Stress in the Workplace: A General

Overview of the Causes, the Effects, and the Solutions

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Stress in the workplace is a growing concern in the current state of the economy, where employees increasingly face conditions of overwork, job insecurity, low levels of job satisfaction, and lack of autonomy. Workplace stress has been shown to have a detrimental effect on the health and well-being of employees, as well as a negative impact on workplace productivity and profits. There are measures that individuals and organizations can take to alleviate the negative impact of stress, or to stop it from arising in the first place. However, employees first need to learn to recognize the signs that indicate they are feeling stressed out, and employers need to be aware of the effects that stress has on their employees' health as well as on company profits. This report is a call to employers to take action on stress levels in the workplace.

General Stress

Simply stated, stress is what we feel when we have to respond to a demand on our energy. Stress is a natural part of life, and occurs whenever there are significant changes in our lives, whether positive or negative. It is generally believed that some stress is okay (sometimes referred to as "challenge" or "positive" stress) but when stress occurs in amounts that individuals cannot cope with, both mental and physical changes may occur (Canadian Centre for Occupational Health and Safety, 2000).

We are all different in the events that we perceive as stressors and the coping abilities at our disposal. However, there are a number of situations which are generally identified as being stressful, and include financial worries, work overload, unemployment, relationships, parenting, balancing work and family, caregiving, health problems, losses, Christmas, competitiveness, peer pressure, exams, and not having enough time (Canadian Mental Health Association, n.d.).

Stress is an ever-present issue with the majority of Canadians, according to results from the 2001 Canadian Mental Health Survey (Canadian Mental Health Association, 2001). 500 Canadians were asked the question, "Thinking about stress in your life, how often do you feel really stressed… all the time, a few times a week, about once a month, a few times a year, once a year or less often, or never?" In response, 9% of Canadians said they felt really stressed all the time, 43% felt really stressed a few times a week, while 24% felt really stressed about once a month.

Stress is a normal, adaptive response to stressors in our environment. Our bodies are designed with a set of automatic responses to deal with stress. This system is very effective for the short term "fight or flight" responses we need when faced with immediate danger. The problem is that, physiologically, our bodies have the same reaction to all types of stressors. Experiencing stress for long periods of time, such as lower level but constant stressors at work, activates this system. For many people, every day stressors keep this response activated, so that it does not have a chance to "turn off."

This reaction is called the "Generalized Stress Response" and consists of the following physiological responses:

- increased blood pressure

- increased metabolism (e.g., faster heartbeat, faster respiration)

- decrease in protein synthesis, intestinal movement (digestion), immune and allergic response systems

- increased cholesterol and fatty acids in blood for energy production systems

- localized inflammation (redness, swelling, heat and pain)

- faster blood clotting

- increased production of blood sugar for energy

- increased stomach acids

When this set of reactions is continuously activated, individuals begin to display signs and symptoms that indicate they are having difficulty coping with the stressors in their lives. These symptoms can be physical, psychosocial, and behavioural in nature, as illustrated in the following table (Canadian Centre for Occupational Health and Safety, 2000):

Physical	Psychosocial	Behavioural
- Headaches	- Anxiety	- Overeating or loss of appetite
- Grinding teeth	- Irritability	- Impatience
- Clenched jaws	- Sadness	- Quickness to argue
- Chest pain	- Defensiveness	- Procrastination
- Shortness of breath	- Anger	- Increased use of alcohol /
- Pounding heart	- Mood swings	drugs
- High blood pressure	- Hypersensitivity	- Increased smoking
- Muscle aches	- Apathy	- Withdrawal or isolation from
- Indigestion	- Depression	others
- Constipation or	- Slowed thinking or	- Neglect of responsibility
diarrhea	racing thoughts	- Poor job performance
- Increased	- Feelings of helplessness,	- Poor personal hygiene
perspiration	hopelessness, or of being	- Change in religious practices
- Fatigue	trapped	- Changes in close family
- Insomnia		relationships
- Frequent illness		

When asked about the sources of their stress, a majority of Canadians (51%) reported that work was a major or moderate source of stress in their lives. This figure is up from 39% reported in a previous survey conducted in 1997. Based on these survey results it appears that workplace stress is a growing problem among Canadians (Canadian Mental Health Association, 2001).

The Canadian Centre for Occupational Health and Safety (2000) has defined workplace stress as the harmful physical and emotional responses that can result from conflicts between job demands on the employee and the amount of control an employee has over meeting these demands. Experiencing lower levels of stress at work can actually be a motivator and serve to increase productivity in employees. However, it becomes problematic when stress occurs in amounts that individuals can no longer manage.

Historical Context

The epidemic of workplace stress can be seen as a result of changing workplace and economic conditions over the past 20 to 30 years. Hoel, Zapf, & Cooper (2002) explain the changes that have taken place specifically relating to industrialized countries:

In most developed countries, the 1980s could be described from a business perspective as the decade of the 'enterprise culture.' Workplaces were transformed by globalization, privatization, process re-engineering, mergers and acquisitions, strategic alliances, joint ventures and the like. In the short term, there was an improvement in economic competitiveness in international markets and the countries that embraced these changes. But eventually, strains began to show, and the concept of 'burnout' became well known within organizations.

However, it was business as usual as work was carried out in essentially the same way in large or medium-sized businesses.

During the 1990s, a major restructuring of work was beginning to take place. Organizations dramatically 'downsized', 'delayered', 'flattened', and 'rightsized'. The result was redundancy, constant restructuring, and substantial organizational changes. Modern workers now find themselves in smaller organizations, with fewer people doing more and feeling much less secure. New technology has added the burden of information overload and accelerated the pace of work.

Two major effects that have stemmed from these economic changes are known as 'work intensification' and 'job insecurity'. The former refers to the extent to which employees are being forced to work faster and harder than they have been before, while the latter refers to the subjective feelings about the risk of job loss, as expressed by employees themselves (Burchell, 2002).

This new economic culture has created more stressful work environments, as seen through the increasing physical and mental tolls on employees, as well as increasing costs for employers in the way of lost productivity, absenteeism, turnover, and disability leave.

Sources of Workplace Stress

Stress can be the result of any number of situations in the workplace. The following table illustrates categories of workplace stressors and examples of each (adapted from Murphy, 1995):

Categories of Job Stressors	Examples
Factors unique to the job	- Workload (overload and underload) - Pace / variety / meaningfulness of

	work
	- Autonomy (e.g., the ability to make your own decisions about your own job or about specific tasks) - Shift-work / hours of work - Physical environment (noise, air quality, etc.) - Isolation at the workplace (emotional or working alone)
Role in the organization	- Role conflict (conflicting job demands, multiple supervisors / managers) - Role ambiguity (lack of clarity about responsibilities, expectations, etc.) - Level of responsibility
Career development	- Under / over-promotion - Job security (fear of redundancy either from economy, or a lack of tasks or work to do) - Career development opportunities - Overall job satisfaction
Relationships at work (interpersonal)	- Supervisors - Co-workers - Subordinates - Threat of violence, harassment, etc. (threats to personal safety)
Organizational structure / climate	- Participation (or non-participation) in decision-making - Management style - Communication patterns

Theoretical Explanations of Workplace Stress

Much research attention has been focused on the issue of workplace stress, so much so that theories have emerged to explain the relationship that exists between stress and the work environment. The three most influential and prevalent theories of occupational stress include the person-environment (P-E) fit theory, the framework of occupational stress, and the demand-control-support model (Vandenberg, Park, DeJoy, Wilson, & Griffen-Blake, 2002).

The basic premise of the *person-environment (P-E) fit theory* is that stress arises from a misfit between person and environment – not from the two components separately, but as the factors of each relate to one another. When individuals perceive that their work environments are not good, or do not fit well with the needs, wants, and desires that they personally would like fulfilled from work, the discrepancies create diverse strains, which are then hypothesized to affect workers' health and well-being.

Environmental demands here include job requirements, role expectations, and group and organizational norms. Countering these demands are the individual's abilities represented through aptitudes, skills, training, time and energy the person uses to meet the demands. The idea is that the larger the discrepancy between person and environment, the greater the likelihood that strain, and a need for coping, will arise.

The *framework of occupational stress* is based around the same foundation as the P-E fit theory. They share two basic premises, first, that stress arises from the misfit between person and environment, and second, that subjective perceptions of work environments primarily determine strains. The difference between the two viewpoints is the framework's core definition. It states that occupational stress is a total process including the environmental sources of stress and the individual's perception of them, short-term and long-term physiological, psychological, and behavioural responses, as well as a number of modifying factors that influence the relationships among variables in the stress process (such as social support, and the quality of interpersonal relationships within the work environment).

Perceived stress and the resulting strains are explained as a "snowball effect", a reciprocal association where the negative feelings regarding work increase strains, which in turn contribute even more to the negative feelings. The end result is that the accumulation of

physiological, psychological and behavioural strains will eventually result in long-term outcomes such as acute depression, alcoholism, unemployment, physiological problems (e.g., cardiovascular problems) and other costly results.

Finally, the *demand-control-support model* emphasizes the role of work content as the major source of workplace stress. Work content here is divided into two components: worker perceptions regarding the tasks that need to be completed in performing the job (job demands), and worker perceptions about the degree of control or discretion they have in performing the job tasks (job control). These two constructs are thought to interact with one another in affecting the amount of strain experienced by employees. The strongest levels of strain, and hence, the greatest levels of occupational stress were expected to occur in situations where there were extremely high demands, and very low control.

A revised version of the model includes social support as a third component. Social support is not thought to eradicate strain, but rather to buffer it to some degree.

Research tends to be very supportive of the demand-control-support model; it has been effectively used to predict psychological strain and cardiovascular disease risk.

Signs and Symptoms of Stress

When the demands of the workplace become too much to handle, employees generally display signs and symptoms that indicate they are feeling 'stressed out'. Unfortunately, individuals may not recognize these signs and let them go untreated. This is where serious conditions can occur, either mental or physical in nature, and a need arises for professional intervention. It is important that employees learn to recognize stressful reactions in themselves

and others so that they can stop the downward spiral of stress before it becomes detrimental

to their health.

Completing a stress test is a quick and easy way to determine whether or not stress levels

are becoming unhealthy. There are numerous variations of the test, and they can be found in the

literature on stress, and also through an internet search. A stress test taken from the Canadian

Mental Health Association (n.d.) is included in Appendix A.

Individuals display various signs and symptoms when continuously faced with a stressful

environment. These symptoms do not occur all at once, but progress through several stages,

which are described in the following table adapted from Annscheutz (1999):

	Signs / Symptoms	Suggested Action
Phase 1: Warning Early warning signs are often more emotional than physical and may take a year or more before they are noticeable.	- feelings of vague anxiety - depression - boredom - apathy - emotional fatigue	- talking about feelings - taking a vacation - making a change from regular activities - taking time for yourself
Phase 2: Mild Symptoms Warning signs have progressed and intensified. Over a period of 6 to 18 months, physical signs may also be evident.	- sleep disturbances - more frequent headaches / colds - muscle aches - intensified physical and emotional fatigue - withdrawal from contact with others - irritability - intensified depression	- more aggressive lifestyle changes may be needed - short-term counselling
Phase 3: Entrenched Cumulative Stress This phase occurs when the above phases continue to be ignored. Stress starts to create a deeper impact on career, family life and	- increased use of alcohol, smoking, non-prescription drugs - depression - physical and emotional fatigue - loss of sex drive - ulcers	- the help of medical and psychological professionals is highly recommended

personal well-being.	- marital discord - crying spells - intense anxiety - rigid thinking - withdrawal - restlessness - sleeplessness	
Phase 4: Severe / Debilitating Cumulative Stress Reaction This phase is often considered "self-destructive" and tends to occur after 5 to 10 years of continued stress.	- careers end prematurely - asthma - heart conditions - severe depression - lowered self-esteem / self-confidence - inability to perform one's job - inability to manage personal life - withdrawal - uncontrolled anger/ grief / rage - suicidal or homicidal thinking - muscle tremors - extreme chronic fatigue - over-reaction to minor events - agitation - frequent accidents - carelessness / forgetfulness - paranoia	- significant intervention from professionals

Effects of Untreated Stress

Human terms.

Our natural response to stress, while helpful in threatening situations, may actually cause us physical and mental harm. When individuals have been continually exposed to stress for long periods of time (i.e., their stress responses are continuously activated), a situation known as

'chronic stress' can occur. Chronic stress is characterized by emotional vulnerability, persistent negative emotions, elevated hormonal base levels, hyperactivity of the autonomic nervous system (so that the body never relaxes), and tendencies to experience psychosomatic symptoms. While it is not possible to draw definitive causal links, research is showing strong relationships between the experience of chronic stress and the development of illness and disease (Grimshaw, 1999).

Illnesses that have been linked with long-term exposure to stress include:

- *Coronary heart disease (angina, stroke and heart attacks)*. Research has shown that individuals who suffer from stress are much more likely to experience both fatal and non-fatal heart attacks.

- *Hypertension (high blood pressure)*. There is an undeniable link with the stress hormone cortisol, and the incidence of high blood pressure.

- *Some forms of cancer*. Being constantly stressed has the effect of lowering defences that may help fight off the initial ingress of cancer.

- *Rheumatoid arthritis*. Although stress does not appear to cause rheumatoid arthritis or osteoarthritis, being under stress can exacerbate these illnesses.

- *Diabetes mellitus*. This disorder may be inherited, but there is also strong evidence linking it with stress.

- *Irritable bowel syndrome*. It has been shown that stress or anxiety is to blame in a lot of cases.

- *Depression*. It is widely accepted that depression is linked with stress. The usual symptoms are upset sleep patterns, fatigue, increased consumption of alcohol, muscle aches and pains, poor self-esteem or lack of self-worth, among a variety of others.

- *Anxiety*. Amongst the symptoms of anxiety is usually an over-concern with the lack of control over one's circumstances, either at work or in one's personal life. This is often made worse by the individual becoming so caught up in thinking about their situation that they begin to believe that there is no way out of the problem.

- *Ulcerative colitis (inflammation and ulceration of the colon and rectum)*. Stress is often associated with the onset and worsening of this condition.

- *Strokes (proven link with high blood pressure)*. There is strong evidence that people under stress are more likely to have a stroke than their non-stressed-out counterparts.

- *Stomach and duodenal ulcers and the bacterium* Helicobacter pylori. There has been irrefutable evidence linking the onset of peptic ulcers with the bacterium *Helicobacter pylori*, which is present in the gastrointestinal system of the large majority of people with peptic ulcer disease.

- *Indigestion and heartburn.* When we are anxious or stressed out, we produce too much acid in our stomach, which irritates the lining of the stomach and can lead to the development of ulcers.

- *Chronic fatigue syndrome ME (myalgic encephalomyelitis).* This disease is characterized by feelings of extreme fatigue, depression and a general disappointment with life, which can last for several months or years (Clark, 2002).

Burnout. Burnout is a response to chronic stress that has received a great deal of research attention because of its relevance in today's workplace. Burnout is not simply excessive stress. Rather, it is a complex physical, mental, and emotional reaction to constant levels of high stress, and it relates to feeling that your inner resources are inadequate for managing the tasks and

situations presented to you. Burnout produces feelings of hopelessness, powerlessness, cynicism, resentment, and failure – as well as stagnation and reduced productivity. These stress reactions can result in depression and unhappiness that can threaten your job, your relationships, and your health.

Burnout pervades every occupation, but is thought to be especially prevalent among service professionals, or those who do "people-work", such as teachers, clergy members, health practitioners, and caregivers. These types of jobs require attending to the emotional needs of others, and can lead to emotional and physical fatigue, as well as the feeling of no longer being able to give of oneself. However, burnout can occur in any work situation where a person feels overworked, underappreciated, confused about expectations and priorities, concerned about job security, overcommitted with responsibilities, and resentful about duties that are not commensurate with pay.

Personal characteristics that may lead one to be more prone to burnout include the tendency to place too-high expectations on oneself, as well as excessive compulsiveness, perfectionism, and inflated self-confidence (Hutman, Jaffe, Segal, Kemp, & Dumke, n.d.).

An extreme example of what can happen in stressful work situations is known as "Karoshi". This is a largely Japanese phenomenon, and is quite literally translated as "death from overwork". Karoshi refers to death caused by heart attack and stroke, presumably brought about through a combination of long work hours, high job stress, and cardiovascular disease. Many of the workers who are victims of Karoshi worked for up to twelve hours a day, six or seven days a week. While this appears to be an exceptional series of cases, it speaks to just how damaging workplace stress can be (Wikipedia, n.d.; Vocational Psychology.com, n.d.).

Financial terms.

It is also important to look at workplace stress from a financial and economic standpoint. It is generally accepted that untreated workplace stress is associated with increased levels of employee absenteeism and turnover, decreased levels of productivity, as well as lost workdays due to disability or sick leave (Williams, 2003). A recent U.S. estimate placed the cost of stress to the economy (due to absenteeism, health insurance claims, and lost productivity) at approximately $150 billion per year (Neuman, 2004). Employers are beginning to recognize that this association can no longer be ignored, and that organizational changes need to be made.

A recent poll revealed that 66% of Canadian CEOs surveyed admitted that stress is now the biggest drain facing corporate Canada, and is in fact doing more damage to productivity than anything else in the workplace (National Union of Public and General Employees, 2005). The same poll reported that stress, along with depression, anxiety, or other mental health disorders, are the most serious organizational issues with respect to the issues that cause the most absenteeism and having the most impact on health benefits claims costs (Insurance-Canada.ca Inc., n.d.).

Employers are slowly starting to realize that workplace stress is creating physical and mental health problems in their employees, which is in turn affecting the bottom line. It has been estimated that stress-related mental health problems are costing Canadian businesses $33 billion annually in lost production (Conner, 2005), and related mental disability is now accounting for an estimated 30 – 40% of the disability claims being recorded by Canada's major insurers and employers. Far less is known about the cost in lost productivity by employees who continue to work while suffering from stress-related conditions (*The Edmonton Sun*, 2005).

Other research has indicated that the majority of Canadian organizations consider the continuous rise in employees' mental health claims to be a top concern, and that there "has been a huge increase in stress and anxiety in the workplace and it is showing up in their long-term and short-term disability costs". In fact, mental health issues continue to be the leading cause of disability claims, and it's been reported that healthcare expenditures are nearly 50% greater for workers who report high levels of stress. 71% of CEOs polled (National Union of Public and General Employees, 2005), agree that these issues will become more of a problem with spiralling healthcare costs over the next ten years – it's already reaching the extent that they are beginning to worry about their ability to pay future disability claims. In spite of evidence linking stress and mental health issues to financial loss, companies have nonetheless been slow to adopt innovative mental-health management practices in the workplace (*The Province*, 2005; Galt, 2005; Williams, 2003; Canada NewsWire Group, 2005).

A large part of the problem of stress-related mental illness is that there is a general lack of understanding – as well as action – on mental health issues in the workplace. This can be aggravated by employees' reluctance to seek help. Furthermore, there remains a stigma associated with mental illness, and this may prevent employees from seeking support from superiors and co-workers. Employees may even fear losing their job over an inability to cope with the stressors inherent in their jobs. There can be tragic consequences when employees are afraid to seek treatment or ask managers and co-workers for help. It needs to be recognized that mental illness is a serious crisis for employees, and it demands a serious response from employers. Mental health has to be seen as important as physical health (*The Edmonton Sun*, 2005; Harvey, 2005).

Employees' mental health is a vital tool for increasing productivity and profits. Treating mental illnesses early not only benefits the employees themselves, but it can also save companies a great deal of money. If companies invest money into finding workers who are suffering from stress-related mental illnesses, and provide them with professional help, companies get a 100% return on their investment because employees will show up for work and be more efficient and productive on the job. It has been shown that when employees get early access to treatment, employers can save $5,000 to $10,000 per worker per year in the costs of prescription drugs, sick leave, and wage replacement. Companies have every reason to try and foster healthy work environments, especially with the knowledge that providing help for their workers will not run up big costs, but rather save them money (Canadian Mental Health Association, 1999; Conner, 2005; *The Standard*, 2005).

A wide range of studies have found that modifiable health risks (i.e., stress) can be improved through workplace-sponsored preventative medicine and health promotion programs (Smith, 2005). However, despite widespread acknowledgement of the detrimental impact of stress on individuals and organizations, the amount of attention given by employers to understanding the sources of workplace stress and to alleviating stressful work conditions is relatively small. Stress researchers have observed incongruence between workplace practices and theoretical and practical work in the field. Three reasons that have been suggested to explain this inconsistency include, 1) managers' perceptions and beliefs about the impact of the work environment on levels of employee strain and general well-being, 2) their beliefs about who is responsible for managing individual employees' levels of strain, and 3) the costs associated with making organization-level changes compared with those related to teaching individuals to cope more effectively (Cooper, Dewe, & O'Driscoll, 2001).

The good news is that despite a general reluctance by employers, there are progressive companies making changes for the better and instituting various means of helping employees to manage their stress. The measures that employers can take in the way of Stress Management Interventions (SMIs) will be discussed in a later section of this report.

Individual Differences in Reactions to Workplace Stress

Workplace stress does not have the same effect on all individuals. There are a range of personal, social, and environmental moderators within each of us that influence our susceptibility and coping abilities in relation to the stressors we experience. Personality differences, gender differences, age, and social support all seem to be important factors in determining how well individuals cope with workplace stress (Wichert, 2002).

Personality differences.

Type A and Type B personality. With respect to individual personality differences, one can view workplace stress as a function of the relationship between work characteristics and the attributes of, and resources available to, the individual worker. A well known perspective on personality variables and their relations to stress are the distinctions between "Type A" and "Type B" personality types, which were derived by two cardiologists looking to explain the role of psychological factors in cardiovascular disease. Type A behaviours include such things as ambition, aggressive competitiveness, and an eagerness to get things done on time, as well as self-absorption, and a tendency to be cynical and hostile. On the other hand, the Type B personality includes behaviours that are much more relaxed and less competitive.

Studies have shown that individuals displaying Type A characteristics have a significantly increased risk of experiencing the deleterious effects of stress, specifically with respect to cardiovascular disease. It is argued that individuals exhibiting Type A behaviours are more likely to enter into demanding jobs, more likely to over-react to them, and for this reason would be more vulnerable to stress and coronary heart disease in particular (Wainwright & Calnan, 2002; Cowley, Hager & Rogers, 1995).

Another distinction that may be related to the Type A personality, involves types of people known as "hot reactors". These are individuals who, when facing the challenges of daily life, suffer extreme surges in blood pressure. Other individuals who do not exhibit this reaction to stressors, have been found to be less at risk for the deteriorating effects of workplace stress (Cowley et al, 1995).

Locus of control. Another personality factor that has been found to affect individual reactions to stressors is known as the "locus of control". People can be differentiated on the basis of their 'generalized expectancy' concerning internal and external control of life events and outcomes. Specifically, some individuals feel that events are caused by factors external to them which they have little or no control over (meaning they have an external locus of control), while others tend to feel that events are caused by internal factors which they have a great deal or entire control over (meaning they have an internal locus of control).

There is evidence to suggest that individuals who have an external locus of control tend to respond to perceived stressors with negative emotions and may be more prone to the negative effects of stress when they feel pressured at work. Specifically, these individuals have been shown to report more burnout, higher levels of perceived tress, less job satisfaction, greater

anger, frustration and hostility, and higher levels of anxiety. Whereas, the internal locus of control is associated with a number of highly desirable behaviours and attributes, including higher job motivation and better performance, higher job satisfaction and psychological well-being. The underlying premise is that individuals who define stress factors as controllable will be more likely to try and cope with them using a problem-solving approach and will thereby experience fewer ill effects. Externals might not take active steps to resolve their feelings of stress (Grimshaw, 1999).

Gender differences.

Gender is another factor that is important in determining susceptibility to workplace stress. Research indicates that women are more likely than men to experience the negative effects of stress. Several factors appear to magnify the effect of workplace stress on women, and include:

- The predominant role that women still play in the provision of family care. It is well established that the total workload of women who are employed full-time is higher than that of their male counterparts, particularly where they have family responsibilities.

- Lower levels of control in their jobs, since the great majority of women still tend to occupy less senior jobs than men.

- The higher proportion of women who work in precarious forms of employment.

- The proliferation of women in high-stress occupations.

- The prejudice and discrimination suffered by many women who are in more senior positions, such as managerial jobs, both as a result of organizational and corporate policy and from their colleagues at work.

Largely due to these kinds of factors, women are significantly more likely to report

burnout, stress-related illnesses, or a desire to leave their jobs (International Labour

Organization, 2001).

Also important to note is that there may be differences in the coping mechanisms men

and women use to deal with stress. It has been found that in general, women tend to use more

social-emotional strategies to cope with stress, whereas men are more likely to use

behavioural/mental or drug/alcohol disengagement. Men tend to cope by way of problem-

focused strategies while women characteristically use more emotion-focused strategies to

manage their stress. There is also evidence to suggest that women may have been socialized in a

way that predisposes them to ineffective coping, for example, women get sick as a way of coping

with stress more often than men do (Korabik, McDonald, & Rosin, 1993).

Finally, when it comes to how men and women react to stress over the long-term, it has

been found that men tend to show physical deterioration as a response to stressful situations,

whereas women generally exhibit psychological symptoms (Wichert, 2002).

Age.

Age can influence the type of workplace stress experienced, but it tends to be specific to

certain aspects of the job. For example, in a study conducted by Statistics Canada (Williams,

2002) more workers over the age of 45 felt stress as a result of having to learn computer skills, as

compared to workers between the ages of 15 and 24. With respect to stress as a response to risk

of injury or accidents, more young men felt this as a significant source of stress than older male

workers. Young employees were significantly less likely than older employees to feel that too

many hours / too many demands were a source of stress. Lastly, it was reported by Wichert

(2002) that with respect to job security, older employees tend to experience less stress than their younger counterparts but experience more stress than younger workers when it comes to work intensification.

Social support.

This is another factor that can buffer the effect of workplace stress that an individual experiences. Social support refers to the resources (both emotional and practical) that are derived from an individual's social network of family, friends, co-workers and other social contacts. There is a substantial body of evidence suggesting that lack of social support may lead to ill health, and in fact has been shown to exert a positive effect on people's health and well-being in a range of stressful situations.

It has been suggested that social support brings health benefits irrespective of the degree of stress encountered by the individuals, and also acts as a 'buffer' against the negative effects of stress by fulfilling specific needs – through practical help, advice and information or emotional comfort. Additionally, social support may serve to a) reduce the importance of the perception that a situation is stressful, b) in some way tranquillize the neuro-endocrine system so that people are less reactive to perceived stress, or c) facilitate healthy behaviours, such as exercising or getting sufficient rest.

When it comes to appraising potential stressors, the availability of emotional, informational, and instrumental support may substantially effect an individual's perception of threat. Emotional support may increase individuals' confidence in their ability to deal with the

challenges that confront them. Informational support may yield new strategies for

resolving particular problems, or reduce the perceived magnitude of the challenge by placing it

in the context of difficulties encountered by others. Finally, instrumental support may offer the

resources to resolve a problem or stop it from arising in the first place (Wainwright & Calnan,

2002; Wichert, 2002).

<div align="center">Coping Strategies and Interventions</div>

Whatever the causes of this workplace stress 'epidemic', there is no denying its existence

as one of the key problems of modern working life. Because of the pervasiveness of stress in the

workplace, there is a need to define coping mechanisms so that the long-term negative effects of

persistent stress can be avoided. There are two different approaches to coping with stress. The

first approach is to locate the origins of work stress in the structure and organization of the

modern workplace and to see the solution in terms of job redesign. The second approach is to

locate work stress in the responses of the individual and see the solution in terms of therapeutic

intervention (Wainwright & Calnan, 2002).

The most effective method for workers to manage stress seems to lie in solutions that

combine stress management at both the organizational and individual level. Of the two,

organizational strategies are more effective in reducing long-term stress and risk of illness,

however, it is just as important that individuals have personal coping strategies at their disposal

for when stress inevitably occurs (Cahill, Landsbergis, & Schnall, 1995).

Individual Level

It is extremely important that individuals are taught to recognize when they are feeling

"stressed out" and to develop personal coping strategies to utilize when they are feeling

overwhelmed by stress. The Canadian Mental Health Association (n.d.) lists a number of methods for individuals to use in coping with stress.

Relaxation techniques.

Learning relaxation techniques can be one of the most effective ways of dealing with stress. While the stress response speeds up the body's reactions and tenses the muscles, relaxation will do the opposite, by deepening breathing, slowing the pulse and heart rate, and relaxing the muscles.

Deep breathing is a tool we have at our disposal all the time. No matter where you are, it is easy to take a few minutes to practice deep breathing, exhaling slowly until your abdomen is flat, then filling up your lungs, diaphragm and abdomen with air as you inhale. Doing this several times a day will help to calm your body and your mind.

Progressive relaxation refers to the process of training your body to relax completely by tensing and releasing each set of muscles in turn. Books or cassette tapes are available that can help to guide you through the process.

Massage therapy and *hot baths* are other methods of relaxing tense muscles that will help release stress.

Ways to focus your mind.

Individuals who worry excessively and "beat themselves up" in their own minds can benefit from finding ways to focus their minds and let go of troublesome or painful thoughts.

The ancient practice of *meditation* is a proven way to work with the chaos of our thoughts towards a sense of peace. There are many books on meditation and many different techniques, as well as a number of groups that can provide an introduction to the practice.

Spending regular time on a *hobby* will help to restore energy and sense of well-being. Absorbing yourself in something you really enjoy is a great way to give yourself a break from the hassles and stresses of everyday life.

We have already spoken to the benefits of social support in the work environment. However, having *supportive friends* in general can help when we are experiencing stress. We all need someone we can talk to get our worries off our chest, someone who will listen without judgement and appreciate you for who you are.

One of the very best ways to relax your mind is by *laughing*! Good, hearty laughter causes the release of endorphins, which are the body's natural "feel good" chemical. It is a good idea to collect things that make you laugh - cartoons, books, movies - and look at them when you feel over-stressed. You'll be amazed how smiles and laughter can lighten your mood.

Daily habits.

Individuals who feel tired and lacking in energy may be experiencing stress due to unhealthy daily habits that are interfering with the body's ability to maintain a sense of well-being. An individual's diet, amount of sleep, caffeine consumption, and level of activity are all important factors in one's general health. Maintaining your health by practising healthy habits can be important in fighting off the negative effects of stress.

It is important to *maintain a balanced diet* to ensure that we are keeping our bodies healthy. We are what we eat, and we need a balanced intake of healthy food. Too much fatty

"comfort" food adds weight and depletes energy. It is important to get enough fresh fruit

and vegetables, and drink plenty of water.

Our bodies need *adequate sleep* to restore our energy. Many people these days are sleep-

deprived without realizing it. Artificial light and late-night television keep many of us up and

awake at hours when our ancestors used to sleep. Try going to bed early after a hot bath, or listen

to a relaxation tape to help you fall asleep. You'll feel much better in the morning.

It is advisable to *cut caffeine consumption down*. Caffeine is a stimulant that simulates

the stress response and can make us edgy and "hyper". Keeping your consumption down to three

cups of coffee daily, or cutting it out completely is recommended.

Exercise is one of the best ways to release tension and relax our minds and bodies. It's

great if you enjoy sports, but it doesn't have to be that formal. Swimming and biking are

excellent. Walking the dog, working in the garden, and vacuuming the house are all forms of

exercise. Or join a dance or yoga class and get the benefit of meeting people along with the

exercise!

Grimshaw (1999) points out that while individual level stress management interventions

may be of value in helping workers cope with unavoidable pressures, they deal with only part of

the problem, and need to act as a supplement to organizational change programs that deal with

the root causes of stress in unhealthy work environments.

Organization Level

Organizations may have different reasons for wanting to implement stress management

initiatives. One reason may be the need to reduce the costs to the organization of stress-related

illness, absenteeism and staff turnover. It may be a humanitarian desire to improve working

conditions. There may be regulations in place regarding the listing and assessing of workplace hazards, including hazards to mental health such as psychological stress, and to provide a safe working environment. An organization might wish to be seen as caring and as looking after their employees in order to raise morale or improve the company image. A final reason for wanting to make these changes may simply be to follow current trends, where other such organizations are introducing stress management interventions (Grimshaw, 1999). Whatever the reason, the issue of workplace stress can no longer be ignored, and it is necessary for changes to be made where unhealthy work environments exist.

Stress management interventions.

There are a broad range of interventions that can be used to manage stress in the workplace. These include interventions that aim to change the individual, the individual's relationship with the organization, and the organization.

Three broad aims of stress management interventions include 1) prevention, through control of hazards by design and worker training to reduce the likelihood of workers experiencing stress, 2) timely reaction, to improve the ability of managers to recognize and deal with problems as they arise, and 3) rehabilitation, which often involves offering enhanced support such as counselling to help distressed workers cope and recover (Grimshaw, 1999).

The following sections explain some commonly used stress management interventions in the workplace.

Employee Assistance Programs. An Employee Assistance Programme (EAP) is a systematic, on-going and organized service, funded by the employer and providing counselling,

advice, and help to employees and their families with problems arising from both work-related and external sources. EAPs have two main objectives: 1) to help employees distracted by a range of personal concerns, including emotional, stress, relationship, family, alcohol, drug, financial, legal and other problems, to cope with such concerns and to learn to manage the stresses produced, and 2) to assist the organization in the identification and improvement of productivity problems in workers whose performance is adversely affected by such concerns.

EAPs are generally seen as the first step to take in seeking help with stress-related emotional problems. These services may be provided in-house by designated staff, or delivered by an external contractor. Most counselling within this service is short-term therapy aimed at helping the client at a time of change, choice, or crisis. Workplace counselling does not aim to be the kind of personal restructuring accomplished by a psychoanalyst. Instead counselling is viewed as an opportunity to learn problem-solving skills and to create new life choices. The services of an EAP can generally be extended to employees' family members as well, but this may vary depending on the organization.

A weakness of the EAP service surrounds the delicate balance between assisting individuals and promoting the interests of the organization. The problem lies in attempting to ally a mental-health driven therapy to a performance- and profit-dominated system of production of goods and services. The degree of benefit gained by the organization will be in direct correlation with the extent to which the EAP is integrated into the organizational structure (Grimshaw, 1999; Canadian Mental Health Association, 2004).

Stress Management Training. In recent years, it has become popular to offer training in stress management techniques in the work setting. Individual-level stress management training

seeks to educate staff about stress and its associated health effects, and to teach coping and

stress reduction skills. Interventions have more often than not been offered in a preventative

context to participants not suffering from any evident stress-related problems. Training usually

consists of some form of relaxation exercise in combination with cognitive techniques borrowed

from the fields of counselling and psychotherapy. Elements of management skills, such as time

management, and of interpersonal skills, such as delegation and assertiveness, may be included.

i. Relaxation training

The objective of relaxation training is to reduce the individual's arousal level both

psychologically and physiologically. Psychologically, successful relaxation results in enhanced

feelings of well-being, peacefulness and control, and a reduction in tension and anxiety.

Physiologically, decreases in blood pressure, respiration and heart rate should take place.

Progressive muscle relaxation. This involves focusing attention on muscle activity,

learning to identify even small amounts of tension in a muscle groups, and practising releasing

tension from the muscles. Muscle relaxation is usually accomplished by a series of alternating

tensing and releasing exercises and involves creating tension in a muscle group, studying the

feelings of tension, and then allowing the muscles to relax.

Meditation. Meditation methods taught in stress management training are often secular

versions of traditionally practised Transcendental Meditation. For example, the Respiratory One

Method requires a person to sit comfortably in a quiet place for 20 minutes twice a day and

repeat the work "one" or some other neutral word with each exhalation while maintaining a

passive mental attitude.

Biofeedback training. In biofeedback training, an individual is provided with information or feedback about the status of a physiologic function and over time learns to control the activity of that function. Potentially, biofeedback techniques can be used to bring a wide range of physiological functions under control, including heart rate, blood pressure, stomach activity, and body temperature (Grimshaw, 1999).

ii. Cognitive-behavioural skills training

Cognitive-behavioural techniques refer to a range of skills designed to help participants to appraise situations more realistically so as to reduce the threat they present, and to develop behavioural skills to manage stress factors successfully. Cognitive reappraisal or restructuring focuses on removing distorted views of a situation that can arise from over-generalization, personalization and exaggeration of its impact. Approaches used in this type of training aim to help individuals gain a higher degree of control over their reactions to stressors by modifying unhelpful patterns of thinking.

The most widely used approach is called stress inoculation training, and consists of three phases. The first phase is educational and aims to help the individual understand the nature of stress and stress effects. The second phase consists of skill acquisition and rehearsal, and has the objective of teaching individuals a range of coping skills to reduce anxiety and enhance their capability to respond effectively in stressful situations. The third and final phase, application and follow-through, involves the application of coping skills through role play or guided imagery in conditions that increasingly approximate real life (Grimshaw, 1999).

Crisis Intervention. Few organizations have developed comprehensive plans to deal with the acute and long-term effects of traumatic events on the health and morale of employees. However, implementing crisis intervention strategies in the workplace is important when you consider the effects of traumatic events on the health and well-being of employees, and the resulting effects to their performance at work.

Traumatic events in the workplace can arise from many sources. Some jobs carry higher than normal risks of exposure to crime or injury, such as law enforcement, emergency response, and retail banking. However, sudden death, violence or the threat of violence can strike any workforce and can have a profound effect on individual and group functioning. Having a crisis intervention method available for when employees experience distressing and painful events can help minimize disruption of work within the organization.

People exposed to traumatic events in the workplace may display a range of reactions including emotional numbing, withdrawal, irritability, fearfulness, depression, sleep disturbance, substance abuse, and prolonged medical problems. It has been shown that mobilization of social support at work is vital to the restoration of general morale and the protection of the health of individual workers. A crisis response plan that encourages communication and group support should consist of the following:

- Crisis readiness – A set of procedures prepared in advance including communication plans, security procedures, handling shutdowns, etc.

- Formation of a crisis response team, including high level management whose visibility will be reassuring to staff.

- Meetings with affected groups, which will combine an information, education, and emotion-sharing approach.

- Crisis counselling for individual employees, especially primary victims and witnesses.

- Follow-up, including evaluation of the success of the interventions and planning for the future.

Additionally, stress debriefing has been widely promoted as a means of preventing or reducing psychological distress experienced following a severe trauma.

Critical Incident Stress Debriefing (CISD) is the most widely used group intervention technique for the prevention of work-related traumatic stress disorder among high-risk emergency response personnel. CISD can be defined as group meetings or discussion designed to diminish the psychological impact of a traumatic event, prevent the development of post-traumatic stress disorder, and serve as an early identification mechanism for individuals requiring professional counselling. Participants are given the opportunity to discuss their thoughts about, and emotions following, a traumatic event. They are also taught about normal reactions to trauma and stress management techniques, and have the opportunity to see they are not alone in their responses (Grimshaw, 1999).

Stressor Reduction Interventions. Job characteristics that can be associated with poor levels of mental and physical health typically include role ambiguity, role conflict, job insecurity, low involvement in decision-making, and work overload among others. In spite of these factors being prevalent in many organizations, relatively little attention has been focused on organizational change as a way of improving health and well-being of employees. Implementing changes aimed at reducing work stressors can be costly and difficult to implement. Stressor reduction requires an identification of the stress agents followed by planned changes in organizational structure and function, which are potentially expensive and disruptive to on-going

work. It is therefore more financially feasible for organizations to concentrate on cheaper individual-centred approaches, than to tackle the root of the problems inherent in the work environment.

Regardless of this fact, research in the area supports organizational level interventions as the preferred approach to dealing with employee stress because they concentrate on eliminating the sources of the problem rather than simply treating the symptoms. Organizational interventions may include:

- Changing organizational characteristics, such as reward systems, staff selection systems, or training and development systems.

- Changing role characteristics through role redefinition, reduction in role underload or overload, reduction in role conflict and increasing participation in decision-making.

- Changing task characteristics through job redesign to take account of workers' abilities, use of workers' preferences in selection and placement, provision of training programs, and treatment of workers as individuals.

The ideas listed in the above sections are broad in nature, and are meant to give an overall glance at the current methods of stress interventions in the workplace. Some practical, workable steps that an organization can take to reduce stress in their employees are listed in Cahill et al (1995) and are explained as follows:

- The first step is to *offer an occupational stress workshop*. This sends a message of concern for employees, will educate workers about stress, and help to identify the most important personal and organizational concerns about the issue.

- *Organize an occupational stress committee.* The committee should meet on an on-
  going basis and formulate a strategy for improving the work environment. This committee
  should include both labour and management. Employees from various departments,
  divisions, shifts, and work groups should be included. Management representatives should
  include persons with real authority in the organization. This committee should also be
  distinguished from other on-going committees.

- *Increase employees' sense of control and participation in the workplace.* The key point here
  is to increase real control and participation; not the illusion of control. Some possible
  strategies may include using staff meetings more effectively to encourage participation and
  input; and developing autonomous workgroups.

- *Increase the skill levels of employees.* Unfortunately, many of the jobs presently being added
  to the economy are extremely low skill ones. Skillful work allows for the ongoing
  development of new skills and the opportunity to use them. Possible workplace strategies to
  counter the de-skilling effect may include increased skill-based training, use of career ladders
  to reward skill development, use of job rotation to expand skills, use of job redesign to
  increase ranges of skill needed, and healthy use of computers for skill development.

- *Increase levels of social support.* Key components of social support in the workplace are
  supervisory support and co-worker support. Some possible strategies may include training in
  proactive supervision; training in conflict resolution and team building; and appropriate use
  of staff retreats.

- *Changes that improve physical working conditions.* There is extensive evidence showing that
  poor physical working conditions contribute not only to physical hazards, but stress levels as
  well. Some possible strategies may include improving indoor air quality; reducing levels of

physical hazards such as noise, toxins, chemicals, etc.; and job redesign to reduce

incidence of repetitive strain injuries (i.e., reducing repetitive work, awkward work postures

and/or heavy lifting.).

- *Healthy use of technology*. Strategies may include healthy use of computers; and staff

  involvement in choosing new equipment.

- *Maintain job demands at healthy levels*. People are at their most productive and healthy if

  they can work at a manageable level. Possible strategies may include reduced use of

  overtime; caseload restrictions; brake mechanism (an administrative group designed to

  reduce the amount of change the organization initiates); and formation of "What don't we

  need to do?" committee (an internal group charged with finding low priority or unnecessary

  tasks).

- *Changes that provide for job security and career development*. Changes that are intended to

  eliminate jobs are usually incompatible with efforts to improve the quality of the working

  environment. More positive approaches attempt to use the skills of existing employees in a

  more effective manner. Possible workplace strategies may include extension of career

  ladders; and expansion of responsibilities and tasks.

- *Changes that provide healthy work schedules.* More flexible work schedules have the

  potential of improving employee satisfaction and reducing stress. Possible workplace

  strategies may include reduced use of forced overtime; rotating shifts in a forward (day to

  night) schedule; and use of flextime and other alternative work week schedules.

- *Strategies to improve personal coping mechanisms*. These strategies can be seen as useful

  companions to organizational change efforts. A distinction must be made between functional

  and dysfunction coping mechanisms. Some healthy choices include improving the diet of

employees; encouraging the employees to exercise; training in muscle relaxation techniques; training in effective cognitive strategies; training in substance abuse awareness; organizing discussion groups on healthy stress reducers; transition time (the basic idea being to train employees to find a way to relax for 20-30 minutes before assuming family responsibilities, allowing the body's autonomic responses to return to baseline levels); and training on family dynamics and parenting skills (improving employees' abilities to handle pressures at home can have major payoffs for an organization, as employees will be less-stressed in general).

- *Develop strategies that do not harm.* Change for the sake of change is not a goal of stress reduction programs. One effective way to avoid these negative outcomes is to design an assessment mechanism that will accurately measure key aspects of the work environment and stress symptoms before, during and after your efforts. Important things to assess include the following: Has social support (both co-workers and supervisory) increased? Have job demands decreased? Have employees' sense of autonomy and control increased? Has job satisfaction increased? Have skill levels and use of skills increased? Have physical or psychological stress symptoms decreased? A positive finding on any of these measures is an encouraging affirmation of healthy organizational change.

As organizations work to implement changes, the interest should lie not just in workplace stress per se, but in identifying and working towards the 'healthy work organization' where workplace stress is considered among other factors such as health promotion, and safety and risk management. A key assumption of the healthy work organization is that creating and

maintaining such an organization is good for all stakeholders – employees, shareholders

(and others concerned with financial performance), and society in general.

In working towards the goal of maintaining the healthy work organization, six fairly

distinct but interrelated components must be kept in consideration:

i. *Core organizational attributes*. Specific attributes that are relevant include

involvement, quality of work life, safety and health, organizational values, and

organizational beliefs. Focus should be on employees' perceptions of the attributes,

and not on some objective assessment of the existence of those attributes.

ii. *Domains of social support*. Opportunities should be provided for meaningful

interpersonal interaction and communication, both for emotional support and support

in fulfilling job tasks and other assigned responsibilities.

iii. *Job design*. Jobs should involve reasonable workloads, meaningful and worthwhile

tasks, adequate levels of control, and clear job expectations. Work schedule is also an

important element, as well as the minimization of exposure to environmental

stressors.

iv. *Job future*. Employees should be clearly informed about opportunities to improve

their job skills and career opportunities, as well as about the organization and

economic developments that may alter their employment situation.

v. *Work adjustment*. Defined through four indices: job satisfaction, organizational

commitment, psychological empowerment (including workplace self-efficacy, and

perceived impact on the work group), and experienced job stress.

vi.   *Organizational effectiveness*. It is necessary to measure relevant outcomes

related to the employees as well as the organization to determine if changes have been

beneficial (Vandenberg et al, 2002).

Conclusion

Stress is not something to be dismissed as being just part of the job, or the price you pay

for being successful in your career. Stress has been shown to be either directly or indirectly

responsible for early and untimely deaths through heart attack, stroke, high blood pressure, and a

multitude of other stress-related illnesses. While the mental and physical health of employees

are suffering due to unhealthy work environments, stress is still seen as a sign of weakness in

many organizations, and is kept quiet so as to avoid negative repercussions. Stress tends to be

either ignored or dismissed by the very people who are best placed to do something about it –

managing and senior directors, personnel and training managers, occupational health workers,

and departmental managers and supervisors.

The opportunity exists for employers and employees to get together and make way for

changes that will reduce stress-related illness. Change must come from the top, and it is

therefore imperative for managers to recognize that they have a legal and moral responsibility to

protect the physical and mental well-being of their workers (Clark, 2002).

It is the intention of this report to educate on the damaging effects of workplace stress,

and increase awareness of the widespread nature of this problem. It is hoped that this knowledge

will motivate organizations to explore the stressors that are present in their own work

environments, and to take steps to reduce and/or prevent stress in the workplace, thereby

working to maintain the health and well-being of employees.

Appendix A

Self-Scoring Stress Test

Choose a number for each statement and add up your own score.

Behaviour	almost always (2 points)	a few times a week (1 point)	rarely (0 points)
I feel tense, anxious or have nervous indigestion.			
I seem to be low in energy.			
I eat/drink/smoke in response to tension.			
I have tension or migraine headaches, or pain in the neck or shoulders.			
I seem to have trouble getting to sleep naturally or have difficulty getting back to sleep if awakened.			
I find it difficult to concentrate on what I'm doing because of worrying about other things.			
I take pills, medicine, alcohol or other drugs to relax.			
I have difficulty finding enough time to relax.			
If I finally find the time, it is hard for me to relax.			
I feel pressured during my workday.			
I find it difficult to laugh.			

Maximum total score = 22

MY TOTAL SCORE = _____

Score	Tension level
14-22	Considerably above average
10-13	Above average
6-9	Average
3-5	Below average
0-2	Considerably below average

If you're above average, it's vital for you to develop a coping plan. And if you're doing fine at the moment, a good coping plan will help you stay fine (Canadian Mental Health Association, n.d.).

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