CHAPTER TWO

REVIEW OF LITERATURE

This section reviews the literature in the following areas:

1. Stress
2. Causes of stress
3. Coping strategies
4. Stress and health
5. Related research

2.1 STRESS

2.1.1 Definition

The term "stress" originally came from the Latin *strictus* (tight, narrow) and *stringere* to (draw tight). This became *estrece* (narrowness, oppression) in Old French, and *stresse* (hardship, oppression) in Middle English (Kenny, Carlson, McGuigan and Sheppard, 2000, p. 129).

Selye (1956) stated that stress is the nonspecific response of the body to any demand placed upon it to adapt, whether that demand produces pleasure or pain.

Lazarus (1976) defined stress as a state of anxiety produced when events and responsibilities exceed one's coping abilities.

Morris and Maisto (2008) defined stress as a state of psychological tension or stain.

Specialists in the field of holistic medicine have expanded Lazarus's and Selye's definitions of stress as the inability to cope with a perceived or real (or imagined) threat to one's mental, physical, emotional and spiritual well being which results in a series of physiological responses and adaptations.

In psycho-physiology, stress refers to some stimulus resulting in a detectable strain that cannot be accommodated by the organism and which ultimately results in impaired health or behavior. In psychology, stress refers to a particular kind of state of the organism resulting from some interaction between him/her and the environment (Pestonjee, 1999).

2.1.2 Types of Stress

There are three types of stress: eustress, neustress and distress (Seaward, 1999, p. 7).

1. Eustress is good stress and arises in any situation or circumstance that a person finds motivating or inspiring.

2. Neustress describes sensory stimuli that have no consequential effect. It is considered neither good nor bad.

3. Distress is considered bad and often simply means stress. There are two kinds of distress; acute stress when that which surfaces is quite intense, and disappears quickly, and chronic stress, or that which may not appear quite so intense, yet seems to linger for a longer period of time.

2.1.3 Types of Stressors

A stressor is any environmental demand that creates a state of tension or threat and requires change or adaptation. Situations, circumstances, or any stimulus that is perceived to be a threat is referred to as a stressor.

Stressors are divided into three categories bioecological, psychointrapersonal and social stressors (Seaward, 1999, p. 8):

1. Bioecological influences are external influences, including sunlight, gravity, and electromagnetic fields that affect our biological rhythms. These biological changes are influenced by natural phenomena. Having jet lag is an example as a result of airplane travel through several time zones.

2. Psychointrapersonal influences are the perception of stimuli that we create through our mental processes. Psychointrapersonal influences create the greatest percentage of stressors. These types of stressors involves thoughts, values, beliefs, attitudes and perceptions that we use to defend our identity or ego.

3. Social influences are related to stress as they affect major life changes. Social causes of stress include financial trouble, technology advances, violations of human rights, etc.

As stress is a personal response to certain circumstances, the same set of stressors can be viewed differently (Pestonjee, 1999) depending on:

1. The nature and the magnitude of the strategy

2. The importance of the stressor to an individual

3. The perception of the threat element as a component of the stressor

4. The personal and social support system available to the individual

5. The involvement and willingness on the part of the individual to do something about the state of stress.

2.2 CAUSES OF STRESS

Pestonjee (1999) has divided the sources of stress into two systems by using social perspective. The two systems are:

1. The primary system such as family and religion as well as regional and linguistic groups.

2. The secondary system related to such as schools, colleges, technical institutes, neighbourhood, and work organization.

Pestonjee (1999) has developed the Stress Tolorance Limit (STL), a subject concerning the handling of stress, which is made up of four components:

1. Depression is an emotional state of dejection, a feeling of worthlessness and guilt. Depression can be divided into two types endogenous and exogenous. Endogenous depression is self-made, so it is caused by oneself without any apparent

reason. Exogenous or reactive depression out of one's control such as sunlight, noise and environment.

2. Anxiety is a state of emotional tension characterized by apprehension, fearfulness and psychic pain. This harmful side is that it prevents us from doing anything productive.

3. Anger can be viewed as a predictor of physical health problems. Mild anger may increase energy levels and the ability to do something because of the increase of adrenalin. On the other hand, chronic anger may damage the systems in the body.

4. Type-A behavior is a personality profile characterized by speed, impatience, desire for achievement and perfectionism. This type of individual is more likely to create stress for themselves in situations that others find stress-free.

Sources of stress can be divided into two: environmental and individual factors.

1. Environment factors include the economy, technology and political uncertainty.

2. Individual factors mean stress caused by individual differences such as family problems, financial problems and personality such as having a low income and a person having no one who understands them.

According to the Student Stress Survey (SSS) done by Ross, Niebling and Heckert (1999), the potential sources of stress in students can be divided as follows:

1. Interpersonal sources which result from interactions with other people, such as trouble with parents, roommate conflict and working with people they do not know.

2. Intrapersonal sources which result from internal sources or individual differences such as change in eating or sleeping habit.

3. Academic sources which come from school-related activities issues, such as, class workload or receiving lower grades than anticipated.

4. Environmental sources which come from non-academic problems in the environment, such as, car trouble or difficult living conditions.

2.3 COPING STRATEGIES

2.3.1 Definition

According to Monat and Lazarus's study (as cited in Pestonjee, 1999, p. 217), coping refers to efforts to master conditions that exceed adaptive resources. The word "coping" has been used to define a way of dealing with stress, or the effort to master conditions of harm, threat or challenge when a routine or automatic response is not readily available.

2.3.2 Coping Styles

Powell and Enright (1990) have suggested two coping styles which are similar to Schafer (1998): adaptive and maladaptive coping strategies.

1. Adaptive coping strategies are actions which help to make stress more bearable and return the system to a state of emotional balance. Adaptive coping includes recognizing the external stressors and demands, and being aware of personal resources to cope.

2. Maladaptive coping strategies are reactions to stress which are likely to produce further problems. Failing to recognize and understand what is happening may lead to irrational misinterpretations about the situation. Maladaptive behavioral responses include avoidance of situations which produce anxiety, withdrawal from social support, aggression, excessive alcohol consumption, drug abuse and physical problems.

Moos and Billing (as cited in Pestonjee, 1999, p. 218) have organized the dimensions of appraisal and coping included in measurement procedures into three domains:

1. Appraisal-focused coping involves attempts to define the meaning of situation and includes such strategies as logical analysis and cognitive redefinition.

2. Problem-focused coping is seeking to modify or eliminate the source of a stress to deal with the tangible consequences of a problem or actively change the self and develop a more satisfying situation.

3. Emotion-focused coping includes responses whose primary function is to mange the emotions aroused by stressors and therefore maintain effective equilibrium.

Cook and Heppner (อ้างถึงใน สุดารัตน์ หนูหอม, 2544, น. 42) analyzed three coping strategies which proved their scores in previous studies had good psychometric qualities (i.e. estimate of reliability and validity): Coping Strategies Inventory (CSI), COPE, and Coping Inventory for Stressful Situation (CISS). The three general-factor models are:

1. Problem-focused coping strategy consists of active coping, planning, suppression of competing activities, restraint coping, positive reinterpretation and acceptance.

2. Social support coping strategy consists of seeking social support for instrumental reasons, and seeking social support for emotional reasons.

3. Avoidance coping strategy consists of denial, behavioral disengagement, mental disengagement and alcohol and drug use.

Maddi and Kosaba (as cited in Pestonjee, 1999, P. 219) has suggested two forms of coping styles:

1. Transformational coping involves altering events so they are less stressful. To do this, an individual will have to interact with the situation, think about them optimistically, and change it into a less stressful event.

2. The regressive approach is a strategy where an individual thinks about the situation pessimistically and avoids it.

According to Pestonjee (1999), coping can have an effect on three kinds of outcomes which are psychological, social and physiological. From a psychological perspective, coping can have an effect on how one feels about oneself and life. From a social perspective, coping can have an effect on interpersonal relationship. It can be useful and one can experience its impact when getting involved in community service at the workplace and in social events. From a physiological perspective, coping can have short-term outcomes as well as long-term ones. Psychologists have identified two major ways which people use to cope with stress:

1. A passive approach in which a person decides to suffer or deny the experienced stress.

2. An active approach in which a person decides to face the conditions of the stress.

Morris and Maisto (2008) have suggested two general types of adjustments to stress; direct coping and defensive coping.

1. Direct coping refers to internal efforts to change an uncomfortable situation. The three basic choices for coping directly are confrontation, compromise, and withdrawal.

2. Defensive coping includes denial, repression, projection, identification, sublimation, regression, intellectualization, reaction formation and displacement.

Therefore, it can be concluded that there are two major ways of coping with stress which is associated with the classification that Lazarus has suggested which are:

1. Direct coping which is an action that an individual decides to do in order to eliminate the problem or difficulties. This coping strategy can be classified into three types; confrontation, compromise and withdrawal.

2. Defensive coping which means an action that one tries to distort the reality of the problem in order to get away from pressure, frustration, worries. One often does this unconsciously to avoid dealing with the problem directly.

2.4 STRESS AND HEALTH

Walter Cannon, a physiologist at Havard first introduced the term "fight-or-flight response" (Seaward, 1999, p. 6) to describe the mechanism involved in the body's physiological arousal to survive a threat. The fight response was triggered by anger or aggression.

Selye (1956) has explained the stress phenomenon in his "General Adaptation Syndrome (GAS)". The three-stage model consists of:

1. Alarm reaction or fight or flight response is the first stage in which the defensive mechanism in the body becomes active such as, adrenalin discharge, blood flow and an increasing heart rate. The response in this stage depends on the nature and intensity of the threat and the condition of organism.

2. Resistance is the second stage where the characteristic signs of the alarm reaction disappear. Maximum adaptation occurs during this stage. In this stage, the body tries to get back to a state of equilibrium. (Powell and Enright, 1990, p. 19)

3. Exhaustion is the stage where adaptative energy is exhausted. Signs characteristic of the alarm reaction appear again and resistance level begins to decline. In this case, stress-producing hormone levels may increase and the organism may collapse.

Stress and Cardiovascular System

Stress is a major contributing factor in the development of coronary heart disease, hypertension and high blood pressure. A person who responds to life with impatience, hostility, or anger is more likely to suffer from heart disease. When a person feels stressed or depressed, there is an increased risk of heart disease and premature death. Negative emotion will produce excessive amounts of cortisol, which damages the heart and blood vessels.

Stress and the Immune System

Stress affects the functioning of the immune system which can impair our health. Increased stress may make us more sensitive to influenza and respiratory infections, such as the common cold. Moreover, scientists have established a relationship between stress and cancer. Stress itself does not cause cancer, but it actually damages and impairs the immune system.

Headache Disorders

People who have chronic stress often suffer from headaches. Migraines are a painful condition associated with alternating construction and dilation of the cerebral arteries that supply blood to the brain.

Insomnia

Selye (as cited in Schafer, 1998, p. 135) has suggested that insomnia is usually a consequence of being keyed-up. He noted that "muscular activity or mental work which leads to a definite solution prepares you to rest and sleep, but intellectual efforts which set up self-maintaining tensions keep you awake". People have difficulties in sleeping because they may have too much stress and tension that cause an inability to leave events, thoughts or feeling from the previous day.

2.5 RELATED RESEARCH

According to an analysis of coping resources, researchers such as Lazarus, Folkman and Stroebe (Stroebe, 2000) have found that the impact of stress on health is dependent on the coping resources which are available to an individual confronted with stressful life events. Extrapersonal coping resources are resources external to the individual which potentially help an individual in coping with stressful life experiences. The examples of external resources are financial resources and financial support. Intrapersonal coping resources consist of personality traits, ability and skills which enable people to cope with stressful experiences. There is evidence that individuals who have a great deal of social support suffer lower risk of mental and physical impairment and even mortality than individuals who have little social support.

Gmelch and his colleagues' study (as cited in Kenny, Carlson, McGuigan and Shepperd, 2000, p. 440) have done an analysis of what professional and personal characteristics are associated with academic stress. With respect to sex, women were significantly more stressed than men. Abouserie's study (as cited in Kenny, Carlson, McGuigan and Shepperd, 2000, p. 441) found that stress was highest in more junior members of the academic staff. Richard and Krieshok in the US reported that all faculty members experienced similar role stressors, regardless of sex or rank.

According to a study of children and adolescent' coping by La Greca, Siegel, Wallander and Walker (1991), problem-focused and emotional-focused coping skills emerge at different points in development. Problem-focused skills appear to be acquired earlier by the preschool years. This is because children obtain coping skills by copying the modeling of adult behaviors. Emotional-focused coping skills appear to develop in later childhood and early adolescence. This is due to several factors, including younger children having less access to their internal emotional states, and because of the fact that emotional-focused coping skills are hard to observe; therefore, they are less easily learned through modeling processes.