

## **CHAPTER TWO**

### **REVIEW OF LITERATURE**

Having studied theories, concepts and related documents, the researcher has divided the review of literature into the following topics:

#### **2.1 DEFINITION OF STRESS**

Stress has been defined in numerous ways as follows:

Stress, according to Arnold, Robertson, and Cooper (1991, p. 284), is a word derived from the Latin word *stringere*, meaning to draw tight. Early definition of strain and local used in physics and engineering eventually came to influence one concept of how stress affects individuals. Under this concept, external forces (load) are seen as exerting pressure upon an individual, producing strain. While this first concept looked at stress as an outside stimulus, a second concept defines stress as a person's response to a disturbance.

Costly and Todd (1991) describe stress as "the nonspecific response of the body to any demand made on it that results in the individual preparing to take action" (p. 210).

Stress has been defined in a number of ways according to Northcraft and Neale (1994): originally, stress refers to experiencing something unpleasant. However, more formal definitions of stress are based on stress originators, which suggest that stress is an external force such as imminent deadlines, acting on a person. The second perspective on stress suggests that it is a physiological or psychological response of an individual to environmental demands known as stressors.

Burrows, King, and Stanley (1987) define stress as "a state of unacceptable divergence between perceived demands and capabilities to adapt" (p. 4), and as "a negative emotional experience which results from negative thoughts or environment" (p. 3).

#### **2.2 CAUSES OF STRESS IN THE WORKPLACE**

Stressors at work can be categorized in various aspects and are varied as they are in other areas of life. Some stressors are conditions of the physical works

environment or sociopsychological in nature. Many people consider relocation and crowding as potential stressors. Moreover, the job itself can contain stressors, such as work overload and lack of autonomy. The temporal aspects of work, such as time pressures, can also be stressful (Berry, 1998).

Numerous studies have identified specific stressors and their effects. For example, in a worldwide comparative study of work stress, researchers gathered information from 1,065 managers in ten countries on five continents: Brazil, the United Kingdom, Egypt, Germany, Japan, Nigeria, Singapore, South Africa, Sweden, and the United States. Fifty-five percent of all respondents mentioned time pressures and deadlines as a stressor, followed closely by work overload, mentioned by almost 52%. Other frequently identified stressors included inadequately trained subordinates, long working hours, attending meetings, and conflicts between work and family and other social relationships (Hellriegel, Slocum, & Woodman, 1995, p. 240).

Therefore, the causes of stress in the workplace are identified as follows:

#### ***Physical Stressors***

Poor working conditions such as noise, smell, lighting, fumes, and heat have an impact on workers' moods and overall mental state. Kornhauser (1965) suggested that "poor mental health was directly related to unpleasant working conditions, the necessity to work fast and to expend a lot of physical effort, and to excessive and inconvenient hours" (Arnold, Robertson, and Cooper, 1991, p. 292).

In terms of noise, Berry (1998) stated that intense sounds cause hearing loss when the direct physical impact of the sound overstimulates auditory cells. Consequently, noise damages task performances since workers would use their energy to cope with stress instead of performing their ordinary tasks. In addition, high or low temperature extremes can be considered as stressors. High temperature adversely affects employees' health more than low temperature because of body protection difficulties.

#### ***Type A and B Personalities***

Cardiologists Meyer Friedman and Ray Rosenman have identified two distinct personality patterns; type A and B personalities, relating to employee's ability to tolerate stress and leading to heart disease which is a major consequence of stress.

Two primary characteristics of the Type A personality are a high competitive drive and a constant sense of time urgency. Type As are described as being intensely ambitious and aggressive, always striving to achieve, racing against the clock, rushing from one self-imposed deadline to the next. They are attracted to high-stress, fast-paced, competitive, and demanding jobs. When Type As set out to accomplish something, it must be done immediately. Type A personalities are hostile, although they are successful in hiding that quality from others. They express their aggression through competitiveness, especially on the job. They are impatient and quick to get angry if they believe subordinates or colleagues are working too slowly. Type As are thought to be in a continual state of tension, perpetually under stress. Even when their work environment is relatively free of stressors, they carry their own stress as a fundamental part of their personality (Schultz, 1998, p. 377).

On the other hand, Type B personality is considered to be the opposite of the Type A personality. Type B individuals tend to be more easy-going and relaxed, less concerned about time pressures, and less likely to overreact to situations in hostile or aggressive ways (Hellriegel, Slocum, & Woodman, 1995, p. 253)

### ***Role Ambiguity and Role Conflict***

One of the major sources of stress in the workplace is role ambiguity and role conflict. Role ambiguity arises when employees are assigned unclear job definitions and job responsibilities. As a result, they are confused about what is expected or what to do which creates job dissatisfaction, depression, and difficulty in getting along with superiors and co-workers (Coffey, Cook, & Hunsaker, 1994).

In addition, Schultz (1998) proposed three components of role ambiguity as follows:

- Performance criteria ambiguity- uncertainty about the standards used to evaluate a worker's job performance
- Work method ambiguity- uncertainty about the methods or procedures appropriate to the successful performance of the job
- Scheduling ambiguity- uncertainty about the timing or sequencing of work

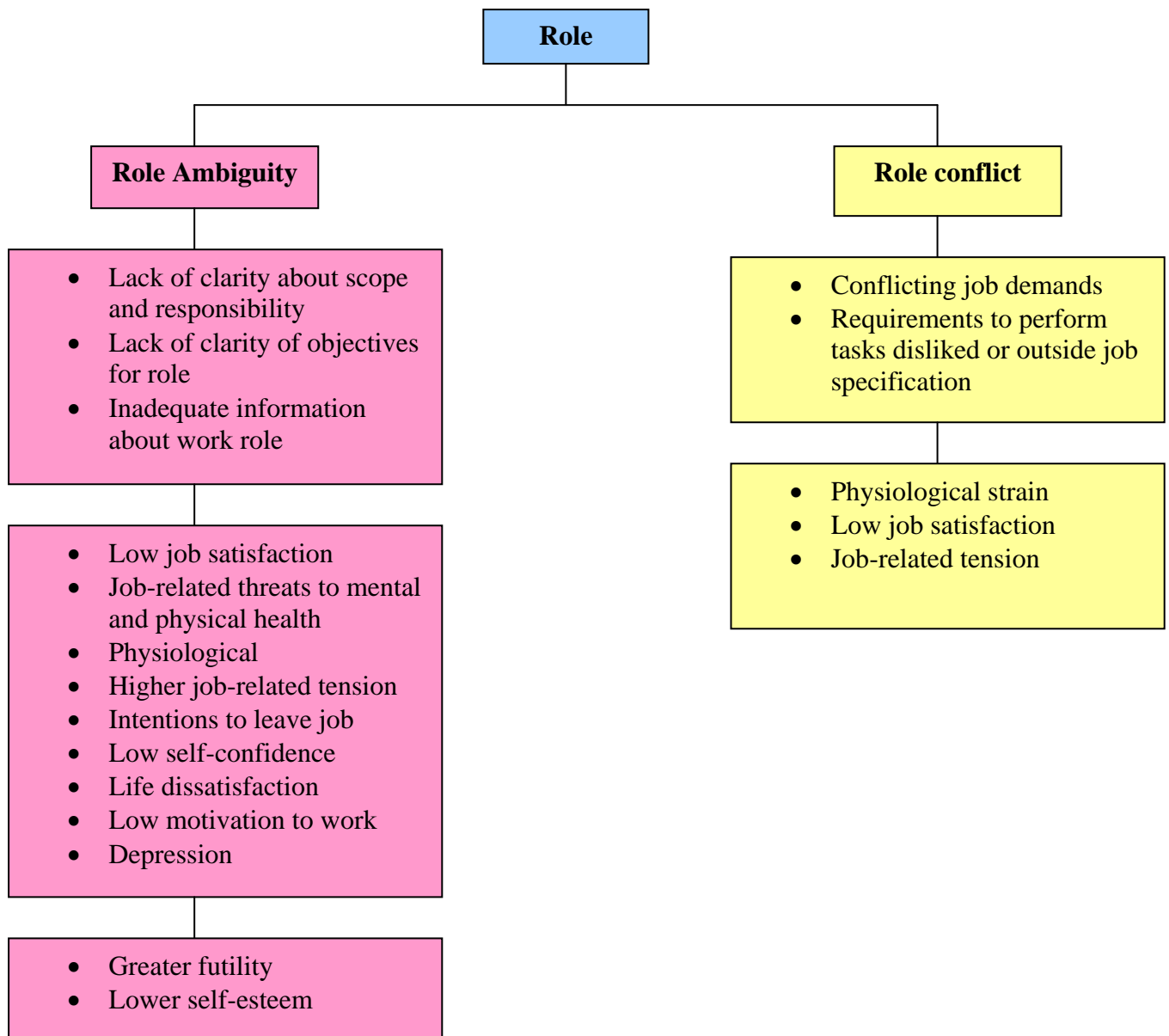
According to Gibson, Ivancevich, Donnelly, and Konopaske (2006, p. 201), role conflict is present whenever compliance by an individual to one set of

expectations about the job is in conflict with compliance to another set of expectations. Facets of role conflict include being torn by conflicting demands from a supervisor about the job and being pressured to get along with people with whom you are not compatible. Consequently, role conflict causes increased interpersonal tension and decreased job satisfaction. Worst still, people who create conflict lose their trust and respect of others (Coffey, Cook, & Hunsaker, 1994)

Moreover, Mullins (2002, p. 653) added that role incongruence and role conflict are considered as one of the potential major sources of work stress. Consequently, they can lead to difficulties in communication and interpersonal relationships, and can have a destructive effect on morale, performance and effectiveness at work and health. The following are the five organizational situations that are likely to create role problems and stress for the individual later on.

- Responsibility for the work of others – reconciling overlapping or conflicting objectives of groups and organization, of groups and individuals, of self and superiors
- Innovative functions – conflicting priorities and different psychological demands between the routine and administrative aspects of the job and the creative side.
- Integrative or boundary functions – the particularly stressful role to the coordinator, link person or outside contact, perhaps due to a lack of control over their demands or resources.
- Relationship problems – difficulties with a boss, subordinates or colleagues
- Career uncertainty – if future career prospects become doubtful the uncertainty can quickly become stressful and spread to affect the whole of a person's work.

A summary of causes of role stress in the workplace are shown below (p. 654).



### ***Work Overload***

Psychologists have identified two types of work overload which are quantitative overload and qualitative overload. Briefly, quantitative overload is the condition of having too much work to do in the time available. Qualitative overload occurs when employees found out that their work is too difficult to perform. Obviously, these two types of work overload are main causes of stress in the workplace and related to coronary heart disease. Several studies report relationships between high role overload and coronary heart disease. For example, Russek and Zohman (1958) found that in a study of 100 young coronary patients, 25 percent had been working at two

jobs, and an additional 45 percent had worked at jobs which required 60 or more hours per week. A questionnaire survey of 418 employees in 143 different jobs in 65 organizations found that employees who experience work overload and are unable to cope with the assigned tasks reported a high level of stress (Billington, 1982; Schultz, 1998).

In addition, Furnham (2005) stated that stress may be caused by a number of factors and can be divided into many aspects. However, this list is not rank-ordered or exhaustive; nor are all the factors unrelated.

- Occupational demands intrinsic to the job: some jobs are quite simply more stressful than others.
  - Role conflict: stress resulting from conflicting demands.
  - Role ambiguity: stress resulting from uncertainty.
  - Over-and underload stress from having too little or too much to do
  - Responsibility for others: stress resulting from a heavy burden.
  - Lack of social support: stress from being socially isolated or ignored.
  - Lack of participation in decisions: stress from helplessness and alienation.
  - Poor performance appraisal: stress from little, no, or obviously biased feedback.
- Working conditions: stress from poor working conditions.
- Organizational change: stress that comes from adaptation.
- Career development: stress from being stuck at the same level or beneath the “glass ceiling”.
  - Home-work interface: stress that results from having two jobs.

### ***Poor Work Relationship***

Stress can result from poor relationships within and between groups. In other words, bosses, colleagues, subordinates, or workers in other functions can cause stress in the workplace. Gibson, Ivancevich, Donnelly, and Konopaske (2006) suggested that low trust, lack of cohesion, low supportiveness, and lack of interest in listening to and coping with the problems confronting a group or group member are included in

poor relationships. As a result, these factors contribute to communication collapse and low job satisfaction.

## **2.3 CONSEQUENCES OF STRESS AT WORK**

The consequences of stress are rather destructive than constructive.

According to Costly and Todd (1991, pp. 212-213), there are four effects of stress as follows:

1. Physiological effects of stress: increased heart rate, high blood pressure, hot and cold spells, numbness, headaches, indigestion, skin disorders, physical fatigue, ulcers, strokes, and heart attacks.
2. Psychological effects of stress: anxiety, depression, aggression, fatigue, guilt, boredom, low self-esteem, alienation, loss of concentration, and feeling of inadequacy.
3. Behavioral effects of stress: use of drugs, overeating or undereating, nervous gesturing, pacing, emotional outbursts, restlessness, difficulty in sleeping or getting too much sleep, aggression, and poor interpersonal relations.
4. Organizational effects of stress: absenteeism, lower productivity, interpersonal conflict, accidents, turnover, job dissatisfaction, and antagonism at work.

Furnham (2005) added another aspect of the consequences of stress which can be divided into 2 approaches as follows:

### **1. Personal approaches**

#### **1.1 Physiological symptoms**

- A noticeable decline in physical appearance
- Chronic fatigue and tiredness
- Frequent infections, especially respiratory infections
- Health complaints such as headaches, backaches, stomach and skin problems
- Signs of depression, change in weight or eating habits

#### **1.2 Emotional symptoms**

- Boredom or apathy: lack of affect and hopelessness
- Cynicism and resentment

- Depressed appearance, sad expressions, slumped posture
- Expressions of anxiety, frustration, tearfulness

### 1.3 Behavioral symptoms

- Absenteeism, accidents
- Increase in alcohol or caffeine consumption; increased smoking
- Obsessive exercising
- Irrational: quick to fly off the handle
- Reduced productivity; inability to concentrate or complete a task

## 2. Organizational approaches

- Changes in organizational structure/function
- Job redesign

Another effect of job stress is called “Burnout” resulting from overwork. Job burnout is “a feeling of exhaustion that develops when an individual simultaneously experiences too much pressure and too few sources of satisfaction” (Coffey, Cook, & Hunsaker, 1994, p. 523). Schultz (1998, pp. 392-393) indicated that employees suffering from burnout tend to be less energetic and less interested in their jobs. Moreover, they are emotionally exhausted, apathetic, depressed, irritable, and bored. Consequently, they have a tendency to become very strict about their work because they are too exhausted to be flexible or to consider alternative approaches. Three components of the burnout syndrome have been described as follows:

1. Emotional exhaustion- the feeling of being drained and empty that is caused by excessive psychological and emotional demands, often brought about by work overload or unrealistically high expectations
2. Depersonalization- a feeling of callousness and cynicism and a reduced sensitivity toward others
3. Reduced sense of personal accomplishment- the feeling that one’s actions and efforts are wasted and worthless



## 2.4 STRESS LEVELS

Sudarat Nu-Hom (สุดารัตน์ หนูหอม, 2544, น.28-29) stated that people can experience and assess degrees of stress differently despite similar situations or factors. It depends on a person's internal factors such as adaptability, acceptability, and external factors such as environment and culture. The measurement of stress can be divided into 5 levels:

1. Much lower than normal: the people with this stress level are satisfied with their life; they have less tension and less motivation than other people.
2. Normal stress level (or day to day stress): the people with this stress level are able to deal with stress in their daily life and adjust to their environment properly; they perform their work very well.
3. Slightly higher than normal stress level (or mild stress): it is the level at which people are unhappy because of unsolved problems and conflicts in daily life. This stress level can be noticed from physical, emotional and behavioral changes. However, at this level the stress is still bearable.
4. Moderately higher than normal stress level (or moderate stress): it is the level that people have higher levels of tension and suffer a lot from emotional problems caused from life's conflicts and crises. Warning signs can be noticed from changes in the body, emotions, thoughts and behavior. This stress level will affect working performance and life.
5. Much higher than normal stress level (or severe stress): it is the level at which people are facing severe tension and crisis. Without proper and correct coping and adjustment, people who persist on this stress level will become sick emotionally and physically.

## 2.5 COPING STRATEGIES

Stress management refers to any program that reduces stress by understanding the stress response, recognizing stressors, and using coping techniques to minimize the negative consequences of stress.

In addition, stress coping strategies can be divided into 2 types as follows:

### *1. Individual Stress Coping Method*

Individual stress management includes activities and behaviors designed to eliminate or control the stressors and make the individual more resistant to stress or better able to cope with stress. Many useful techniques for individual stress management are suggested as follows:

- Plan ahead and practice good time management.
- Get plenty of exercise, eat a balanced diet, get adequate rest, and generally take care of yourself.
- Develop a sound philosophy of life and maintain a positive attitude.
- Concentrate on balancing your work and personal life. Always take the time to have fun.
- Learn a relaxation technique (Hellriegel, Slocun, & Woodman, 1995)

According to Pornthep Chaimongkol (2004, p. 11), the following are three general-factor model coping strategies conducted by Cook and Heppner:

1. Problem-focused coping strategy consisting of active coping, planning, suppression of competing activities, restraint coping, positive reinterpretation and acceptance.
2. Social support coping strategy consisting of seeking social support for instrumental reasons, seeking social support for emotional reasons.
3. Avoidance coping strategy consisting of denial, behavioral disengagement, mental disengagement and alcohol/drug use.

Other coping strategies belong to Billington (1982, p. 107) who had developed the five coping styles scales to find out the different ways in which people responded to stress as follows:

1. Cognitive Coping: This style would include reactions to a stressful situation in which an individual will modify her perception of the situation; for example: change her priorities and values, substitute intangible goals for tangible ones, or compare herself to people who are in worse situations than herself.
2. Give up: An individual using this style would resign herself to the fact that the stressful situation is unalterable. In addition, she might react psychologically withdrawing from the situation, by daydreaming or refusing to think about the problem.

3. **Active Confrontation Coping:** An individual using this style would change the situation out of which the strain arises. For example, she might negotiate for a mutual agreeable solution of a stress causing incident, or she may gather information to gain an understanding of a problem.

4. **Withdraw and seek help:** A person using this style may physically withdraw from a stressful situation or seek help from a qualified source; for example, legal service or psychotherapy.

5. **Cognitive Distortion:** An individual using this style may ignore the stress provoking situation by taking drugs or diverting her attention to other more joyful areas of her life.

Fincham and Rhodes (1999) suggested three practical methods for individual coping stress strategies as follows:

- **Appraisal focused strategy:** Individuals examine causes and effects of stress or think of what has changed in their life recently. Furthermore, they accept their stressful situation by trying to find something positive in it.
- **Problem-focused strategy:** Individuals confront their work stressors actively. For example, they talk to their friends or family to solve the problem together.
- **Emotion-focused strategy:** Individuals use emotional defenses to help dealing with their anxieties such as smoking, daydreaming, and taking a day off. However, this strategy is ineffective because it can increase the problems more than solve them.

Moreover, Northcraft and Neale (1994) revealed that there are various ways for an individual to manage stress. For example, physical exercising such as jogging, walking, swimming, bicycling and aerobic exercise, use of time-management skills, and interaction with a social support system are an excellent way of relieving stress and tension.

## *2. Organizational Stress Coping Method*

Organizational stress management is designed to (1) identify, modify, and eliminate work stressors, (2) help employees modify their perceptions and understandings of work stressors, and (3) help employees to cope more effectively with the consequences of stress.

The following are stress coping techniques to eliminate or modify work stressors (Hellriegel, Slocun, & Woodman, 1995).

- Improvement in the physical work environment
- Job redesign to eliminate stressors
- Changes in workloads and deadlines
- Structural reorganization
- Changes in work schedules, more flexible hours
- Management by objectives or other goal-setting programs
- Greater levels of employee participation, particularly in planning

changes that affect them

- Workshops dealing with role clarity and role analysis

In addition, Schultz (1998) suggested that the organization should provide sufficient support to reduce employees' stress as follows:

- Allowing employees to participate in decisions about changes in work practices and in the organizational structure.
- Enriching, enlarging, and expanding jobs to provide greater responsibility and decision-making authority.
- Informing subordinates clearly what their job responsibilities are and what is expected of them.
- Proper matching of job requirements with employee abilities to prevent work overload and underload.
- Providing social support by promoting cohesive work groups and by training supervisors to show empathy and concern for subordinates.

## **2.6 RELEVANT STUDIES**

According to the study "Psychological and Organizational Factors in the Development of Work Stress and Physical Illness" conducted by Billington (1982, p. 80), individuals who experienced high levels of stress used active confrontation or cognitive coping the least as coping behaviors. Moreover, respondents who perceived high work stress coped with more frequently by withdrawing from a stressful

situation, turning to somebody for help or by resignation to the consequences of a stressor than those participants who reported low work stress.

Pornthep Chaimongkol (2004) conducted an Independent Study on *Strategies for Coping with Stressful Situations Involving People at Work of Thai Airways International Departure and Arrival Staff at Bangkok International Airport*. His research purpose was to find the levels of stress caused by supervisors, colleagues, and passengers. The sample consisted of 151 staff at Thai Airways International Departures and Arrival. His finding was that passengers caused the most stress to employees, superiors caused the second highest levels, and colleagues caused the least. Moreover, they had stress levels with the majority of *sometimes* when facing stressful situations caused by superiors.

The study “Development and Analysis of the Coping Stress Inventory” conducted by Gadzella, Pierce, and Young (2008, p. 260) revealed that women had significantly higher ratings (use more strategies) than did the men in the Behavioral category on items, such as, “went to sleep” and “took pain killers”. However, men had significantly higher ratings (used more strategies) than did the women on items, such as, “got angry and hit others” and “drank alcohol”.

Taweesak Kritjaroen (2004) found out in his study “Strategies for coping with factors of stress caused by people at work of sales staff: A case study of sales staff at Thai Containers Group Co., Ltd” that factors from co-workers in different functions caused the highest amount of respondents’ stress. In addition, the majority of participants used problem-focused and social support coping strategies the most as effective ways to cope with stressful situations.

Li (2008) found out in his study “Relationships among Stress Coping, Secure Attachment, and the Trait of Resilience among Taiwanese College Students” that females reported significantly higher levels of stress than males did and significantly lower levels of resilience than their male counterparts did. In addition, as with high stress situations, resilience was the only effective predictor of active coping in low stress situations.

The study “Job stress level, causal factors and coping stress strategies of employees at AIS (IT Department)” conducted by Kantnuthtayar Armornratthumrong (2007) revealed that most of the respondents feel irritated or annoyed (89%) the most

when experiencing work stress. The factors that caused work stress the most were high competition at work (87%), inflexibility of colleagues (85%) and lack of training by supervisors (82%), respectively.