STRESS AMONG IT PROFESSIONALS

Abstract

Experienced stress in life is the host, it is also the process that mediates, makes and mars health and illness, peace and happiness and propels the individual towards skepticism and stressed interaction with ‘self’ and ‘others’. Stress is an external pressure, which is brought to bear upon the individual of signs and symptom that invariably include anxiety. Effects of stress is felt in all walks of human life. Work stress is a high predictor of psychological symptoms in addition to life events. IT professionals face lot of stress in their day to day life. They face many physical illness and psychological disturbances.

INTRODUCTION

In the present ‘era of anxiety’ and ‘century of stress’, civilized human beings are paying the price of their civilization, on different counts - being victimized by the known and the unknown predators emerging from the hideouts of their biopsychosocial life space.

According to Asian Health Care Services study report in 2001, approximately 30% of IT (Information Technology), professionals suffer from depression and last eight years have seen a dramatic rise in the number of such cases reported from IT industry (Arun Kumar, 2002).

IT is a term that encompasses all forms of technology used to create, store, exchange and use information in its various forms (business data, voice conversation, still images, motion pictures, multimedia presentations and other forms, including those not yet conceived). It is the technology that is driving what has often been called “the information revolution” (Dean Kamen, 2003).

IT professionals are those who are working with the computers for design, development, implementation, support or management of computer based information system particularly software applications and computer hardware.

Stress

Stress is a word derived from the latin word ‘stringere’ meaning to draw tight. Under this concept, external forces (load) are seen as exerting pressure upon an individual, producing strain (John Arnold, 1991).

CAUSES AND SOURCES OF STRESS

Stress as a State of Psychological upset

The environmental demands, social obligations, family responsibilities, aspirations and demands of the person who concern us and the problems of complexities of life exert a good deal of pressure. Such pressure force us to strive and struggle resulting in severe stress.

Stress as a class of stimuli

The hazards and calamities of life like losing a job, money or property, a severe illness or death of someone close,
financial liabilities beyond one’s income and similar situations are such threatening stimuli or stresses of life which cannot be ignored or underestimated. Such stresses are capable of bringing about behavioural disorders and personality disorganizations of a serious nature (Wayne Weiten, 1992).

**PROCESS OF STRESS**

It was made by physician and scholar Hans (1946), who described three stages an individual encounters in stressful situations.

**Alarm Reaction**

In which an individual with initial phase of lowered resistance is followed by countershock, during which the individual’s defence mechanisms become active.

**Resistance**

The stage of maximum adaptation and hopefully, successful return to equilibrium for individual. If, however, the stress agent continues or defence mechanism does not work, the individual will move on to third stage.

**Exhaustion**

When adaptive mechanisms collapse an individual will experience lot of stress in this stage.

A stress is any force that pushes a psychological or physical factor beyond its range of stability, producing a strain within the individual. Stress is likely to occur which constitutes a threat to individual. A threat can cause a strain (John Arnold, 1991).

**Two sides of stress**

The physical side of stress understanding how stress affects us physically.

**Stage 1** - During alarm stage the body prepares itself from immediate action (increased heart rate, B.P. and energy consumption)

**Stage 2** - During resistance stage the body draws on resource at an above normal rate to cope with a prolonged stressor.

**Stage 3** - During exhaustion stage the body’s capacity to cope with stress is depleted and susceptibility to illness increases.

(2) The cognitive side of stress

Illustrates how our interpretation of potentially stressful event greatly affects our reaction to them.

**Primary appraisal**

- If the event is not perceived as threatening, then they experience no stress.
- If the event is perceived as threatening, then they engage in secondary appraisal of situation.

**Secondary appraisal**

- If the answer is yes, they do not experience stress
- If the answer is no, they experience stress.
Stress among IT professionals

INDIVIDUAL PERCEPTION OF EVENT

Primary Appraisal
The individual determines the threat to his or her well-being, e.g. the individual may use denial to reduce the reality of event

Secondary Appraisal
Determines the coping resources that are available and the likelihood that they can be employed successfully

Stimulus event

No Stress
The situation is perceived as harmless
The situation is perceived as threatening

Coping mechanisms are thought to be adequate
No stress
Coping mechanisms are thought inadequate
Stress

Robert, A., Baron, 1989

Stress among IT professionals is mainly due to:

- Unrealistic deadlines and expectations from the higher officials.
- Cognitive demands of work memory, attention, decision making, creative problem solving.
- Poor lifestyles of IT professionals – less sleep, junk food and staring at a monitor for days.
- Isolation from social relationships (Arun Kumar, 2002).

Stress in IT (Indian Scenario).

Studies Until late 80s reveal
- High job satisfaction – within the range of ‘satisfied’ to ‘highly satisfied’ (Pestonjee and Singh, 1983 and 1987).

Studies during 90s
- Started showing signs of distress in Indian IT industry (Singh, 1993; Arora, 1998).
Express Computer Study (2003) found the following:

- Little is being done to address Computer Related Injuries (CRI) afflicting the Indian IT professionals.
- Out of 50 companies surveyed only 3 had human resources policies for Computer Related Injuries.
- Computer Related Injuries is not treated as an occupational hazard in India, unlike developed countries.
- 62% of IT companies in Chennai do not provide medical allowance and compensation to employees.
- Very few IT companies in India, formally conduct programmes on stress management, yoga or ergonomics (Arunkumar, 2002).

FACTORS RESPONSIBLE FOR STRESS AMONG IT PROFESSIONALS

There are many factors responsible for the stress among IT professionals as follows:

1. Working conditions
2. Shift work
3. Long hours
4. New Technology
5. Work overload

**Working Conditions**

Our physical surrounding noise, lighting, smells and all stimuli which bombard our senses can affect our moods and overall mental state.

Since IT companies were air conditioned, the professionals may race with health problem which in turn affects their activity.

**Shift work**

IT professionals have jobs requiring them to work in shifts some of which involve working in staggered hours. It has been known that shift work affects blood temperature, metabolic rate, blood sugar level, mental efficiency and work motivation.

**Long hours**

Many individuals such as executives work long hours and some might have no sleep for 6 hours or more which in turn affect their body and mind.

**New Technology**

The introduction of new technology into work environment will be difficult for new workers/employees to adopt to new systems, equipment way of working.

**Work overload**

Two different types of work overload have been described by researchers namely quantitative (overload refers simply too having to much work to do) and qualitative (refers to work that is too difficult for an individual). They are supposed to suffer more interruptions and suffer more by physiological strain through higher heart rates and higher cholesterol levels (P. Jayakumar and K. Muralidharan, 2002).

**ROLE OF STRESS ON THE BODY AND MIND**

Doctors have identified the physical and behavioural symptoms of stress listed in table a commonly occurring before the onset of serious stress related illness.
## Physical symptom of stress

- Lack of appetite
- Craving for food when under pressure
- Frequent indigestion or heart burn.
- Constipation or diarrhoea
- Insomnia
- Constant tiredness
- Tendency to sweat for no reason
- Nervous twitches
- Nail biting
- Headaches
- Nausea
- Breathlessness without exertion
- Fainting spells
- Frequent crying or desire to cry
- Importency or frigidity
- Inability to sit still without fidgeting
- High blood pressure

## Behavioural symptom of stress

- Constant irritability with people
- Feeling unable to cope
- Lack of interest in life
- Constant, recurrent fear of disease
- A feeling of being failure
- A feeling of bad or self hatred.
- Difficulty in making decision
- A feeling of ugliness
- Loss of interest
- Awareness of suppressed anger
- Inability to show true feeling
- Loss of sense of humour
- Feeling of neglect
- Dread of future
- Difficulty in concentrating
- Inability to finish one task
- Intense fear

## Ailments with stress aetiology

- Hypertension
- Coronary heart attack
- Migraine.
- Hay fever and allergies.
- Asthma
- Intense itching
- Peptic ulcers
- Constipation
- Colitis
- Rheumatoid arthritis
- Menstrual difficulties
- Nervous dyspepsia
- Hyperthyroidis
- Diabetes mellitus
- Skin disorders
- Tuberculosis
- Depression


### EFFECT OF STRESS ON PHYSICAL HEALTH

Psychosomatic diseases are physical ailments with a genuine organic basis that are caused in part by psychological factors, especially emotional distress.

**Coronary heart disease**

Involves reduction in blood flow in the coronary arteries which supply the heart with blood. Atherosclerosis is the principal cause of coronary heart disease. Atherosclerosis is a condition characterized by a gradual narrowing of coronary arteries. A build up of fatty deposits and other debris on inner walls of arteries is usual cause of narrow resulting in heart attack.
Friedman and Rosenman reveled that stress is main factor for the cause of coronary heart disease (Wayne Weiten).

**Ulcer formation**

Ulcers can form in several ways, but people who experience severe work related stress are believed to be especially vulnerable, because of the difficulties in understanding ulcer formation in humans. During the period of stress, especially during the first two hours after stress period, the stomach makes many slow but intense contractions. These contractions tend to break up the protective mucus lining of the stomach wall to the digestive secretions.

**Decreased immune system activity**

Prolonged stress leads to the secretion of the adrenal hormone cortisol, which elevates blood sugar and increases metabolism. Those changes help the body to sustain prolonged activity but at the expense of decreased immune system activity.

**High Blood pressure**

Stress is the main factor which is the reason for sudden raise in the blood pressure (James W. Kalat, 1995).

**EFFECTS OF STRESS ON PSYCHOLOGICAL FUNCTIONING**

People struggle with many stress everyday. Most stresses come and go without leaving any enduring imprint. However, when stress is severe or when many stressful demands pile up, one’s psychological functioning may be affected.

Stress makes life challenging and interesting. Moreover, it can have beneficial effects stress can force people to develop new skills, learn new insights and acquire new personal strength. Along the way, though stress can be harrowing sometimes leading to impairments in performance to burnout and to other problems.

(i) **Impaired Task Performance**

Frequent stress takes its toll on one’s ability to think and perform effectively on the task at hand.

Keinan (1987) placed subjects under stress by telling them that they might receive painful but harmless electric shocks while working on a decision making task at a computer keyboard. Keinan found that stress disrupted two aspects of attention measured. Stress increased subjects tendency.

1. to jump to a conclusion too quickly considering all their options.
2. to do an unsystematic, poorly organized review of their available options.

**Burnout**

According to Ayala Pines and her colleagues (Pines and Aronson, 1988; pines, Aronson and Kafry 1981) have described burnout as “burnout” involves physical, mental and emotional exhaustion that attribute to work related stress. The physical exhaustion includes chronic fatigue, weakness and low energy. The mental exhaustion is manifested in highly negative attitude toward oneself, one’s work and life in general. The emotional exhaustion includes feeling hopeless, helpless and trapped.
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Post traumatic stress Disorders
The post traumatic stress disorder involves disturbed behaviour that is attributed to a major stressful event but that emerges after the stress is over. Symptoms of posttraumatic stress disorders were nightmares, sleep disturbances, paranoia, emotional numbling, guilt about survival, alienation, problems in social relations with others.

Psychological problems and disorders
Psychologist have long suspected that chronic stress contributes to many types of psychological problems and mental disorders.

In the domain of common psychological problems studies indicate that stress may contribute to poor insomnia, nightmares, sexual difficulties, drug abuse, anxiety and dejection.

Stress often plays a role in the onset of psychological disorders, including depression, schizophrenia, neurotic disorders and eating disorders (Wayne Weiten, 1992).

Conclusion
IT professionals are to be provided with
• Individual counselling
• Psychological support
• Emotional support and
• Behaviour modification therapies

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