workers compensation insurance, premiums, reduce absenteeism, reduce workplace conflict, improve workplace communication, improve customer service, improve workload and other resource management issues.

**Anger and Stress:**

*Neel Konwar (2004)*\(^{172}\). Anger and Stress, Bond et al. (2001) mentioned that stressors for most people most of the time include aversive behaviors of others that produce concern about important daily aspects. Chon (1998) found that chronic CHD patients showed variety of stress specially stress from anger. Novaco et al. (1998) wrote that activation of anger has long been recognized as a feature of clinical disorders that result from trauma /stress, notably with respect to PTSD. Beck (1976) and Ellis (1994) both found that the hypothesized and automatic thoughts raise irrational beliefs and it occurs during threatening or frustrating stress situations which gives arousal to anger. Novaco (1995) in the study of clinical problems of anger and its assessment and stress-coping skills approach found that anger can be viewed as a stress reaction, specially internal stressor. Kassinove (1994) stated that aversive states like stress lower the threshold for anger. Greenberg et al. (1993) also found that stress can occur in subordinates if people
who are in authority neurotically abuse their power. Berkowitz (1993) mentioned that stressors like foul odors, pain, high temperature or sleep deprivation act as triggers of anger. Hains (1992) worked with stressed high school students and found that both cognitive and relaxation interventions lowered anger expression. Mills (1989) compared questionnaire and interview methods of anger assessment in predicting reactivity to a stressor which may provide insight into the mechanisms linking anger, blood-pressure and cardiovascular disease. Wolff (1947) in a bizarre experiment to study stress which involved the observation of the human stomach at work, by installing a window, found that when anger stimulus was induced the gastric activities increased.

Chon (1998) Quoted from Konwar, found from studies, that “Hwabyung” a Korean folk anger syndrome which is generally considered a syndrome, is caused by the repression, and suppression of emotional stress. Scherer et al. (1988) found that 58% Japanese felt stressed and angry during interaction in intimate relationship. Broman (1988) examined relationship between anger experience and life stress in black American adults where it was found that “point of nervous breakdown and anger/hostility” was an important predictor of life stress. After the 1979 terrorist attack in Israel, Ben-Eli (1980) studied 60 children who showed symptoms of fear, anger, terror and blaming during therapy.

Fontana et al. (1998) Quoted from Konwar, studied coping style and stress reactivity with an anger provocation paradigm in women during different phases of menstrual cycle along with other stressors. It was observed that social support helped women to have lower baseline blood-pressure. Barbour et al. (1998) used the articulate thoughts in simulated situations to assess verbal reports of married, violent men exposed to anger engendering scenarios and noticed that irrational beliefs of stress lead to anger episodes. Zuckerman (1989) found in a self -report study of college students stress levels and reactions to stress that when women were under stress, they were more likely to express anger and feelings than men. Thomas (1989) found that women had more anger-related physical symptoms and trait-anger (as measured by STAI) which strongly related to stress, especially vicarious stressors arising from women’s concern about others and the drive to care for others. Spielberger et al. (1995) studied stress and emotion: anger,
anxiety and curiosity, especially stress-related phenomena, interrelation effects of stressful events, personality, violence, disease, family relations and happiness, and found an interrelation between anger, stress temperament, coping and variations in both eastern and western nations. Greenberg et al. (1993) named family stressor as leading to aggressive behavior disorder. Ireton (1989) assessed stressors experienced by 214 patients in a family center where moderately high levels of stress and anxiety were reported with psychological symptoms of anger, anxiety and depression.

2.5. Life Event changes and their impact

Life event changes have been extensively researched. Holmes and Rahe (1967), researches in the US, drew up a ranking of stressful events; the Holmes and Rahe Social Readjustment Rating scale. The research was conducted across a range of cultures and findings showed a remarkable similarity in the degree of importance attached to specific life event by different cultural groups. Death of a spouse was viewed as the most stressful, requiring the greatest degree of adjustment and was given rating of 100. The other 42 events were rated in comparison with this event and are given below- (Jane Cranwell-Ward,& Alyssa Abbey)
Table 2: Life event changes and their impact:

<table>
<thead>
<tr>
<th>Life Event</th>
<th>Stress Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death of a spouse</td>
<td>100</td>
</tr>
<tr>
<td>Divorce</td>
<td>73</td>
</tr>
<tr>
<td>Martial Separation</td>
<td>65</td>
</tr>
<tr>
<td>Jail term</td>
<td>63</td>
</tr>
<tr>
<td>Death of close family member</td>
<td>63</td>
</tr>
<tr>
<td>Personal injury or illness</td>
<td>53</td>
</tr>
<tr>
<td>Marriage</td>
<td>50</td>
</tr>
<tr>
<td>Fired at work</td>
<td>47</td>
</tr>
<tr>
<td>Marital reconciliation</td>
<td>45</td>
</tr>
<tr>
<td>Retirement</td>
<td>45</td>
</tr>
<tr>
<td>Change in health of family member</td>
<td>44</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>40</td>
</tr>
<tr>
<td>Sex difficulties</td>
<td>39</td>
</tr>
<tr>
<td>Gain of new family member</td>
<td>39</td>
</tr>
<tr>
<td>Business Readjustment</td>
<td>39</td>
</tr>
<tr>
<td>Change in financial state</td>
<td>38</td>
</tr>
<tr>
<td>Death of a close friend</td>
<td>37</td>
</tr>
<tr>
<td>Change to different line of work</td>
<td>36</td>
</tr>
<tr>
<td>Change of number of arguments with spouse</td>
<td>35</td>
</tr>
<tr>
<td>Mortgage over $10,000/-</td>
<td>31</td>
</tr>
<tr>
<td>Foreclosure of mortgage or loan</td>
<td>30</td>
</tr>
<tr>
<td>Change in responsibilities at work</td>
<td>29</td>
</tr>
<tr>
<td>Son or daughter leaving home</td>
<td>29</td>
</tr>
<tr>
<td>Trouble with in laws</td>
<td>29</td>
</tr>
<tr>
<td>Outstanding personal achievement</td>
<td>28</td>
</tr>
<tr>
<td>Wife begins or stops work</td>
<td>26</td>
</tr>
<tr>
<td>Begin or end school</td>
<td>26</td>
</tr>
<tr>
<td>Change in living conditions</td>
<td>25</td>
</tr>
<tr>
<td>Revision in personal habits</td>
<td>24</td>
</tr>
<tr>
<td>Trouble with boss</td>
<td>23</td>
</tr>
<tr>
<td>Change in work hours or conditions</td>
<td>20</td>
</tr>
<tr>
<td>Change in residence</td>
<td>20</td>
</tr>
<tr>
<td>Change in schools</td>
<td>20</td>
</tr>
<tr>
<td>Change in recreation</td>
<td>19</td>
</tr>
<tr>
<td>Change in church activities</td>
<td>19</td>
</tr>
<tr>
<td>Change in social activities</td>
<td>18</td>
</tr>
<tr>
<td>Mortgage or loan less than $10,000/-</td>
<td>17</td>
</tr>
<tr>
<td>Change in sleeping habits</td>
<td>16</td>
</tr>
<tr>
<td>Change in number of family get together</td>
<td>15</td>
</tr>
<tr>
<td>Change in eating habits</td>
<td>15</td>
</tr>
<tr>
<td>Vacation</td>
<td>13</td>
</tr>
<tr>
<td>Christmas</td>
<td>12</td>
</tr>
<tr>
<td>Minor violations of the law</td>
<td>11</td>
</tr>
</tbody>
</table>


Holmes and Rahe constructed their scale by researching medical records of patients who suffered from illnesses after experiencing psychological trauma, these trauma or life
events, were ranked in order of severity, with death of spouse being rank 1, as most severe.
The PERI questionnaire contains work related events, however these have been constructed by some researchers as being acute and discrete (e.g. being promoted/demoted) rather than chronic, this highlights the confusion which exists over the terms acute, and long term or chronic (the death of a spouse is discrete event, causing acute stress, but the residual effects may be chronic).

2.6 Workplace Stress:
Cox et al (1981) found that work was cited as the major source of stress and problems for fifty four percent of respondents, while a further twelve percent is an area necessitating investigation, commencing with areas of work which may be identified as potentially stressful.

2.6.1 Work overload / Underload:
A common source of stress at work is having too much to do or a job requiring excessive speed of output, this is quantitative overload, but overload can be qualitative – having work which is too difficult or requires excessive concentration, High levels of anxiety and frustration were found among clerical workers who reported heavy workloads (Specter 1987). Work Underload is also stressful and results in boredom and frustration, suggested French and Caplan (1972), this can also be quantitative (not enough to do) or qualitative (under utilization of the employees skills and abilities), this work insufficiently has been found to be associated with psychological strain, low job satisfaction and low organizational commitment.

2.6.2 The Most Stressful Jobs:
Cooper et al (1998) quoted from Jane Cranwell and Alyssa Abbey. Evaluated 100 jobs on a 10 point scale, with 1 being the least stressful and 10 the most stressful, they used their professional judgments based upon the research findings, and the survey was conducted at the time of miners’ strike in 1985.
Table 3: Professions with their rating of stress:

<table>
<thead>
<tr>
<th>Profession</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miner</td>
<td>8.3</td>
</tr>
<tr>
<td>Police Officer</td>
<td>7.7</td>
</tr>
<tr>
<td>Airline Pilot</td>
<td>7.5</td>
</tr>
<tr>
<td>Prison Officer</td>
<td>7.5</td>
</tr>
<tr>
<td>Dentist</td>
<td>7.3</td>
</tr>
<tr>
<td>Actor</td>
<td>7.2</td>
</tr>
<tr>
<td>Politician</td>
<td>7.0</td>
</tr>
<tr>
<td>Doctor</td>
<td>6.8</td>
</tr>
<tr>
<td>Nurse / midwife</td>
<td>6.5</td>
</tr>
<tr>
<td>Teacher</td>
<td>6.2</td>
</tr>
<tr>
<td>Social Worker</td>
<td>6.0</td>
</tr>
<tr>
<td>Manager</td>
<td>5.8</td>
</tr>
<tr>
<td>Bus Driver</td>
<td>5.4</td>
</tr>
<tr>
<td>Civil Servant</td>
<td>4.3</td>
</tr>
<tr>
<td>Accountant</td>
<td>4.3</td>
</tr>
<tr>
<td>Postman</td>
<td>4.0</td>
</tr>
<tr>
<td>Computer Operator</td>
<td>3.7</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>3.5</td>
</tr>
<tr>
<td>Museum Worker</td>
<td>2.0</td>
</tr>
<tr>
<td>Librarian</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Cary Cooper repeated the survey in 1997 assessing 104 jobs, factors used to make the assessment included hours worked, workload, deadlines pressures and levels of responsibility. He was convinced that it was not the jobs themselves that were stressful, but the amount of change the particular profession had undergone.

Table 4: The most Stressful Jobs Survey 1997.

<table>
<thead>
<tr>
<th>UK’s 10 most stressful jobs</th>
<th>UK’s 10 least Stressful Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prison officer</td>
<td>Librarian</td>
</tr>
<tr>
<td>Police officer</td>
<td>Museum Personnel</td>
</tr>
<tr>
<td>Social Worker</td>
<td>Biologist</td>
</tr>
<tr>
<td>Teacher</td>
<td>Nursery nurse</td>
</tr>
<tr>
<td>Ambulance Service Worker</td>
<td>Astronomer</td>
</tr>
<tr>
<td>Nurse / midwife</td>
<td>Beauty therapist</td>
</tr>
<tr>
<td>Doctor</td>
<td>Linguist</td>
</tr>
<tr>
<td>Fireman</td>
<td>Remedial gymnast</td>
</tr>
<tr>
<td>Dentist</td>
<td>Speech therapist</td>
</tr>
<tr>
<td>Miner</td>
<td>Pharmacist</td>
</tr>
</tbody>
</table>
2.6.3. Workplace Stress: Alex Roney and Cary Cooper.

“I really feel stressed “, how often have you heard or felt that lately? One cannot pick up a newspaper or switch on the radio or television without some form of stress being mentioned or discussed. When you think about it, so many stressful scenario’s can be envisaged- job insecurity, unemployment, debt, having to deal with difficult customers, clients, patients or people generally. May we can also imagine ourselves as the outraged person, being aggressive, fighting for our perceived rights both roles are stressful for the participants. One gets the impression that people are increasingly taking out their anger and frustration, however caused, or others – either by being more irritable (at lower level) or by driving fast and dangerously, exploding into road rage, drinking heavily and then becoming aggressive, or by releasing some of their tensions by bullying other people either at home or work.

The link between home life and work is important, as few people can truly separate completely the two halves of their lives. Employers must understand the implications and symptoms of stress and its related illnesses. Employees must be able to withstand its pressures, and know what to do, if they are becoming affected. Those at home to have an appreciation of the problems which can arise, and the ways in which they can help. This means that everyone would know more about stress, how to recognize it and its symptoms, how to minimize it, how to manage it successfully, how to deal with it and how to help others to deal with it, from the different perspectives of individual or employee, employer, family, friend or professional advisor, This knowledge could be vitally important for you, and your close family friends, or even, your work colleagues.

Stress Reduction Techniques:
There are various methods which individuals use to enable to them both physically and mentally to cope with the strains imposed on them. Some people find that exercise which helps to keep the body fit also acts as a physical release for the tensing up effects of stress and provides a relaxation. Others find massage, aromatherapy, or relaxation or meditation exercises helpful, Others again throw themselves into their hobbies or extra work activities such as gardening or drama groups to ensure that they have distractions from
the work environments, if this is where the pressure are; or from the home environment, if their stressful situations arise there. Others go to their local pub, and provided they do not become reliant on alcohol, this has provided a friendly panacea for many, however, many of these solutions are expensive, and it is a sad myth that only those with cash suffer from stress. Some people are lucky enough to be able to “switch off” when they come home, and they are the ones least likely to suffer from harmful stress.

Debt as a Stressor:
Another source of stress is the credit syndrome; People are bombarded on all sides to “buy now, pay later” and can get into dire financial positions where they can see no way out. Unpaid mortgage installments can eventually lead to dispossession of homes. Longer hours will not necessarily pay the bills, which can swiftly mount up if, even for a short period, a person cannot earn the usual amount- through ill – health for example. The sickness may not even be their own, but that of a family member, help is available, however, and any manager identifying an employee in this kind if difficulty would do well to offer to arrange for, or at least to urge the employee to take the advice of a good credit counselor.

2.6.4. Identifying sources of Workplace stress and a strategy to deal with them
Every decade this century has brought its own unique changes to our working environment. In the 1960’s, Harold Wilson talked about the “white heat of technology” transforming our lives, producing the 20 – hour week. New technology was going to be responsible for a “leisure age” allowing us to pursue our dreams even mid week. But instead the 1970’s brought unrest and conflict, a workplace not knowing what it was going to produce or how it was going to do it, Studs Terkel’s book working summed it up” work is by its very nature about violence- to the spirit as well as to the body. It is about ulcers as well as accidents, about shouting matches as well as fistfights, about nervous breakdowns as kicking the dog around. It is above all about daily humiliations. To survive the day is triumph enough for the walking wounded among the great many of us.
Then came the 1980’s – the enterprise culture” - with people working longer and harder to achieve individual success and material rewards. We had privatization, process re-engineering (Americanized term for re-organization) mergers and acquisitions, strategic alliances, joint ventures and the like, transforming workplaces into hot house, free market environment. In the short term, this approach improved our economic competitiveness in international markets -but the strains started to show, “stress” joined “junk bonds’, “software packages” and “downsizing” in the modern business vocabulary – and its cost in the workplace mounted (Cooper, 1996)

2.6.5. Role Ambiguity and Role Conflict:
Role ambiguity occurs when an employee is not clear as to his or her work role within the organization, this is often demonstrated as confusion over objectives and expectations, and uncertainty about the scope and responsibilities associated with the job, specter et al (1988) found role ambiguity was associated with frustration and anxiety.

Role Conflict : may occur when an individual is asked to carry out a role which conflicts with their beliefs and values, or when they play various roles which are incompatible with each other, for e.g.- a manager may be expected to increase production output of the section and also to provide work counseling to the employees, these two roles may not be incompatible, but may be perceived as such by some individuals, Shirom et al (1989), found that there was a significant relationship between role conflict and the incidence of coronary heart disease among white collar workers, but not among blue collar workers. Those who work at the boundaries of organizations, between shop-floor and management, are likely to experience role conflict, Margolis and Kroes (1974) found that foremen were seven times more likely to develop digestive tract ulcers than were shop floor workers.

2.6.6 Job Insecurity and lack of Career Development:
Job insecurity and redundancy are very real fears for many people. The sense of anxiety experienced is also heightened by the feeling of unfairness that the organization still requires total commitment on the part of the employee. Whilst this is not reciprocated by
the organization (Porter, 1990). Lack of career structures within organization or fears that the individual has reached his or her promotional ceiling have been related to feeling of stress and poor physical health (Kasl and Cobb, 1882).

2.6.7. Interpersonal Relationships:
Good relationships at work promote health for the individual and the organization. These may include relationships with superiors, subordinates and peers or colleagues, relationships at work and outside the workplace are usually viewed as playing a moderating role, a buffer, on stressful situations. Karasek et el (1982) studied over 1000 male workers in Sweden and it was shown that support from supervisors and colleagues buffered the effects of job demands and helped maintain job satisfaction. Low interpersonal support at work has been shown to be associated with anxiety, job tension and low job satisfaction (Warr – 1992). Matteson and Ivancevich (1982) found the most common source of work stress was an inability to go on with other workers.

Bullying and violence at work is an issue which has recently been highlighted. Bullying may stop short of actual physical violence. But may cause such severe stress that individuals may absent themselves from work, suffer mental ill – health or leave the job. Cox and leather (1994) argue for control of violence in the workplace through use of cognitive behavioral approaches, where the situation is appraised rather than apportioning blame to the individuals involved.

2.6.8 Home Work Interface:
A number of issues have been examined in this context. First, the obvious conflict of time demands between home and work, where research has centered mainly on working women. In these so- called days of equality, surveys show that women still carry out more household tasks and child care than their partners. Conflicting demands can be source of stress. If these are not resolved adequately (Bhagat and Chassie 1981), In addition, social and emotional support form the partner may be affected by the conflicting demands of home and work (Cooper and Hingley, 1985).
In the broader area of “non–work time”, leisure pursuits may be affected for those workers who feel they have insufficient energy or time to participate in outside activities, Cox (1980) suggests that more is involved than just physically demanding jobs; the influence of repetitive work may be to deaden initiative. Cary L Cooper & Edwin A Locke (2000)\textsuperscript{18}.

2.7 The Cost of Stress:

For United Kingdom companies in the 1980’s, stress in the workplace was ten times more costly than all industrial relations disputes. In addition, the Confederation of British Industry in 1995 calculated that alcohol and drink related diseases cost the UK economy approximately \textsterling 1.7 Billion annually, and 8 million lost working days, with coronary artery disease and strokes costing a further 62 Million days lost and mental ill health at \textsterling 3.7 billion and 91 million days lost. 

The British Heart foundation has estimated that heart disease costs the average UK company of 10000 employees 73000, lost working days per year, the death of 42 of its employees (between 35-64 years old) and lost productivity value to its products or services of over \textsterling 2.5 million annually.

The costs of stress on the National Health Service is also currently extremely high, for e.g., the British Heart Foundation Coronary Prevention Group have calculated that 180000 people die in the UK each year from Coronary Heart Disease, that is, 500 people a day. In addition MIND estimates that between 30 and 40 percent of all sickness absence from work is attributable to mental and emotional disturbance.

The country has also suffered from increased rates of suicide amongst the young, increasing by 30 percent from the late 1970’s to the early 1990’s, particularly in the younger age groups of employees.

2.7.1 Corporate Cost:

Why is it that many countries (e.g. USA, Finland) seems to showing declines in their levels of stress – related illnesses such as heart disease an alcoholism, while the united Kingdom are still rising? Is it the case, for e.g., that American Employers are becoming
more altruistic and caring for their employees, and less concerned about “The bottom line”? Unfortunately the answer is a definite “no”.

2.7.2 Sources of Workplace Stress in the 1970’s and 1980’s:
Stress at work is primarily caused by the fundamentals of change, uncertainty, lack of control and high work load; all of which have become characteristic of work today. In addition, events which may be occurring in the personal domain (e.g. family or financial problems) can cause stress which often spills over into work. Because stress is cumulative, it can be quite difficult to separate cause and effect. A great deal of research has now been carried out to help identify in broad terms the sources of job and organizational stress in the workplace. The main sources of stress at work can be conceptualized as falling into six categories, factors intrinsic to the job, the employer’s role in the organization; relationships at work; career development, organizational structure and culture; and the home/work interface.

There are a variety of factors intrinsic to the job which are potentially stressful and have been linked to poor physical and mental health, these include poor working conditions, shift work, long hours, travel risk and danger, person-job mismatch, new technology, work overload or underload, both of a qualitative nature and quantitative nature. (Cooper et al 1990)

The quality of the physical working environment is recognized as an important factor in employee health, in 1983, the World Health Organization defined the concept of the “sick building syndrome” is characterized by a range of physiological symptoms including sensory irritation (e.g. noise, visual distractions), headache, nausea, dizziness and fatigue.

Numerous occupational studies have found that shift work is a common occupational stressor. As well as affecting Neurophysiological rhythms such as blood temperature such as blood temperature, metabolic rate and blood sugar levels, it has a negative impact on mental efficiency and work motivation, which ultimately result in stress – related disease (Wallace et al, 1988), In a study carried out among British police officers (cooper,
Davidson, Robinson, 1982), it was found that workload was a major stressor among the lower ranks, particularly sergeants.

2.8 Occupational Hazards due to Stress:

*Occupational stress is a major hazard for many workers. Increased workloads, downsizing, overtime, hostile work environments, and shift work are just a few of the many causes of stressful working conditions. This fact sheet addresses some of the causes of workplace stress and solutions for change. (*www.pef.org.*)

*The human body has a natural chemical response to a threat or demand, commonly known as the “flight or fight” reaction, which includes the release of adrenalin. Once the threat or demand is over the body can return to its natural state. A STRESSOR is an event or set of conditions that causes a stress response. STRESS is the body’s physiological response to the stressor, and STRAIN is the body’s longer-term reaction to chronic stress. Occupational stress can affect your health when the stressors of the workplace exceed the employee’s ability to have some control over their situation or to cope in other ways. For example:

1. Workers are overburdened with workloads that remain high regardless of their efforts: the workload is the STRESSOR

2. Employees feel anxious and their heart rate speeds up because they can not control their workloads: that is STRESS

3. Increased blood pressure, insomnia, or chronic headaches: that is STRAIN

**Hazard of occupational stress in their workplace**


The increasing cost, both socially and financially, of workplace stress is of concern to the Northern Territory Government. This booklet has been designed by NT WorkSafe and the Office of the Commissioner for Public Employment to assist managers and supervisors to reduce the hazard of occupational stress in their workplace.
The booklet provides information on the causes and the consequences of excess stress. Importantly, it also provides information on how workplaces can identify the incidence rates and assess the associated risks in their workplace. Control measures aimed at reducing risks are also provided.

The term ‘stress’ is also used to describe the individual’s response to pressure. The response can be psychological and/or behavioral. How the individual responds to the stressor will depend on their personality, their perceptions, and their past experience. Some stress is necessary in that it assists us in achieving both work and personal goals. However, too much stress can make those goals harder to achieve.

People respond differently to stress. Some people function well under significant stress while others do not.

A worker’s ability to cope with increasing workplace stress is also affected by the amount of stress they are subjected to from stressors outside of the workplace. Trouble at home may reduce their ability to cope with pressure at work.

**How well a person will cope with occupational stress will depend on** -
the extent to which they fell threatened by the stressor, the actions they know they can take to reduce the impact of the stressor, their expectations as to how they will be able to cope with the stressor.

**Stress may cause productivity losses through:**
poor worker performance increased absenteeism, diverted administrative and management time, poor morale, increased staff turnover. Examples of possible causes of stress are as follows.

**Threats, such as** -- risk of harm caused by working in unsafe conditions, the possibility of dismissal the rate of change, the uncertainty of change, poor interpersonal relationships with supervisors or co-workers, harassment from others discrimination.
Pressure to meet unreasonable deadlines. Adopt new technology, adapt to certain management styles, accept new goals and targets, comply with unreasonable proposals, accept and act upon performance feedback.

Frustration from poor workplace communication and consultation, lack of acknowledgment in the workplace that a stressor exists, lack of acknowledgment of the individual’s achievements, being passed over for promotion, not being suited for, or properly trained.

Major Stress can be caused by personal loss, such as the death of a loved one or the end of a relationship, threat of physical danger, a major industrial accident, loss of job.

**The individual’s response to workplace stress:**

What may be significant in one person’s mind may not be in another. It is often difficult for an employee to choose a rational response and they may internalize the stress. This could result in physiological, emotional and/or behavioral responses that are recognized as symptoms of stress. Examples of these include:

**Physiological Change**  Increased blood pressure, Tiredness, Stomach ulcers
Digestive disorders such as indigestion, constipation or diarrhea, Weight loss or gain
Headaches.

**Emotional Change**  Increased tension, depression, frustration, Anxiety, feeling of emptiness

**Behavioral Change**  Over/under eating, Misuse of alcohol and other drugs, Interpersonal difficulties
Difficulty in sleeping, Aggressive or passive behavior, Workplace conflict, Absenteeism.
2.9 Strategies for Coping with Stress:

2.9.1 Workplace Interventions to Prevent Stress-Related Illness:

Definitions and theories of Job Stress ----

Stress is a difficult concept to define for it often refers to physiological and psychological reactions of individuals as well as to the environmental conditions that elicit them. Typically investigators have referred to the situational demands that provoke these responses as “stressors” and the responses themselves as “strains” (Ganster and Schaubroeck, 1991). Stressors generally mean environmental factors that cause the individual to muster a coping response because they pose threat or harm. In the work domain examples of such stressors are high workloads, requirements for working fast and meeting strict deadlines, conflicting demands, and interruptions. Many theorists believe that such stressors are especially harmful when they are uncontrollable.

Other common demands arise from interpersonal interactions with supervisors, co-workers, and customers, throughout all of these environmental demands runs the idea that the individual interprets them as posing some level of threat or challenge, in the most common paradigm (Lazarus, 1991), this cognitive appraisal of threat or challenge triggers a set of coping responses. Stress might then be described as the process whereby individuals respond to demands from their environment. IN many respects this response process is a normal and benign part of life, and in fact some stressors, such as physical exercise, are regarded as promoting health and wellbeing. And in fact some stressors, such as seen to arise, thought, when exposure to such demands is chronic and elicits a strong enough pattern of responses to strain the individual’s physical and mental resources.

Hans Selye (1976) was among the first to posit that chronic exposures to environmental demands could have a cumulative negative impact on health through a process he described as the General Adaptation Syndrome (GAS).

Do work demands cause illness-?
Studies linking various work demands to health outcomes roughly compromise two broad categories. Most commonly conducted studies by organizational behavior researchers are field surveys of employees in which characteristics of work and occupations are linked at the individual level of analysis to various measures of psychological and physical well being, as well as job attitudes.

Most of these studies rely on the self reports of the respondents for measures of both work stressors and their putative outcomes (review by Ganster and Schaubroeck, 1991), although exceptions to this method are appearing more frequently (Fox et al, 1993; Manning et al, 1996; Schaubroeck et al 1994, Schaubroeck and Ganster – 1993).

The other broad category of work stress research arises from occupational comparisons of health and morality by epidemiologists having an interest in identifying population risk factors or populations that are most at risk. The tradition here is to compare occupational groups on various tends to be measured in either two ways. One approach utilizes fairly objective occupational classifications (for e.g retail sales person) and relates these to aggregate health data. Normally these data have been compiled by responsible government agencies into registries.

What specific workplace characteristics have the largest impact on health?

Having made a case for an etiologic role of work stress on health, our next question is whether we can identify job characteristics that appear to be important contributors to health problems and are common across a wide arrange of occupations. From a practical standpoint, we gain little by targeting work life as a threat to health without being able to pinpoint things that we might change in order to make work healthier.

In some ways generating a list is of stressors is futile because occupations, and different work settings within the same occupations, differ widely in the kinds of demands that they impose. In any practical application individuals desiring to intervene would need to conduct a diagnosis that includes some open ended, or inductive component.

There is a large literature in which investigators search for stressors within specific occupations, for e.g studies have reported such descriptions for nurses (McGrath et al, 1989), teachers (Blasé, 1986; Brenner and Bartell, 1984; Freison and Sarros, 1989:

These represent a small fraction of such studies. Despite the wide diversity of occupations examined and the inductive approach researchers often take, there is a surprising degree of overlap in the stressors that emerge from such studies.

2.9.2 Knowing about intervening in Stressful work environments –

Interventions aimed at changing organizational structures, job design, leadership practices and many other aspects of work settings occur everyday, some of these are reported in the research literature, but rarely do they examine stress-related outcomes or mental and physical health. There are only a handful of studies that we know of that actually tested an intervention designed to reduce the negative effects of work stress by changing some aspect of the work situation. We will discuss these as a way of illustrating approaches that can be taken and also to gauge how effective such interventions might be.

One of the early field experiments in work stress was not really an intervention designed to make a work setting less stressful, but it is worth noting because it provides one of the rare examples of experimentally testing the impact of a specific work stressor.

Timio and Gentili (1976) manipulated the payment methods for 16 confectioners in a repeated measures design, half of he workers started on a piece rate payment schedule then cycled to a daily pay schedule and then cycled back to a piece rate schedule, each cycle lasting for four days. The other half of the sample performed under a daily pay/piece rate/daily pay sequence. Cumulative daily measures of adrenaline, non adrenaline, and 11-hydroxycorticosteroids showed a very large effect for the piece rate payment method, with levels of adrenaline, for example, being two to three times higher when working on piece rate.
Timio and Gentili (1976) noted that the exertion levels of the workers were identical during each phase of the study, leading them to conclude that the effects reflected a “corresponding” augmentation in stress and distress” an experiment by Timio et al, (1979), also showed that neuroendocrine responses are affected by working on the assemble line. But assembly line works entails a number of characteristics (such as forced pacing, repetitiveness, monotony, lack of social interaction), making it harder to pinpoint the exact nature of stressor than in the Timio and Gentili (1976) experiment.

The Timio and Gentili (1976) study raises several interesting questions, for e.g how did the workers cognitively appraise the different payment scheme, did the piece rate payment system lower their sense of personal control? Did they perceive the piece rate system lower their sense of personal Control? Did they perceive the piece rate system as a threat to their pay or job security? We don’t know the answers to these questions, but the results do illustrate how changing just one aspect of the work setting (albeit and important one) can trigger a large stress response. Of course, we also do not know how persistent the allostatic reactions to the payment plan would have been over time. On the other hand, they might have exacted a cumulative toll on health over an extended exposure, On the other hand, the workers might have eventually adapted to their changed pay system with a concomitant reduction in their physiological reactivity.

Jackson (1983) was one of the first to report a stress reduction intervention in the organizational literature. She assigned employees of a hospital outpatient facility either to a participation or no- intervention control group. Self –report measures confirmed that employees in the participation condition experienced a greater amount of control over work- related matters. The intervention produced lower levels of self – reported emotional strain, at a six month post test and a nine – month follow up what is enlightening about this study is how significant the effect was of such a seemingly low-key intervention.

The participation program consisted of training in the nominal group technique and weekly staff meetings to discuss departmental activities. In this case, there is evidence
that the intervention augmented the respondent’s sense of control in the workplace, which might well be the key mediator for its effects on their emotional strain.

2.9.3 **What would constitute an ideal stress intervention?**

An ideal Intervention would have the following characteristics:

1. Be comprehensive and attend to individual and organizational factors. Teaching workers stress management skills is necessary and serves a useful purpose, but it deals with only part of the problem. The workplace can be a source of important stressors that can be identified and targeted for change.

2. Include an assessment of stressors in the work environment in order to understand the stress - health dynamics. A job stress assessment need not be a major undertaking; an initial assessment could take the form of informal discussions with workers. Opening a channel of communication with employees serves to legitimate stress as a topic for discussion and is a good way to obtain valuable information about job stressors and employee reactions. Group discussions and questionnaire surveys can be used later to pinpoint common areas of stress and to measure the prevalence of the problem.

3. Include workers in the design and evaluation of the intervention. There is sufficient research attesting to the importance of worker involvement in organizational change efforts, and to the importance of the process (that is, how the intervention is done) as well as the content of such interventions. In most stress intervention studies, consultants make all the decisions regarding program design, assessment tools, interventions, and evaluation protocols. It is recommended that worker groups (for e.g. joint labor management committees) be positioned at the center of the decision making process, and stress intervention experts relocated to the periphery. Increasing worker participation and involvement in stress interventions will shift some of the emphasis to the process, without ignoring either the content or outcomes of training Reynolds and Shapiro (1991) have made a convincing case for examining process variables as well as outcome variables in stress intervention research.
4. Be designed and evaluated within the context of a well defined conceptual model. A conceptual model is useful for defining the stressors, the short and long term consequences of stress, key intervening variables, and the nature of relationships among stressors, outcomes, and intervening variables. Once a model is specified, it guides the choice of which stressors to measure, the targeting of intervention strategies, and decisions on how to implement the intervention and evaluates effectiveness. A number of authors have proposed conceptual models for stress intervention, but these models remain underutilized by practitioners (Ivancevich et al, 1990; Newman and Beehr, 1979; Stoner and Fry, 1983).

2.9.4 Stress Prevention and Management:

Any organization which seeks to establish and maintain the best state of mental, physical and social well-being of its employees, needs to have policies and procedures which comprehensively address health and safety. These policies should include a mental health policy with procedures to manage stress based on the needs of the origination and its employees. These should also be regularly reviewed and evaluated.

There are a number of options to consider in looking at the prevention of stress, which can be termed as primary, secondary and tertiary levels of prevention, and address different stages in the stress process (as described by Cooper and Cartwright (1996), In their guide to employees, Mental health and Stress in the workplace)

**Primary Prevention** is concerned with taking action to reduce or eliminate the sources of stress and positively promoting a supportive and health work environment. **Secondary prevention** is concerned with the prompt detection and management of depression. Tertiary Prevention is concerned with the rehabilitation and recovery process of those individuals who have suffered or are suffering from serious ill-health as a result of stress, to develop an effective and comprehensive organizational policy on stress; employers need to integrate these three approaches.

As Alister Mant suggested in The Rise and Fall of the British Manger (London, Pan, 1977) “a great deal of what wants doing in this naughty world seems to be reasonably
obvious to men and women of goodwill and common sense everywhere. But we have not, it seems mastered the trick of creating in the intervening institutions that help us to get things done. We rush headlong from analysis to action, without stopping en route to build sound constitutional structures to support our Endeavour’s”, we must view employees as individuals who have needs, personalities and commitments outside organizational life and begin to realize (and put into practice) our intuitive feeling that the performance, efficiency, and satisfaction of an employee is linked to total life experience. As John Ruskin said in 1871, “in order that people may be happy in their work these things are needed. They must be fit for it, they must not do too much of it, and they must have sense of success for it.
2.9.5 Ten Strategies for Coping and Thriving at work:

*Managing Job Stress: 10 Strategies for Coping and Thriving at work* - by Randall S. Hansen, Ph.D.

**Causes of Job Stress:**

**Strategies for Managing Job Stress:**

While many of the methods of preventing job stress need to be developed and supported by the organization, there are things that workers can do to help you better manage job stress.

Here are 10 tips for dealing with the stress from your job:

1. **Put it in perspective.** Jobs are disposable. Your friends, families, and health are not. If your employer expects too much of you, and it's starting to take its toll on you, start looking for a new job/new employer.

2. **Modify your job situation.** If you really like your employer, but the job has become too stressful (or too boring), ask about tailoring your job to your skills. And if you got promoted into a more stressful position that you just are not able to handle, ask about a lateral transfer -- or even a transfer back to your old job (if that's what you want).

3. **Get time away.** If you feel the stress building, take a break. Walk away from the situation, perhaps walking around the block, sitting on a park bench, taking in a little meditative time. Exercise does wonders for the psyche. But even just finding a quiet place and listening to your iPod can reduce stress.

4. **Fight through the clutter.** Taking the time to organization your desk or workspace can help ease the sense of losing control that comes from too much clutter. Keeping a to-do list -- and then crossing things off it -- also helps.

5. **Talk it out.** Sometimes the best stress-reducer is simply sharing your stress with someone close to you. The act of talking it out — and getting support and empathy from someone else -- is often an excellent way of blowing of steam and reducing stress. Have a support system of trusted people.
6. Cultivate allies at work. Just knowing you have one or more co-workers who are willing to assist you in times of stress will reduce your stress level. Just remember to reciprocate and help them when they are in need.

7. Find humor in the situation. When you -- or the people around you -- start taking things too seriously, find a way to break through with laughter. Share a joke or funny story.

8. Have realistic expectations. While Americans are working longer hours, we can still only fit so much work into one day. Having unrealistic expectations for what you can accomplish sets you up for failure -- and increased stress.

9. Nobody is perfect. If you are one of those types that obsess over every detail and micromanage to make sure "everything is perfect," you need to stop. Change your motto to performing your best, and leave perfection to the gods.

10. Maintain a positive attitude (and avoid those without one). Negativism sucks the energy and motivation out of any situation, so avoid it whenever possible. Instead, develop a positive attitude -- and learn to reward yourself for little accomplishments (even if no one else does).

But your health is everything. You need to take care of yourself, and no job, customer, or boss is worth putting yourself at risk. Find a way out through one or more of our 10 strategies. Take control of your situation -- and fix it -- and you will have better mental and physical health, as well as better relationships with the people around you.
2.9.6 **Organizational Drivers for Managing Stress:**

(Organizational Stress- Jane Cranwell – Ward and Alyssa Abbey)

External and Internal Drivers for Managing Stress—

<table>
<thead>
<tr>
<th><strong>External Factors</strong></th>
<th><strong>Internal Factors</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Globalization</td>
<td>Cost of Stress and Stress related illnesses</td>
</tr>
<tr>
<td>Competition and drive for profit</td>
<td>Organizational change</td>
</tr>
<tr>
<td>Economic environment</td>
<td>Company culture , values , work ethics</td>
</tr>
<tr>
<td>Technological change</td>
<td>Relocation</td>
</tr>
<tr>
<td>The media</td>
<td>Working Environment</td>
</tr>
<tr>
<td>Expectations of customers</td>
<td>Leadership Styles</td>
</tr>
<tr>
<td>Restructuring of Organizations</td>
<td>Downsizing and Workloads</td>
</tr>
<tr>
<td>Work- life balance</td>
<td>Silo Mentality- team V/s Individuals</td>
</tr>
<tr>
<td>Changing demographics in the workplace</td>
<td>Teamwork</td>
</tr>
<tr>
<td>Changing structure of the family</td>
<td>Increased violence and bullying at work</td>
</tr>
<tr>
<td>Diversity</td>
<td></td>
</tr>
<tr>
<td>Changing psychological contract</td>
<td></td>
</tr>
</tbody>
</table>

The Health and Safety (HSE) in the UK has identified hazards in its Management Standard for tackling Work – Related Stress (2004) in six categories –

1. Demands (workload and physical hazards)
2. Control (how much say a person has)
3. Support (encouragement, sponsorship, and resources)
4. Relationships (harassment and bullying)
5. Change (the way it is managed and communicated)
### Treating occupational stress: (Terry A Beehr)

**Individually and Organizationally targeted treatments of Occupational stress:**

<table>
<thead>
<tr>
<th>Individual Target</th>
<th>Organizational Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meditation</td>
<td>Mastery of environment – including stressors</td>
</tr>
<tr>
<td>Manage desires, ambitions, drives</td>
<td>Leaving stressful situation permanently</td>
</tr>
<tr>
<td>Increase self understanding</td>
<td>Human relations training</td>
</tr>
<tr>
<td>Organization provide health services</td>
<td>Planning, organizing day’s activities</td>
</tr>
<tr>
<td>Vicarious stress reduction(e.g audience activities)</td>
<td>Find more suitable job</td>
</tr>
<tr>
<td>Relaxation Techniques</td>
<td>Redesign jobs</td>
</tr>
<tr>
<td>Acceptance of less than perfection</td>
<td>Alter organizational structure</td>
</tr>
<tr>
<td>Tension release (laughing, crying, attacking)</td>
<td>Change evaluation, reward system</td>
</tr>
<tr>
<td>Seeking medical, psychological, other professional help</td>
<td>Change work schedules</td>
</tr>
<tr>
<td>Attempts to alter behavior or personality</td>
<td>Clarify roles</td>
</tr>
<tr>
<td>Use of biofeedback techniques</td>
<td>Refine selection and placement procedures</td>
</tr>
<tr>
<td>Think of work as less important</td>
<td>Clarify career paths and promotion criteria improve organizations communication</td>
</tr>
<tr>
<td>Getting sufficient rest</td>
<td></td>
</tr>
<tr>
<td>Quitting drug intake</td>
<td>Other strategies</td>
</tr>
<tr>
<td>Physical activity</td>
<td></td>
</tr>
<tr>
<td>Diet</td>
<td></td>
</tr>
<tr>
<td>Increased religious activity</td>
<td></td>
</tr>
</tbody>
</table>

**How to Survive Workplace Stress** - Neil Shah, Director, the Stress Management Society, [www.stress.org.uk](http://www.stress.org.uk)

The economy may be taking a battering right now, but how are employees and entrepreneurs holding up? Not too well, according to Neil Shah.
“Workplace stress is on the increase during the credit crunch as people are decidedly nervous about their jobs in the foreseeable future. At the Stress Management Society the last six months have been our busiest ever in terms of the number of enquiries we’ve had, both from individuals needing help and companies wanting to find support for their stressed staff.

A major survey released in late 2008 also highlights this rise in stress at work with almost two thirds of 2,700 workers polled saying they felt more run down, stressed and prone to illness than they did three years ago.

At the same time, the current financial climate means that ‘luxuries’ like holidays or meals out are being cut from people’s budgets. Ironically these are often the very things that help us unwind and alleviate stress, thus compounding the problem.

But is this a real cause for concern? Isn’t pressure just part of the job? Within reasonable boundaries pressure is actually a positive driving force that ensures we keep pushing to be the best we can be. However too much, and pressure turns to stress which leads to poor decision making in the short term, and poor health in the longer term.

However workplace stresses are solved using sophisticated mental and social skills. Having a body pumped full of adrenaline won’t help you if you’re worried about profits, office politics or a frozen PC. It will only make it more complicated to form a measured and appropriate response. Workplace stress is a major problem for business. Not only does it affect productivity and morale, it’s the second biggest occupational health problem in the UK after back problems. It’s also something Businesses should be tackling this problem with some urgency because not only does it reduce productivity, but it can also leave companies that don’t try to deal with the problem liable to legal action.
Models on stress Management

Robbins, Millett, Cacioppe & Waters-Marsh (1998) (www.sciencedirect.com/science) developed the model below to detail the three major categories of potential stressors

Model 1: Categories and Consequences of Stress:

Potential Sources

- Environmental Factors
  - Economic Uncertainty
  - Political Uncertainty
  - Technological Uncertainty

- Organizational Factors
  - Task Demands
  - Role Demands
  - Interpersonal Demands
  - Organizational Structure
  - Organizational Leadership
  - Organization’s Life Stage

- Individual Factors
  - Family Problems
  - Economic Problems
  - Personality

Individual Differences

- Perception
- Job Experience
- Social Support
- Belief in focus of Control
- Hostility

Experience Stress

Consequences

- Physiological Symptoms
  - Headaches
  - High blood pressure
  - Heart disease

- Psychological Symptoms
  - Anxiety
  - Depression
  - Decrease in job satisfaction

- Behavioral Symptoms
  - Productivity
  - Absenteeism
  - Turnover

Source: Robbins et al. 1998, p 279

Psychologists and medical practitioners observed that this model does have some shortcomings with regard to the consequences. In particular, behavioral aspects such as substance abuse, i.e. nicotine and/or alcohol, eating disorders, relationship breakdowns, family violence and even in some cases, suicides, can be directly attributable to workplace stress. These behaviors are not included in the list of behavioral symptoms.
Organizational Factors

Each organizational factor is now considered in turn.

Task Demands: are factors related to a person’s job. High-level projects being imposed, in addition to usual workloads, have been a feature within the finance sector. Examples include merger and integration projects, implementing reporting requirements for new shareholders, and reconciling the demands of multiple stakeholders that are often in conflict.

Role Demands: relate to pressure placed on a person as a function of the particular role they play in the organization. Role demands of executives have increased markedly from all directions. Examples include the demands of staff for communication, vision, and direction and from boards and shareholders for return on investment. These demands can create a great deal of conflict for those in leadership roles. Pressures such as making people redundant, whilst attempting to ensure survival in their own roles, also cause stress.

Interpersonal Demands: do other employees create pressures? Lack of social support from colleagues and poor interpersonal relationships can cause considerable stress. An individual’s ability to perform is dependent upon someone else having done his or her bit. A “You feel pressured by me and I feel stressed by you” syndrome arises, that contributes to the feelings of stress. This is particularly so when executives are dependent upon many people within the organization to produce results that are being demanded by others such as shareholders.

Organizational Structure: defines the level of differentiation in the organization. Recent trends include the flattening of structures, the loss of autonomy over decision-making, and the loss of staff that may have provided support for these leaders in the past. All can affect the level of stress experienced. When some, or all, of the above are experienced the potential for high levels of stress is exacerbated.

Organizational Leadership: represents the managerial style of the organization’s senior executives. In the case of these senior executives, the board of directors they report to, or the major shareholders, create the organizational climate. Learning to cope with the
demands of these people, in particular those from different cultural backgrounds can be a major contributor to stress. The ‘leaner, meaner’ organization has meant that frequently fewer people are doing the same amount of work. ‘Leaner, meaner’ has become ‘anorexic’ in an effort to reduce costs in many finance sector organizations (McNally, 1999).

Organizational Life Stage: in the case of the New Zealand finance sector the majority of firms were at the end of the maturity cycle or in the decline cycle. Many of the changes have been forced upon the companies in order for them to survive. In many cases, more than one change strategy has been imposed within a short period of time. For example, one company alone had — within a two-year period — a restructuring of the sales and distribution system.

Robbins et al. (1998) made the very important point that stressors are cumulative. Stress builds up. Each new and persistent stressor adds to an individual’s stress level. Each single stressor in and of itself may seem unimportant, but when added to an already high level of stress, it can be the one thing that pushes someone to complete breakdown. Therefore, it follows that if an individual executive has to cope with all of the organizational factors as outlined above, the potential for an individual to experience the negative consequences of stress is extremely high indeed.


Maslach and Leiter’s (1997) Employee burnout model outlined the aspects of organizational life that, taken in conjunction with those identified by Robbins et al. (1998), identified the causes of the stress impacting upon these executives. They believed that organizations should act to prevent burnout. For organizations to create an environment that enables people to do their best work. They also believed that a goal oriented organizational approach was necessary to minimize stress-induced burnout.

Rather than focus upon the individual as having responsibility for the management of stress, an organizational approach gives stress a workplace focus. Therefore, Maslach &
Leiter (1997) analyzed organizational life and found that six areas held the key to identifying sources of stress related burnout in employees. These six areas are: Workload, Reward, Control, Community, Fairness and Values. If these six areas of organizational life are disrupted, then employee burnout is more likely to occur. If organizational strategy has as its goal the building of processes and structures that promote engagement with work, then they believe management can take a proactive role in the control of job related stress.

**Maslach & Leiter’s Framework for Employee Burnout**

Maslach & Leiter (1997) believe that workload is a key dimension of organizational life. From the organizational point of view, workload means productivity: from the individual point of view workload means time and energy. Finding the balance between the two is the challenge facing most workplaces. Major organizational transitions associated with downsizing and restructuring, target workload first in order to increase productivity.
NIOSH Approach to Job Stress:

On the basis of experience and research, NIOSH (National Institute for Occupational Safety and Health) favors the view that working conditions play a primary role in causing job stress. However, the role of individual factors is not ignored. According to the NIOSH view, exposure to stressful working conditions (called job stressors) can have a direct influence on worker safety and health. But as shown below, individual and other situational factors can intervene to strengthen or weaken this influence. An employee’s need to care for an ill mother is an increasingly common example of an individual or situational factor that may intensify the effects of stressful working conditions. Examples of individual and situational factors that can help to reduce the effects of stressful working conditions include the following:

1. Balance between work and family or personal life
2. A support network of friends and coworkers
3. A relaxed and positive outlook
Job Conditions That May Lead to Stress

The Design of Tasks. Heavy workload, infrequent rest breaks, long work hours and shift work; hectic and routine tasks that have little inherent meaning, do not utilize workers' skills, and provide little sense of control. Example: Employees work to the point of exhaustion leading to stress.

Management Style. Lack of participation by workers in decision-making, poor communication in the organization, lack of family-friendly policies. Example: Employee needs to get the boss's approval for everything, and the company is insensitive to her family needs.

Interpersonal Relationships. Poor social environment and lack of support or help from coworkers and supervisors.

Work Roles. Conflicting or uncertain job expectations, too much responsibility, too many "hats to wear."

Career Concerns. Job insecurity and lack of opportunity for growth, advancement, or promotion; rapid changes for which workers are unprepared.

Environmental Conditions. Unpleasant or dangerous physical conditions such as crowding, noise, air pollution, or ergonomic problems.
### Group I: Sources of Stress in the Workplace

**Extrinsic stress**
- Poor physical conditions of the job
- Career ambiguity
- Degree of risk
- Unfair salaries
- Role conflicts
- Coercing personnel’s behavior

**Intrinsic Sources**
- Time Constraints
- Overload of work
- High or low job difficulty
- Great or little responsibility
- Great or little participation
- In decision making

### Group II: Individual Characteristics

**Social Support**

**Personality**

### Group III: Symptoms and signs of tension

**Psychological Symptoms**
- Depression
- Anxiety
- Irritability
- Fatigue
- Professional exhaustion

**Somatic Symptoms**
- Muscle pain
- Dermatitis
- Gastrointestinal dysfunctions
- Neurological trembling
- Heart problems

**Behavioral Symptoms**
- Smoking
- Alcoholism
- Drug Addiction
- Sexual Dysfunction
- Severe loss of gain of weight

**Physiological Signs**
- High BP
- Increased heart rate
- Migraines
- Respiratory Problems
- Sweating
- Elevated
- Catecholamine
- Elevated Steroids
- High cholesterol

### Group IV: Result
Model 5: Self Esteem, Depression and Narcissism by Dr Simon Dolan

Showing continuum between depression as an affective disorder and what psychiatrists occasionally observe as a hypomanic, overvaluation or narcissistic personality disorder.
Model 6: A typology of cutback situations (Jick, 1985) - Dr Terry A Beehr

<table>
<thead>
<tr>
<th>Severity Level</th>
<th>Time Pressure</th>
<th>Unanticipated major cuts</th>
<th>Anticipated major cuts</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High</td>
<td>(“The big bomb”)</td>
<td>(“The time bomb”)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>High Stress</td>
<td>Moderate Stress</td>
</tr>
<tr>
<td>Low</td>
<td>High</td>
<td>Unanticipated major cuts</td>
<td>Anticipated minor cuts</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>(“The short fused firecracker”)</td>
<td>(“The long fused firecracker”)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moderate Stress</td>
<td>Low stress</td>
</tr>
</tbody>
</table>

The above figure illustrates a way of classifying budget cuts that can be used to examine their stressful qualities. Two dimensions, time pressure (the relative speed with which cuts must be made) and severity (the relative size of the cuts), are proposed to be important in putting stressful pressure on those in the organization.

Placed in a two – by two table, they result in four types of situations: unanticipated major cuts, anticipated major cuts, unanticipated minor cuts and anticipated minor cuts. The unanticipated major cuts would be especially stressful, because they are high on both dimensions (lack of time to deal with the cut and severity). These occurrences of cutbacks in employing organizations may be very stressful.
Model 7: Solution Focused Model of Stress: O’Connell Bill (2001)

The above model illustrates the following points:
1. The socially constructed nature of stress
2. The perception of the client that an event represents a threat to resources which they consider to be important
3. The need to challenge the negative, problem-ridden narrative which disempowers the person.
4. The loss of sense of competence and control when under stress.
5. The temporary destabilization or paralysis of the clients normal coping mechanism.
6. the temporary eclipse of the person’s strengths, qualities and personal resources
7. the recovery of these by paying attention to exceptions to the problem.
8. the expansion of the clients skill response.
Model 8: MASH Model: (http://www.discprofiles.com)

Multisystem Assessment of Stress and Health (MASH) Model. The MASH Model builds upon previous stress research to form a comprehensive biopsychosocial model of stress and health (Aldwin, 1984; Boss, 1989; Doherty & Campbell, 1988). Earlier work in the field of stress concentrated on stress and coping at only one conceptual level, most often at the personal level or in a work setting (Aldwin, 1994).

The MASH Model contains three primary components: stress, coping resources, and satisfaction, which are assessed at four levels of a person’s life: personal, work, couple, and family.

Stress is assessed at the personal, work, couple and family level. Coping resources are organized into a skill dimension and a relationship dimension. The skill dimension includes Problem Solving and Communication. The two relationship dimensions focus on the concepts of Closeness (cohesion) and Flexibility. Each of these four resources are assessed at all four levels, thereby developing sixteen coping resources.

The basic hypothesis of the Coping & Stress Profile is as follows: the greater the number of coping resources one has developed, the better he or she is able to manage life stress and, thereby, increase life satisfaction.

MASH Model:
It may be concluded that the problem of burnout needs urgent attention and intervention for executive well-being. The study contributes to creation of knowledge by empirically evolving the construct of executive burnout and defining it as follows: “Executive Burnout is marked by persistent feelings of inadequacy, ambiguity, dissatisfaction, and powerlessness accompanied by behavioral manifestations of apathy and indiff erence (depersonalization) and physical and emotional exhaustion.”. Role-related factors causing burnout are role expectation conflict, role stagnation, self-role distance, role overload, role erosion, resource inadequacy, inter-role distance, and role ambiguity. Emotional intelligence has been found to play a significant role in executive burnout which mediates and leads to high or low personal effectiveness that moderates experienced stress. High emotional intelligence with personal effectiveness helps in coping.
Model 10: Michigan Model from ISR (quoted in Ashley Weinberg and Cary Cooper)\textsuperscript{124}

The Michigan model emanates from the University of Michigan and its Institute of Social Research (ISR), (Jex and Beehr, 1991). This social environmental model of stress, which comes from Institute of Social Research (ISR) was an early conceptualization of the occupational stress process. In this model, the environment affects the person’s perception of it, which in turn affects their responses, which finally influence the individual’s health.

The Person–Environment Fit Model (P-E fit, French et al, 1974 quoted in Beehr\textsuperscript{6}). It can be considered a very specific elaboration of the properties of the person and the person’s environment (both subjective and objective). While many researchers sometimes use person – environment fit language quite loosely, the ISR P-E fit model is rather constrained. There are two specific types of person –environment misfit that are expected to lead to ill health and welfare for the employee: misfit of the individual’s needs and preferences with the organization’s or job’s provision of rewards and supplies; and misfit of the individual’s skills and abilities with the job’s demands and requirements.

Michigan Organizational Stress Model

Katz and Kahn’s model of work stress

Model 11: Model of work stress:
A model of work stress to underpin the Health and Safety Executive advice for tackling work-related stress and stress risk assessments - Stephen Palmer, Cary Cooper and Kate Thomas

In order to underpin the theory and practice advocated by the HSE (2001) publications, developed a simple model of stress that could be used to explain the relationship between the main stress-related hazards, the organizational and individual symptoms, and the outcomes discussed in the HSE document. This model of stress was subsequently updated and revised (Palmer et al, 2003) and has undergone further revision (Nov 2004) following the revised HSE Management Standards.

The HSE (2001) recommended assessing and the addressing seven major hazards that can cause stress for employees. One of the hazards, culture, has since been subsumed into the other six hazards (HSE, 2004).
The six hazards are:

Demands: includes exposure to issues such as workload, work patterns and work environment (for example volume and complexity of work, shift work, unrealistic deadlines);

Control: how much say and involvement the person has in the way they do their work (control balanced against demands, lack of autonomy, too much supervision);

Support: includes the encouragement, sponsorship and resources provided by the organization, line management and colleagues (for example training for core functions of job; catering for individual differences);

Relationships: includes promoting positive working to avoid conflict and dealing with unacceptable behavior (for example bullying and harassment, conflicts);

Role: refers to whether people understand their role within the organization and whether the organization ensures that they do not have conflicting roles (for example conflicting roles avoided, vague job descriptions);

Change: how the organizational change (large or small) is managed and communicated in the organization (for example staff understanding why change is necessary, little or no communication to staff, redundancy fears).

The HSE does not expect any organization to meet all the standards in its first attempt. They are goals that employers should be working towards as part of their ongoing process of conducting work-related stress risk assessments.

“Any employee can suffer from stress regardless of age, status, gender, ethnicity or disability. It is important that managers, HR personnel, safety officers and welfare staff have a clear understanding of the main issues involved with workplace stress prevention and management”
Use of the model of work stress

It is important that managers, HR personnel, safety officers and welfare staff have a clear understanding of the main issues involved with workplace stress prevention and management. When stress management consultants and practitioners introduce the concept of stress prevention programmes into an organization, the model of stress described in this article enables them during presentations to explain in a cohesive manner the causes of work related stress (ie hazards that need to be assessed), the impact upon the individual and organization and the potential (underestimated) costs.

Model 12: Proposed Causal Model (Sharon Clarke and Cary Cooper104.)

The Model represents the direct effects of stress on accidents (via employees safety – related behavior), but it will also have effects mediated by employee health. At an organizational level, the effects of job stress on the organizations workplace may include increased absenteeism, high turnover or lowered job performance.

"Stress is not what happens to us.
It's our response to what happens.
And RESPONSE is something we can choose."

Maureen Killoran