

CHAPTER 2

LITERATURE REVIEW

2.0 INTRODUCTION

The modern development of the stress concept owes much to the so called "father" and pioneer of stress research, Hans Selye who published his medically based study in 1946. Since then the concept of stress has broadened as more disciplines discover meaning in the term. Feitler and Tokar consider that, because an understanding of stress can be differentially arrived at, depending on what discipline examines the subject, finding a common, satisfactory theoretical base is difficult (1986: 257). These authors write that "despite its widespread use, or in spite of it, stress is not a clinical term, rather it is used interchangeably with feelings of anxiety, conflict, strain, threat and ambiguity" (1986: 255). Gmelch and Thomas reflect this assertion by noting that the word stress is often associated with "anxiety, frustration, strain, conflict and tension; or in terms of pressure situations, up-tight feelings, nervousness or other unpleasant demands" (1989: 1). Because stress receives so much publicity the notion that stress is "bad" has become almost universal. Such a notion should be avoided at all costs. Sedgwick maintains that "while stress is made responsible for a whole host of things that decrease the quality of life today it is by no means true that stress is bad and to be avoided at all costs" (1983: 11). The concept of stress has a positive side:

Tackling interesting tasks, being creative and productive, achieving goals and desires, participating in competitive sports can be the joys of stress. Here stress is working for us to improve performance (Looker and Gregson, 1989: 29).

All of life is composed of widely varying levels of stress and Sedlacek believes that it is through stress "that we develop and grow physically, mentally and emotionally" (1980: 23). The body is under stress every moment of the day but, for all this, stress is neither good nor bad. Stress does not cause excellence, illness or financial loss. For Hanson it is "neutral, until it lands on the person" (1989: 18). This neutrality leaves its effects up to the individual to decide - it is either handled capably or its negative effects will cause distress. Cooper (1983: 18) provides a simple, but useful diagrammatic format to display the variations of stress in Figure 4:

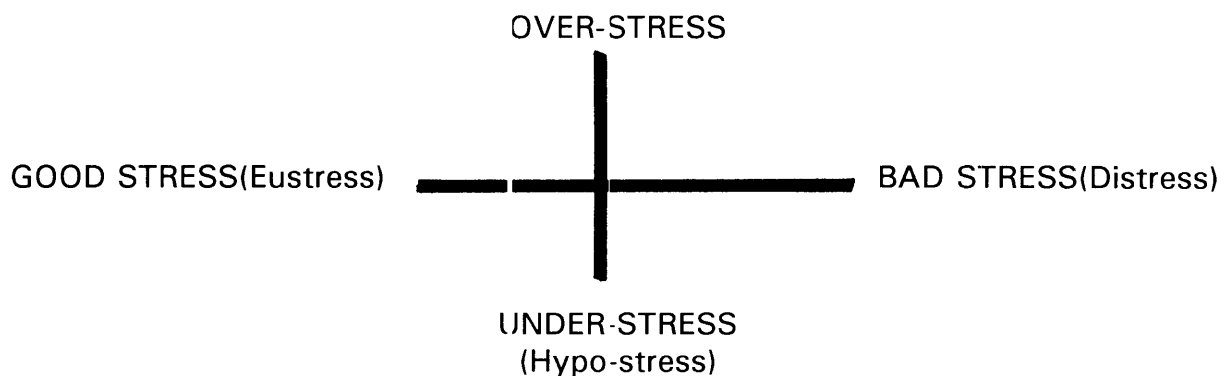


Figure 4

Four Forms of Stress

Various aspects of this modest model are worthy of comment. The tendency when discussing stress is always to focus on the upper right quadrant—stress is "bad". However it has already been noted that a degree of stress is vital for improved performance and for many people in business, sport, schooling and government this aspect of their working lives adds the drive and excitement necessary for effective performance. The dimension of Under-stress never receives the attention that other aspects compete for and yet, without sufficient stress, people cease to grow mentally and emotionally (Sedlacek, 1980: 23). King et al. (1987) used the term "giants" to describe those people who seem to thrive under sustained pressure producing consistently better performances. These people use stress to their advantage. Covey would call these people "proactive" because they are highly effective in any environment. They take initiative, responsibility for their own lives and use these qualities to make things happen (1990: 71). Reactive people use language like "I can't, I must, if only, there's nothing I can do ... " (1990: 72). These people are driven by their feelings and the circumstances surrounding them. They show signs of distress and use the language of blame marking others for their poor state. Figure 4 makes the point that in life, even when there is no pressure to perform, or important work to be completed in a short time frame, a person may well be under some form of stress.

Stressful experiences do not spring from a vacuum. They can be traced to the social structures that surround people and also the people therein. Principals work in a clearly defined social structure and are involved with a wide range of

people. Pearlin contends that the incumbent never acts alone in the role.

Instead, one role is part of a larger role set or of a constellation of complementary roles around which important interpersonal relations are structured. Thus one cannot be a husband without a wife, a parent without a child, a colleague without a fellow worker. Relationships formed by role sets are relatively enduring and stable, and typically are of considerable importance to the parties involved. Consequently, when such relationships are problematic and filled with conflict, they can produce considerable stress (1989: 242).

Schools can be places filled with problematic relationships between the constellation of players. Principals typically engage in dialogue with all members of the larger role set. Cooper and Payne believe that it is possible to trace all of the emotional relationship problems from the devout belief in these three absolutes:

1. **The dire need for success and approval.** I must succeed every time and win total approval constantly. This includes securing approval from those I consider important.
2. **The dire need for consideration and justice.** People must treat me fairly, kindly and with justice and when they don't I blame them for the failure.
3. **The dire need for immediate and constant gratification and ease.** Work conditions must give me everything I want immediately and with ease (1978: 214).

The stark reality of school life and school relationships is that the principal will never find these three absolutes possible. He or she may meet with success and approval, justice and consideration or gratification, on occasion, but such experiences may be rare and fleeting and may come from only one section of the school community. The authors believe that people place stress on themselves because of their devout belief in these three absolutes and when

they are not met, feelings of anxiety, depression, inadequacy or hostility may creep into relationships.

Figure 5 (Reznick, 1989) explains the stress concept and shows four phases that successively follow each other.

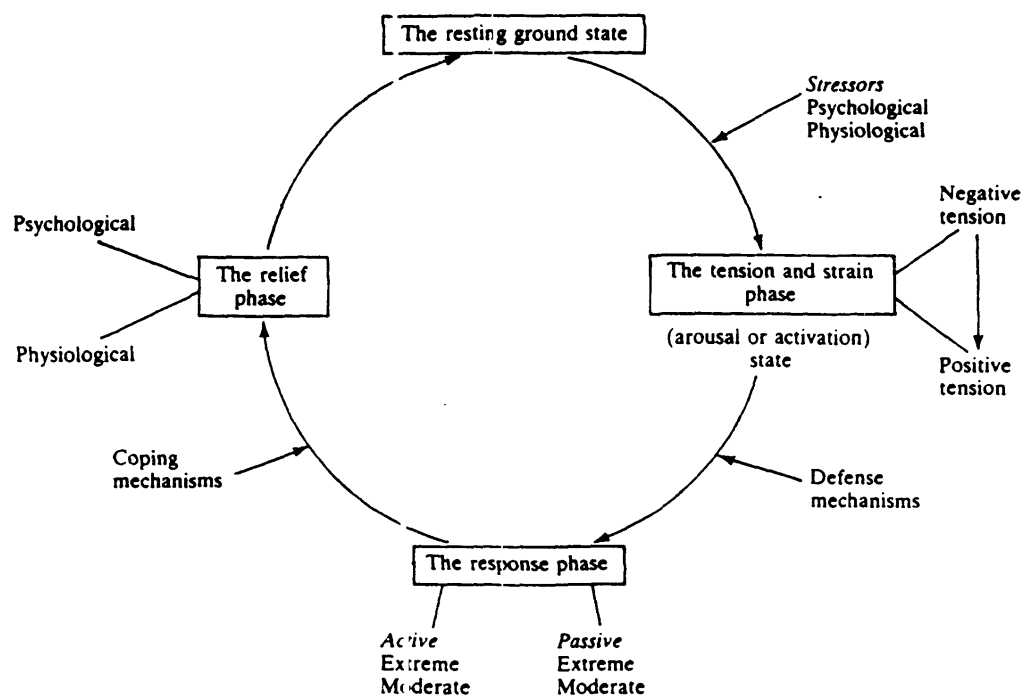


Figure 5

The Cycle of Stress

This figure complements the Conceptual Model which forms the basis of this research project. Reznick believes that in the figure above people can be moved from the homeostatic resting state, to the tension and strain phase, by physical or psychological stressors, or a combination of both, and that these stressors can be external or internal (1989: 219). There is a distinction made between negative and positive tension. This is most important because "on many occasions in life, tension has a positive impact on behaviour and functioning in stressful conditions" (Reznick, 1989: 219). Gmelch and Thomas note that stress has generally been distinguished by three basic orientations:

1. Systemic or physiological
2. Psychological and
3. Social (1989: 1).

The authors believe that the three concepts are related but are also responsible for the confusion and lack of consensus over the years. The basic orientation of the stress concept as discussed by these authors fits the Conceptual Model as proposed in this research work.

2.01 History and Wordage on Stress

"My life is at the mercy of any scoundrel who chooses to put me in a passion". This perceptive observation, by the eighteenth century surgeon, John Hunter, resulted from his personal observations that stressful life events were not infrequently followed by sudden, unexpected death. Even earlier in 1628 another physician, William Harvey, concluded, "every affection of the mind that is attended with either pain or pleasure, hope or fear, is the cause of an agitation whose influence extends to the heart" (Karpman, 1989: 56). The

relationship between external and internal reactions to stress. Sedlacek quotes Cannon's words to the Massachusetts Medical Society in 1928:

The doctor is properly concerned with the workings of the body and its disturbances, and he should have, therefore, a natural interest in the effects of emotional stress and the modes of relieving it. The field has not been well cultivated. Much work still needs to be done in it. It offers to all kinds of medical practitioners many opportunities for useful studies. There is no more fascinating realm of medicine in which to conduct investigations. I heartily commend it to you (1980: 29).

Hans Selye is rightly regarded as the pioneer in modern stress research and began his work before the Second World War leading to his publication of the General Adaptation Syndrome (GAS) theory. Selye came to believe that diseases of adaptation such as hypertension could be produced by abnormal or excessive reaction to stress. His work has provided the impetus for future generations of psychologists, physiologists, cardiologists and psychiatrists. His book The Stress of Life is dedicated to people "who are not afraid to enjoy the stress of a full life, nor so naive as to think they can do so without intellectual effort" (1978: dedication). He has long believed that too little attention has been paid to the "agreeable, even curative actions of stress" (1978: 369). We cannot avoid stress, but we can learn how to keep its damaging side effects to a minimum.

Stress does not necessarily imply a morbid change. Normal life, especially in the intense pleasure and ecstasy of fulfilment also cause some wear and tear in the machinery of the body (Selye, 1978: 1).

Stress, being a normal part of everyday life cannot be avoided. All life is

composed of varying degrees of stress and with it people grow physically, mentally and emotionally. This study concerns itself with the traumas and triumphs in educational administration where stress is a major ingredient. As human beings we are able to make a choice to handle stress capably, through knowledge and past experience, or to suffer its negative and damaging side effects.

2.02 Benefits of Stress

In the words of Lazarus:

Stress does not, of course, always produce maladjusted behaviour. Sometimes it mobilises unusually strong and effective modes of adjustment motivated by the importance for the person's welfare of what is happening (1961: 71).

Therefore stress can be a force for growth, rousing personal resources the individual did not imagine was available to them. King et al. provide an unusual viewpoint by suggesting that stress can be used to manipulate our enemies, opponents and other competitors; in the game of life (1987: 2). Some people describe stress as a "pleasant, exciting, stimulating and thrilling experience" (Looker and Gregson, 1989: 25). These people feel completely capable of handling whatever demands are placed before them, and they often deliberately place themselves in challenging situations. Champion athletes stress their minds and bodies as part of the motivation process to achieve the personal best. Stress can be a productive factor and a key to satisfaction and personal growth. Calling stress "bad" simplifies the problem to the point of the ridiculous as there are many forms of the phenomena. It has always been part of humankind's

experience and Reed maintains that through our history of wars, catastrophes, famines, plagues, genocide and forced migrations, stress has been with us. At its very mention "people feel anxious, and in shying clear of it they run away from opportunities for achievement, joy and satisfaction" (Reed, 1985: 87). Seeking to avoid it, they become victims of it.

2.03 The Giants of Life

Under circumstances of predictable and moderate stress in schools, principals call on conventional patterns of behaviour and solve their problems with the standard resources available. Some do it better than others. But what of those life events and the burdens that accompany them that are not conventional? Major events happen to people in everyday life, where they have no previous experience, no frame of reference, no personal or financial resources immediately available and no control over the cause or outcome. Such events can be viewed on television every night, but they do happen to real people, to ordinary people. They are not captains of industry, famous politicians, sporting heroes or movie stars. Ordinary people, each day face extreme experiences, such as near death situations, serious injury, lengthy hospitalisation, a long term partner's death or incurable disease. History teaches the lessons of war, concentration camps, hostage taking, earthquakes and terrorism. How can the horrors of Dachau be comprehended where:

Dreams used to come in the brutal nights,
 Dreams crawling and violent
 Dreamt with body and soul,
 Of going home, of eating, of telling our story.
 Until quickly and quietly, came

The dawn reveille:
 Wstawach.
 And the heart cracked in the breast.
 (Levi, 1965: 11).

Potocki and Everly (1989) reason that lengthy experiences such as Dachau challenge personal assumptions about oneself and the structure of the world. Control of events is not possible and the person has no way to influence, change, predict, understand or accept any transactions in a meaningful context. Often times ordinary people face massive life changes due to tragic accidents. Loss of a limb, severe burns or the death of a passenger or partner cannot be prepared for or studied in advance. These events involve a massive paradigm shift and all of a sudden the world is viewed differently, and the prospect of severe stress following is almost certain. Oliver Sacks, a neurologist, relates how his world changed following an accident which forced him into a wheelchair for life.

I was physiologically, in imagination and feeling ... a pygmy, a prisoner, a patient ... without the faintest awareness. How could one know one had shrunk, if one's frame of reference itself had shrunk? (1984: 157).

What resources do these people call on to revive themselves and regenerate during this period of intense tension? There must be great fears of loss of control, fear of failure and total dependency. Fine believes the common thread that plagued Vietnam veterans and holocaust survivors, as well as the physically and mentally disabled is:

... the gulf between the self and the others (family, friends, care-givers, society). Who will listen? Who will understand what we are experiencing? Who will believe where we have been and what we have endured? Who will validate us as

we continue to deal with adversity and its imprints? (1991: 496).

For Victor Frankl, a concentration camp survivor, the identification of purpose and meaning in the ordeal is the last of the human freedoms. Choosing one's attitude in any given set of circumstances and having at least the power and control over how to interpret and explain what is happening is vital. Individuals find meaning and purpose in many different ways. Perhaps it is through increased commitment to religion or a social cause. Others use the intellect and personal creativity to battle fear (Fine, 1991: 498). Frankl found he was personally disgusted with his own trivial preoccupation for survival and, in fantasy, lectured other inmates on the psychology of surviving in concentration camps. He demonstrated the capacity to step back "and in doing so preserved part of himself from extraordinary degradation, pain and loss" (Fine, 1991: 498).

Covey would regard this as the habit of proactivity, of taking personal initiative.

It means that as human beings, we are responsible for our own lives. Our behaviour is a function of our decisions, not our conditions. We can subordinate feelings to values. We have the initiative and the responsibility to make things happen (1990: 71).

Highly proactive people do not blame the circumstances and conditions for their current state. Their behaviour is a product of their own conscious choice.

Reactive people allow circumstances and conditions to control them.

Reactive people are also affected by the social environment, by the social weather. When people treat them well, they feel well; when people don't, they become defensive or protective. Reactive people build their emotional lives around the behaviour of others. Reactive people are driven by

feelings, circumstances, conditions. Proactive people are driven by values - carefully thought about, selected and internalised values (1990: 72).

Reactive people use language such as:

- * There's nothing I can do
- * That's just the way I am
- * He makes me so mad
- * They won't allow that
- * I have to do that
- * I can't
- * I must
- * If only (1990: 78).

Reactive people may never be the "giants" of life that King et al. refer to. The problem with reactive language is that it will become a self-fulfilling prophecy and people produce evidence to support their belief. Frankl's experiences and his ability to be proactive under such adverse conditions is truly remarkable. It makes the challenges faced by most of us in everyday work and living seem rather mundane. For Fine, those who rise above adversity do not belong to an exclusive club and are not part of a closed system. Some people are their own best resource, while others need help (1991: 500).

There are lessons to be learnt from those who rise above adversity and who face extreme and prolonged stress. Sacks puts the drama of the occasion thus:

Being full of strength and vigour one moment and virtually helpless the next ... with all one's powers and facilities one moment and without the next ... such a change, such a suddenness, is difficult to comprehend and the mind casts about for explanations (1984: 21).

These experiences make the trials of a principal's day pale into

insignificance. Lifton thinks that people are "perpetual survivors ... of holocausts large and small, personal and collective" (1988: 12). Perhaps an answer for principals battling their own small holocausts is to look for the patterns of behaviour, personal resources, mindsets and models used by the conquerors of stress, the giants of life. In the daily grind of working in organisations the average person can learn much from the experiences of these people.

2.1 A DEFINITION OF STRESS

Like many other topics of intense social interest stress shows both the theorist and the practitioner its evasive and troublesome nature when it comes to providing a definition. Stress is as unique as the individual and its influence on psychological and physiological health is determined by:

1. The characteristics or nature of the given stressor
2. The perception of the individual regarding that stressor
3. The hereditary, psychological and physiological susceptibility of the individual experiencing that stressor and
4. The ability of the individual to perceive positive control over the outcomes potentially generated by that stressor (Boone, 1991: 623).

The above determinates are indicative of the modern trend to view stress holistically and in a transactional sense, where stress is discussed in terms of an imbalance between the person and the environment operated within. This approach has not always been taken and stress research has evolved over a period of time. Gmelch and Thomas describe this as a "search for truth" where

the main approach to the theory of stress has been fashioned from polar definitions (1989: 7). As a direct consequence of being an intricate topic it is not unusual to read that, because of its "notorious vagueness", it is "fruitless to employ stress as more than a general term defining a broad range of phenomena" (Stephens, 1991: 334). These sentiments arise because the literature on stress is available to a wide range of study disciplines and occupations including psychologists, medical doctors and management professionals. "Stress wars" may well be an apt description. The historical development of stress has run in parallel with the medical interest and study into the effects of battle on the soldier. In the American Civil War the exceptional tension caused by battle was called 'soldier's heart', in World War I British pathologists called it "shell shock," in World War II it was termed "battle fatigue" and in the Vietnam War psychologists referred to it as "post traumatic stress disorder" (Darley et al., 1984: 447); the same symptom described with ever increasing complex language.

The definitional philosophy of this research work is based on transactional theory which supports the following notion:

(Stress is) a complex interaction amongst the environment, personality and the body ... that is an external environment puts demands on the nervous system which are mediated by the personality (the combination of desires, drives, preferences, background and upbringing) triggering complex biochemical reactions (Cooper et al., 1988: 198).

Stress is closely related to the relationship between the individual and the environment. People, when presented with a demand, constraint, pressure or opportunity, will react differently according to their psychological and

physiological makeup. Whether their reaction is anger, pain, anxiety, laughter or dissatisfaction depends on the mediating factors of their personality. The transactional style of definition recognises that stress is a disturbance arising from some imbalance within the person which causes tension and physical reaction. Ostell argues "people are not disturbed by situations per se but by the ways they appraise and react to situations" (1991: 11). Steptoe agrees, "despite reservations from some investigators most contemporary theories of stress are transactional in nature" (1991: 634). The basic properties of a transactional model are described by Gmelch and Thomas as:

1. No component of the model is independent of the other components of the model or of the model as a whole.
2. All components of the model have a constant reciprocal relationship such that one component does not simply act on another component and
3. Action in any component of the model has consequences for the other components of the model (1989: 10).

The Conceptual Model for this study accommodates the transactional definition of stress. Monet and Lazarus note that stress occurs when "external and/or internal demands tax or exceed the adaptive resources of the individual". They point out that stress has physiological, psychological and social manifestations and warn that ignoring any of these areas is unwise (1977: 45-57).

2.11 Burnout

Hatchard and Thomas (1986) trace the use of the term burnout to the drug culture era of the 1960s. By the mid-seventies the term had been popularised and had gained legitimacy through the work of Freudenberger,

Maslach and Pines (Hatchard and Thomas, 1986: 2). While there has been some debate on whether the condition is a myth or a reality, it does have a close relationship to stress and the two terms are often used synonymously. Its overuse can render it virtually useless and according to Farber is often used as:

... an accusation against uncaring professionals by disgruntled clients, an excuse by some professionals for half-hearted efforts; and personal failures, as an indication to others (as administrators) of the need for professional renewal and by others again as an impetus to abandon their field entirely (1983: 2).

When attempting to conceptualise the syndrome prior to suggesting a working definition, many authors (Mattingly, 1977; Cedoline, 1982; Kottkamp and Mansfield, 1985 and Knight, 1987) describe burnout as relevant to people working in the human service professions, where sufferers are usually deeply committed, put in long hours, find little time for relaxation and work with others who may well be "troubled" in some way. As a result of this contact professionals may suffer from feelings of emotional and physical exhaustion, cynicism, attempts to distance themselves from clients and an absence of personal accomplishment (Kottkamp and Mansfield, 1985: 29).

The Conceptual Model shows how important the Psychological Perspective is in insulating against or conducting stress because burnout has three predominant facets:

1. Emotional exhaustion
2. Depersonalisation and
3. Lack of personal accomplishment.

Each facet has its roots in the inner psychological life of the person. When a

person cannot rise above adversity, any one or all of the above three factors, may have played a decisive part. Hamburg et al. (1974) underscore the importance of the following: the maintenance of self-esteem, a sense of human dignity, a sense of group belonging and a feeling of being useful to others.

The importance of a strong psychological profile is vital because burnout has the ability to destroy self-esteem. The Conceptual Model proposed for this study firmly places the Psychological Perspective as the coupling between the other two perspectives. It can act as an insulator or conductor for the stress response. Greenberg (1984: 47) lists twenty causes of educator/administrator burnout.

1. Volume of work
2. Impact of external rewards on successful performance
3. Ease or difficulty of work
4. Existence of deadlines
5. Unsatisfactory benefit package
6. Internal communications
7. Job security
8. Intrinsic aspects of the job
9. Opportunities for advancement
10. Management concerns
11. Attitude towards supervision
12. Poor or inadequate physical environment
13. Pressure to perform, make deadlines
14. Time
15. Serving too many clients with varied personal problems
16. Physical habits
17. Personal or marital conflicts
18. Major life changes
19. Low self-esteem
20. Unexpressed feelings.

The Conceptual Model takes account of many of these in the three perspectives.

2.2 A DEFINITION OF STRESSORS

Those factors or events which occasion the stress response are called stressors. They may include "persons, circumstances, events or experiences which activate a complex sequence of psychological and physiological responses" (Lansbury and Spillane, 1983: 193). Selye calls stressors "agents or demands that evoke the patterned response" (1983: 10). Authors distinguish stressors under a number of categories. Lazarus describes stressors as environmental (heat/cold, physical injury) and psychological while Pearlin uses two categories which he calls life events and chronic strain (1989: 244).

Life events research has been very popular in the past thirty years and to some extent has become a metaphor for stress. The Holmes and Rahe Social Readjustment Rating Scale (1967) is a good example of using life events as stressors. Sociologists like Pearlin have some difficulty with such scales because many times these changes are an episodic segment, part of a long history. The loss of a home through foreclosure, or a jail sentence are not events that erupt suddenly. This scale may have utility in those cases of unplanned, undesired, uncontrolled and non-normative change (Pearlin, 1989: 244). Change is dependent on quality, and not on the assumption that change is categorically bad for people.

Chronic strains are another type of stressor and are defined as "the relatively enduring problems, conflicts and threats that many people face in their

daily lives" (Pearlin, 1989: 245). The number and diversity of these problems will make them difficult to measure. Pearlin divides chronic strains into five sub-headings:

1. Role overload. When demands exceed the individual's capacities.
2. Interpersonal conflicts. Difficulties between people interacting in complementary roles (wife/husband, worker/supervisor).
3. Inter-role conflict. Matching the demands of work and home life.
4. Role captivity. Working in a role that is not suitable, desirable or necessary.
5. Role restructuring. Alterations in long established patterns of expectation and interaction (1989: 245).

These role strains have significant implications in the Conceptual Model and are sound examples of possible stressors in the Workstyle Perspective.

2.21 Individual Variability

The vulnerability of the individual is a primary factor in deciding whether or not a stressor will affect a person. Lazarus comments that people react to the same stressor in different ways.

Even in severe disasters in which many are killed or left homeless and in which the whole structure of the community is disrupted or destroyed, there are still some individuals who appear comparatively undisturbed and who act in an effective fashion in spite of everything (1961: 48).

The truth of this statement can be witnessed each night on television news as we are taken to locations around the world where populations are totally disrupted and destroyed by war, famine or natural disaster. Feitler and Tokar maintain that "people perceive stressors idiosyncratically, that is, a situation that stresses one person will not do so to another" (1986: 286). The personality/temperament factor figures strongly for Hellriegel and his co-authors

and they rate the presence or absence of traits such as tolerance of ambiguity, introversion, extroversion, self-esteem and dogmatism as factors in whether an issue will be seen as a stressor (1989: 490). A useful list of relevant individual variables is provided by Payne under the headings of genetic, acquired and dispositional. In Table 5 (Sedgwick) details some of the more relevant variables.

Table 5

Stressors: Individual Variables

Genetic	Acquired	Dispositional
Physique	Social class	Trait anxiety
Constitution	Education	Type A Type B
Reactivity	Age	Self-image
Sex		Locus of control
Intelligence		Coping style
(1988: 209).		

Even from a young age we are a mixture of these variables. Sedgwick says that this is a result of "habits, attitudes, and prejudices acquired from our upbringing and experience" (1983: 21). We become fixed in our pattern of behaviour, our pattern of reaction and our assumptions of an events importance and this is known as our personality. Williams asserts that one major reason why a stressor causes concern in one individual and not in another is because of the individual's value system.

Part of this explanation lies in social values. By values I refer to what is defined socially as good, desirable and prized or as something to be eschewed (1960: 397-470).

Values regulate the effects of experience by regulating the meaning and importance of the experience (Pearlin, 1989: 249).

The Personality Perspective has enormous significance in this study and deserves a fuller explanation later in this chapter. Personality governs the level of personal reaction, the style of the reaction, duration and after effects. This perspective occupies the central position in the Conceptual Model and this researcher believes it acts as a "conductor or insulator" for the stress response. The model shows character, ethics, morality, humour and temperament as sub-factors. Pearlin uses the term "values" which clearly fits well with this model. As a sociologist, Pearlin maintains that important stressors do not exist in isolation from other problems. "The very integration of individuals' activities and relationships means that disruptions in one area of their lives serve to create other disruptions" (Pearlin, 1989: 248). This style of thinking matches the Conceptual Model offered for this study. With its interlocking circles and transactional approach the model's pivotal point is that life problems are linked. Work and home lives are difficult to separate, just as the mind and body are not totally separate entities.

2.22 Categorising Stressors in Management

Handy contemplates the dark side of organisational life:

In my worst moments I have thought that organisations were places designed to be run by sadists and staffed by masochists - and I'm not just talking about business, some of these things

happened in the holiest of places with the nicest of people. Why does it sometimes have to be so awful? (1992: 77).

By their very nature organisations are fertile grounds for tension and conflict and as Handy alludes such a statement need not be confined to organisations designed for profit. Even the most public spirited, socially orientated and altruistic organisations, do things to members which would never happen in private life. It is important therefore, to examine the range of possible stressors in management and attempt to categorise them in some way for as Cooper and Marshall state "in order to do something positive about organisational stressors it is important to be able to identify them" (1978: 81).

Adams typifies stressors under four basic types:

Type 1 Stressors	Recent organisational change events
Type 2 Stressors	Recent life change events
Type 3 Stressors	Ongoing stressful work conditions
Type 4 Stressors	Ongoing away from work stressful conditions

(1980: 188).

While each of these four has practical utility in this research Types 1 and 3 relate specifically to organisational stressors. Adams further explains Type 1 stressors as:

- * Major or frequent changes in policy instructions or procedures
- * Sudden increase in the pace of work
- * New supervisor
- * New subordinates
- * Major departmental reorganisation
- * New coordinator (1980: 188).

Type 3 Stressors relate to work conditions and include:

- * Too much to do and too little time
- * Others demands for the individual's time in conflict with each other
- * Fighting fires rather than working to a plan
- * No knowledge of or involvement in changes

- * Constant meetings
- * Management creates new priorities disrupting work
- * Lack of personal confidence (1980: 188).

French and Caplan’s studies detail a similar litany of stressors including:

- * Role ambiguity and conflict
- * Workload
- * Territoriality
- * Poor relationships and
- * Lack of participation (1972).

Authors including Cooper and Payne (1978: 83) place emphasis on organisational structure, organisational climate and relationships within the organisation as stressors. The Table below shows the contrasting characteristics of high and low levels of occupational stress.

Table 6

Characteristics of High and Low Levels of Occupational Stress

Low Level Occupational Stress	High Level Occupational Stress
Role clarity	Role ambiguity
Authority with responsibility	Authority imbalance
Moderate workload	Extremes of workload
Interaction and networking	Little interaction
Career goals set and achievable (Milstein and Farkas, 1988: 245).	Job insecurity

The Conceptual Model presented covers these central strands of stressors under the Lifestyle/Workstyle Perspective (employer expectations and demands, size of responsibility, hours worked, relations within the organisation and office working conditions) and the Psychological Perspective (job security, job advancement, study needs and reaction to change events). Gmelch and Thomas foreshadow the following refinement in defining stressors when they write:

Due to the multidimensionality and occupation uniqueness of stressors it would be inaccurate to represent one list of stressors as generic of all occupational stress. Each profession should be recognised for its unique demands and reflect its own multidimensionality in the stress construct (1989: 14).

Hence the need to discover those stressors relevant to the principal's role in the school.

2.23 Categorising Stressors in the Principal's Role

By their very nature schools are capable of being prolific grounds for stress and as Handy has already suggested, even schools that espouse the most Christian of values can easily become places where mistrust, dissatisfaction, conflict, and gossip destroy relationships and create multiple problems for school administration. This brief extract from the Primary Principal Contract of Brisbane Catholic Education gives some clues as to where stressors may come from:

The appointee shall have control of and be responsible for the efficient running of the school, the maintenance of academic standards and the supervision and control of staff and students at the school ... the appointee shall have no power of authority to increase staff unless specifically authorised to do so ... the appointee shall organise activities and coordinate programmes that are aimed at character building and personal development of students ... the appointee shall carry out all professional duties as principal in a competent and dedicated manner (Clause 1.3).

The term "role prisoner" is often used to describe how a principal's function quickly evolves into an overdemanding mix of "controller, motivator, persuader, disciplinarian, fire fighter, preserver of the culture, specialist and parent surrogate" (Gmelch and Swent, 1981: 16). Kefford simply states that

the basic problem is "doing the job is not humanly possible" (1987: 66). Conflicting and often poorly defined role statements "constitutes an amorphous mass of duties and obligations and principals find great difficulty in coming to grips with these" (Duignan, 1987: 51). Chapman, commenting on changes in Victoria since the 1980s, notes that the professional life of a principal has forever changed. This means that

The principal is probably more than ever involved in running a complex organisation with accountability for a maze of curricula, a teaching service which faces increasing frustration for promotion and advancement and responsibility for meeting the needs of students moving through the school's developmental system and those who are urged back into the schools (Willis, 1986: 26).

Many researchers (Gmelch and Swent, 1981; Bailey et al. 1987; Williamson and Campbell, 1987; Koff et al., 1988; Lyons, 1990) have produced various rank-order listings of stressors following surveys. These assist in understanding what precisely concerns principals. Koff et al. list 48 stressors in a rank ordered summary of their research. The top ten for these researchers are:

1. Forcing the resignation or dismissal of a teacher
2. Dealing with unsatisfactory professional performance
3. Involuntary transfer to another principalship
4. Preparing for a teacher strike
5. Refusal of a teacher to follow policies
6. Criticism in the press
7. Last week of the school year
8. Forced staff reduction
9. Legal action against a school
10. Assault on a staff member (1991: 4).

While a number of these best relate to a large secondary school, many are applicable in the primary setting. Gmelch and Swent also nominate ten

stressors for principals.

1. Complying with state and federal organisational rules and policies
2. Meetings taking up too much time
3. Gaining public approval and financial support for the school
4. Evaluating a staff member's performance
5. Resolving parent/school conflicts
6. Completing reports and paperwork on time
7. Participating in school activities outside normal working hours
8. Making decisions affecting the lives of individual people known
9. Being interrupted frequently by telephone calls
10. Too heavy a workload. One than cannot possibly be finished in a day (1981: 17).

A pattern appears to be emerging. Lyons prefers to categorise rather than rank order stressors. He chooses to list six categories of stressors:

1. Role conflict - central office directives and staff wishes often in conflict
2. Instructional leadership - insufficient attention to this is a source of concern
3. Problem solver/peacemaker's role - the resolution of other people's problems
4. High activity level - the enormous number of interpersonal contacts in a day
5. Time management - organising time effectively
6. External political stress - principals are held directly accountable for an individual's education (1990: 45).

Duignan maintains the dilemmas of the job come from three directions:

1. Pressures from outside the school
2. Pressures from within the school generally
3. Pressures from the ambiguous and conflicting nature of the administrative role (1987: 42).

Previous work by the present researcher reflects the themes above and indicates that, for Brisbane Catholic Education principals, the five highest ranked stressors were:

1. Dealing with staff incompetence
2. Coping with non cooperation from teachers
3. Conducting difficult parent interviews
4. Lack of time for class contact
5. Attending continual meetings away from school premises (Thornton, 1992: 80).

In all that has been presented above a central factor is the principal's responsibility for people and with that comes a number of dangerous side effects, not the least of which is health problems. "Responsibility for people is significantly more likely to lead toward coronary heart disease than responsibility to things" (Breslow and Buell, 1980).

The value of humour has already been pointed out and the satirical composition below is an appropriate way to conclude a very serious discussion on stressors in the administrator's role.

As nearly everyone knows, an administrator practically has nothing to do except to decide what is to be done, to tell someone to do it, to listen to reasons why it should not be done, why it should be done by somebody else, or why it should be done in a different way, to follow up to see if a thing has been done, to discover that it has not, to enquire why, to listen to excuses from the person who should have done it, to follow up again, to see if the thing has been done, only to discover it has been done incorrectly, to point out how it should have been done, to conclude that as long as it has been done it may as well be left as it is, to wonder if it's not time to get rid of a person who cannot do a thing right; to reflect that he probably has a wife and a large family and that certainly any successor would be just as bad, and maybe worse; to consider how much simpler and how much better the thing would have been done if one had done it oneself in the first place; to reflect sadly that one could have done it right in twenty minutes; and, as things turned out, one had to spend two days to find out how long it has taken three weeks for somebody else to do it wrong (Topics, 1993).

2.3 STRESS AND THE LIFESTYLE/WORKSTYLE PERSPECTIVE

This is the first of three sections to examine each of the three perspectives in the Conceptual Model. The Lifestyle/Workstyle Perspective is presented as one entity because as in life, it is impossible to neatly separate the two. People do not have a home persona and a work persona. It is impossible to come home and always completely forget about work issues, just as it is impossible to go to work during times of great family upheaval, arriving refreshed, eager and full of confidence and drive. Even the most mundane of matters - remembering to collect something on the way home or picking up only half the children at 4.00 p.m.- can intrude into each component of life. Pearlin maintains that "many stressful experiences do not spring out of a vacuum but typically can be traced back to surrounding social structures and people's locations within them" (1989: 242). The family unit or the home life of any person is a major social structure and Pearlin goes on to note that within such structures the incumbents of a particular role rarely act alone. These relatively stable relationships can become problematic and filled with conflict "producing considerable stress" (Pearlin, 1989: 242). Pearlin believes that not all stress researchers are interested in the structural context (Lifestyle/Workstyle Perspective) of the stress process. Many focus directly on potential stressors that reside in the individual's experience without regard to the possible origins of

the stressor. In any wholistic approach to understanding stress the focus must be on a comprehensive view.

Therefore the structural contexts of people's lives are not extraneous to the stress process but are fundamental to that process. They are the sources of hardship and privilege, threat and security, conflict and harmony (Pearlin, 1989: 242).

Families can be both a source of support or a source of stress (Woon, 1993: 9).

Families with children in difficult adolescence times will well know the pressures that must be brought to work.

Adams emphasises the importance of this perspective by listing the risk factors that affect personal health. He maintains that our daily choices have a great deal to do with our well-being. "Those who have positive, moderate, optimistic and confident outlooks are generally healthier than those who have negative, extreme, pessimistic and unconfident outlooks" (1989: 14). The point of Figure 6 (Adams) is that, while some health risks are beyond a person's direct control, the majority can be controlled with a degree of personal dedication and determination.

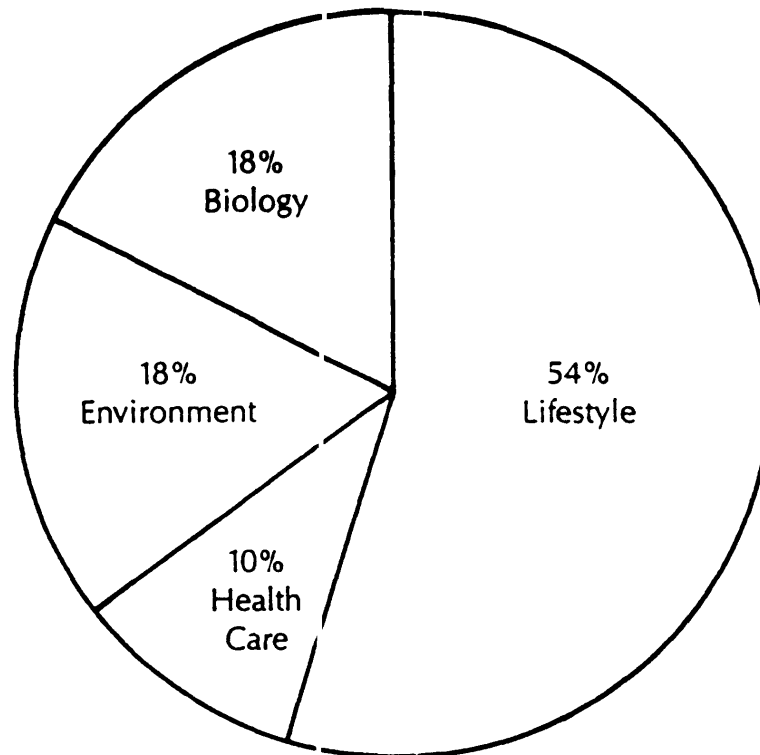


Figure 6
Risk Factors that Affect Health

Biological risks refers to hereditary factors, previous illnesses, accidents and abuses while the environmental risks can include pollution, noise, overcrowding and poor lighting. A greater percentage (54%) of all risks lie in the realm of the lifestyle which can be moderated by changing, deleting or increasing certain activities. This can be a powerful influence in lessening stress pressure. This is evidenced by the satirical yet salutary short story below which neatly sums up the importance of the Lifestyle/Workstyle Perspective.

The Murder of Grabwell Grommet

You may have heard the sad story of Grabwell Grommet - **the man who ignored his stress warning system.**

On the morning of his 42nd birthday, Grabwell awoke to the peal of particularly ominous thunder. Glancing out of the window with bleary eyes, he saw written in fiery letters across the sky, **SOMEONE IS TRYING TO KILL YOU GRABWELL GROMMET.** With shaking hands, Grabwell lit his first cigarette of the day. He didn't question the message. You don't question a message like that. His only question was, "Who?"

At breakfast, as he salted his fried eggs, he told his wife Gratia, "**Someone is trying to kill me!**". "Who?" she asked with horror. Grommet slowly stirred the cream and sugar into his coffee and shook his head. "I don't know".

Convinced though he was, Grommet couldn't go to the police with such a story. He decided that his only course was to go about his daily routine, and hope to somehow outwit his would be murderer. He tried to think on his drive to the office, but the traffic lanes occupied him wholly. Nor, once behind his desk, could he find a moment, what with jangling phones, urgent memos and the problems and decisions piling up as they did every day.

It wasn't until his second glass of wine at lunch that the full terror of his position struck him. It was all he could do to finish his Lasagne Milanese. "I can't panic", he said to himself, lighting his cigarette. "I simply must live my life as usual". So he worked until seven as usual, drove home as fast as usual, ate a hearty dinner as usual, had his two whiskies as usual, studied business reports as usual, had his two sleeping tablets as usual in order to get his usual six hours sleep.

As the days passed he manfully stuck to his routine. As the months went by, he began to take a perverse pleasure in his ability to survive. "Whoever is trying to get me", he'd say proudly to his wife, "hasn't got me yet. I'm too smart for him". "Oh please be careful," she'd reply, ladling a second helping of Beef Stroganoff.

His pride grew as he managed to go on living. But, as surely as it must come to all men, death came at last to Grabwell Grommet. It came at his desk on a particularly busy day. He was 53. His grief-stricken widow demanded a full autopsy. **But it only showed emphysema, arteriosclerosis, duodenal ulcers, cirrhosis of the liver, cardiac neurosis, a cerebravascular aneurism, pulmonary oedema, obesity, circulatory insufficiency, and a touch of cancer.** "How glad Grabwell would have been to know", said the widow smiling proudly through her tears, "that he died of natural causes" (Hoppe, 1973).

Grommet's excesses fall into each of the three perspectives, however, in the matter of his lifestyle, it is easy to see where his over-zealous approach to life and work steers him to certain tragedy. While this is an amusingly overstated and exaggerated case, it is one that contains fragments of truth for many principals. Grommet's choices are completely under his control and the importance of diet, exercise, sensible work hours, relaxation, and family demands have to be addressed with a degree of personal dedication. Grommet chose not to, and in time, paid the ultimate price.

Covey uses the term "sharpening the saw" to describe those activities directed at self that re-energise, renew, and re-enthuse a person's capacity for work and life. Covey describes four dimensions to this sharpening:

1. Physical dimension
2. Mental dimension
3. Spiritual dimension and
4. Social/emotional dimension (1990b: 158).

The mental and spiritual dimensions can assist in understanding how a balanced and temperate approach can assist principals to remain strong and alert. Covey presents the following suggestions as useful:

- | | |
|--------------------|---------------------------------|
| * Read books | * Become an independent scholar |
| * Keep a journal | * Listen to uplifting music |
| * Write creatively | * Read great literature |
| * Do puzzles | * Use meditation and prayer |
| * Start a hobby | * Find value in music and art |
| * Write poetry | * Reflect on quotations |
- (1990b: 158-160).

Not one of the above was part of Grommet's lifestyle. Strength in the Lifestyle/Workstyle Perspective comes not from money or muscle, but from balanced and carefully considered personal judgements.

2.31 Use of Support Groups

In developing coping strategies many authors (Adams, 1980; Willis, 1986; Gmelch, 1988b; Monterio, 1990) recommend the use of support groups to alleviate stress. Willis refers to such groups as "trusted others to whom the principal can turn to for advice and empathy" (1986: 30). Support groups should not be regarded as times to "talk shop" with colleagues. If they are to be of any lasting use they must include opportunities for constructive criticism, the analysis of problems and the opportunity to develop new perspectives. A common sense view would be that principals who have a strong social support network are healthier psychologically and in the Lifestyle/Workstyle Perspective. According to House social support is an:

... interpersonal transaction involving one or more of the following: (1) emotional concern (liking, love, empathy), (2) instrumental aid (goods or services), (3) information (about the environment), or (4) appraisal (information relevant to self evaluation) (1981: 38).

The Conceptual Model supports the claim that social support in both home and work settings is important. While many people can provide support, Katz and Kahn use the term "significant other people" to refer to those who will have the most impact on the principal (1978: 602).

Social support seems a straight forward, practical, simple and effective method of coping and bringing a degree of strength into the Lifestyle/Workstyle Perspective. However, "during times of stress most people have a tendency to withdraw from their support networks rather than use them actively" (Adams, 1989: 45). This claim is supported by Kyriacou who considers "the culture of

the school and a reluctance to admit to colleagues that one is having difficulties often means that teachers are unable to make use of such support" (1987: 149). Undoubtedly principals would exhibit similar behaviour. A strange paradox; when its needed most, the connections and personal transactions are withdrawn. The network, built up over a period of time, becomes lame and worthless. Part of the problem may be what Dolan et al. refer to as self focused coping (SFC). They define such a behavioural tendency as the inclination for people to blame themselves and keep to themselves in stressful situations (1992: 233).

... communicating about the situation might reveal personal failures or weaknesses that the individual wishes to conceal for fear of negative evaluation by others (1992: 238).

While these people may be highly affiliative they are unable to use their professional contacts to buffer them in times of stress. Sarros and Sarros define two parts to social support: sources and types. Sources include significant others close to the principal (deputy, coordinator, colleagues, senior teachers, family and friends) and types of support include listening, concern, trust, feedback, advice, information and time (1990: 9). These types of support are inconsequential if they only ever serve principals in buoyant times.

2.32 Size of Responsibility

Size of responsibility is another important sub-factor in this perspective and correlates with many stressors: including workload, working conditions, job demands and time management. "Low levels of control over one's job and excessive workload seem to be a particularly important combination in

heightening job related stress" (Krantz and Raisen, 1988: 7). Work conditions which have a high level of demand and low control are termed "high strain" situations. Sarros confirms this view and writes, "An excessive workload contributed to feelings of emotional exhaustion and personal accomplishment burnout in administrators" (1988b: 131). Workload and responsibility also figure highly in Welch et al. where the authors believe:

Faced with too much to do, with declining resources and decaying autonomy, the satisfactions associated with being a principal are being eroded ... The result - burned out principals (1982: 45).

Principals can often find themselves in these high strain situations where considerable responsibility and an onerous workload quickly use up available physical resources. The Job Strain Model, as presented by Krantz and Raisen (Figure 7), explores these issues in the working world.

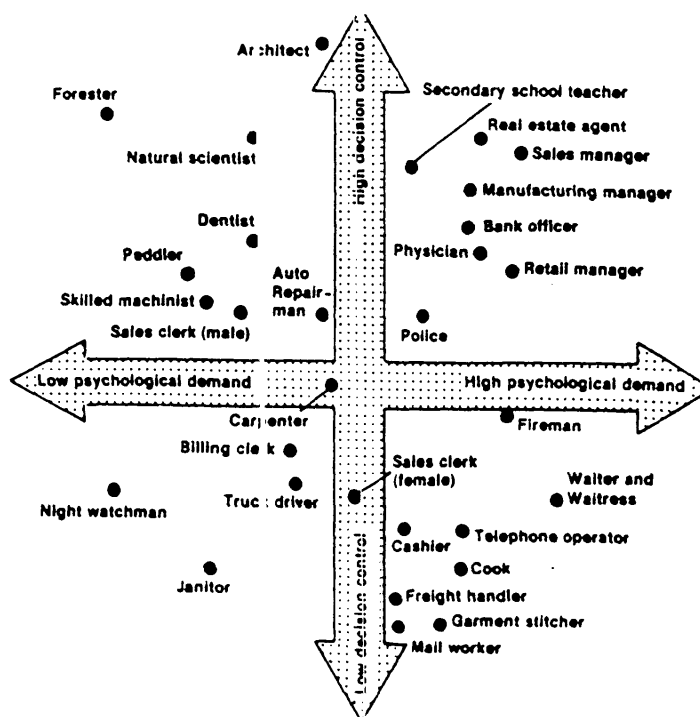


Figure 7
The Job Strain Model

Time management is another specific topic that receives substantial attention in the literature on occupational stress. While this topic has been well written about, Covey believes that there have been at least four generations of thinking on time management. The fourth generation is now emerging and recognises that "time management is really a misnomer - the challenge is not to manage time, but to manage ourselves" (1990: 150). Rather than focus on doing things within a time limit Covey puts the focus on enhancing relationships to accomplish results. Figure 8 demonstrates what Covey means by urgent and important.

		THE TIME MANAGEMENT MATRIX	
		Urgent	Not Urgent
Important	I		II
	ACTIVITIES: Crises Pressing problems Deadline-driven projects		ACTIVITIES: Prevention, PC activities Relationship building Recognizing new opportunities Planning, recreation
Not Important	III		IV
	ACTIVITIES: Interruptions, some calls Some mail, some reports Some meetings Proximate, pressing matters Popular activities		ACTIVITIES: Trivia, busy work Some mail Some phone calls Time wasters Pleasant activities

(1990: 151).

Figure 8
The Time Management Matrix

While everyone has Quadrant 1 activities to attend to this sector consumes the time of many people. They are the crisis managers, the problem minded people and the deadline driven producers (1990: 152). Managers and leaders who spend most of their time here become totally dominated by it and can only escape to Quadrant 4 for a fleeting respite. A brief glance at this time matrix will show that people in Quadrant 2 can achieve results which include: vision and perspective, balance, discipline, and control - all with few crises (1990: 154).

Studies of school principals by Sarros indicate that administrators perceive a shortage of time created by additional demands placed on them as a problem. Sarros quotes principals as saying, "so much to do, so little time; the lack of time to listen to the needs of staff; not enough fun time; pressure of deadlines" (1988b: 183). Covey's matrix may be a workable response to some of these reported case studies.

Within the Lifestyle/Workstyle Perspective size of responsibility is an important sub-factor. The literature strongly indicates that, when responsibility and control are not in balance, there is the possibility of emotional and health problems.

2.33 Relationships within the Organisation

This brief section is designed to highlight the importance of relationships in the Lifestyle/Workstyle Perspective especially if this claim by Welch et al. can

be supported: "a principal's interactions with people are almost always negative" (1982: 47). This statement may well be debated, however, it is clear that a principal is often placed as the "middle man" where he or she must make judgements between the collective interests of the school and the individual needs of parents or teachers (Santos, 1988b: 181). This balancing can often place the principal in stressful situations.

The principal often acts as the great harmoniser in delicate situations. Schools are places of high tension and drama where personal sensitivities can be easily offended. Caught in the middle or directing the traffic is the principal, and all around are demanding people. Houel and Godefroy suggest that no one will ever escape from difficult people and believe that there are three main types to contend with:

- * **The aggressors.** This category includes behaviour such as hostility, the desire to hurt, sarcasm, refusal to cooperate and arrogance. These people try to dominate, often insult and can be the self appointed experts who are driven by pride rather than any expertise.
- * **The complainers.** These people will go to great lengths not to find a solution and will refuse to accept others' enthusiasm for a solution. They are negative and believe in bad luck.
- * **The clams.** People who say nothing or who only talk about issues of a trivial nature offer little in group situations. They limit their conversation to quick acknowledgments that they are awake (a grunt or groan) and offer nothing more of substance when it is really called for in debate or decision making episodes (1994: 2).

Studies by Goodlad into the school as a workplace included results on more and less satisfying schools. The differences pertain primarily to the relationships among those associated with the school.

Principals in the top quartile of schools on the satisfaction criteria, compared to those on the bottom, were more supportive of teachers, teachers were more supportive of students, and parents felt closer to the teachers in their schools. The schools most representative of these characteristics appeared to be taking care of business; keeping problems under control, maintaining an ethos supportive of learning and the like (1983: 56).

The article rates trust between principal, teachers and community highly and it appears that the principal is a pivotal player in relationships. Goodlad suggests that when a principal gets his/her personal relationships in order similar patterns develop across the school. Panos is more direct:

It is the principal's actions that decide the educational climate in schools, and it is those actions that either enhance or reduce stress (1990: 126).

Principals not coping with their stress will quickly and easily pass this on to others by creating a negative work environment that reduces creativity and productivity. De Pree, writing from a general organisational perspective, says:

In most vital organisations, there is a common bond of interdependence, mutual interest, interlocking contributions and simple joy. Part of the art of leadership is to see that this common bond is maintained and strengthened, a task certainly requiring good communication (1989: 89).

This common bond is what is at the heart of good relationships and its application in schools should be immediately obvious.

For principals, the development of a positive school environment is a significant responsibility and everything must be done to encourage enthusiasm, energy, productive efforts and professional growth in the staff and parent body. The ACER Effective Schools Project found that, where working relationships were based on "collegiality, open communication, trust, support and help,

learning on the job, getting results, job satisfaction and high morale", the school organisational culture was in fine shape (1992: 82). Relationship considerations have enormous importance in this perspective and the potential to cause the principal real distress if they are not carefully cultivated. Giving positive feedback, recognition of others' achievements, valuing others' work and delegating responsibility are ways to foster positive relationships.

2.34 Family Demands and Partner Relationships

In this wholistic paradigm it is illogical to separate out work elements and family elements. These hold importance because, while marriage/partnership relationships may be "the most intimate, most satisfying, most enduring and growth producing of all human relationships, observation and experience can often tell a different story" (Covey, 1990: 111). Krantz and Raisen have studied spouse behaviour and heart disease and report that:

One aspect of home environment is the interaction between partners of a married couple, which can be a source of either stability or of frustration and conflict. A frustrating relationship can presumably augment the individual's overall stress load (1988: 6).

This sub-factor in the Lifestyle/Workstyle Perspective is well worth considering because of the emotional dependency close partners often have.

When we are dependent on the person with whom we are in conflict, both need and conflict are compounded. Love - hate overreactions, fight or flight tendencies, withdrawal, aggressiveness, bitterness, resentment and cold competition are some of the usual results (Covey, 1990: 112).

The Conceptual Model demonstrates what may happen when a person's relationships of the closest kind are in disarray. Even if this is for a temporary

time, and not indicative of a wider pattern, it has a distinct chance of causing stress in the worklife of the person. The wholistic approach acknowledges this and also the fact that it is impossible to find partners in permanent and close relationships who do not suffer from temporary upsets. This is called living, and it does not mean that lives are in shambles and divorce is imminent.

Families can also be sources of stress as well as sources of resilience. Many people place a deep investment in family and rightly place it as the central focus in their lives. Consider the mental anguish of the principal who knows that his/her adolescent child is erratic in behaviour and troublesome because of easy access to alcohol and drugs. Families suffer grief, rage, anger and guilt over many issues in daily life. It is not possible to leave intense problems behind on the way to work, devote total attention to the paying job, and refocus again on the drive home six hours later

2.35 Relaxation and Hobbies

These are typically called "after the event" activities but if they form a regular pattern and hold personal importance they can integrate into normal living and thus become "before the event" activities. They engage the mind and body in pursuits other than employment. Many coping taxonomies include relaxation and hobbies as important aspects to recovering from stress. Studies by Bailey, Fillos and Kelly found that principals favoured avocational and recreational activities as a way to reduce stress and included such pursuits as hobbies, mind diversions, recreational activities, avocations and special

accomplishments (1987: 80). Gmelch proposes seven coping categories with a total of 156 techniques to guard against stress. Of the seven categories the following best fit a relaxation/hobby focus:

- * Social having lunch, talking, playing cards
- * Physical boating, fishing, camping, running, sports
- * Intellectual study, reading, cultural events
- * Entertainment dinner, attending movies, watching TV
- * Personal playing music, gardening (1988: 227).

The frequency and thus importance of relaxation and hobbies is immediately obvious when five of the seven categories neatly fall into this way of alleviating stress.

Adams (1980) suggests that a healthy lifestyle, relaxation and physical exercise are good things to put into practice on a regular basis. In many ways these activities confirm the old adage that "prevention is better than cure" In busy lives, with competing demands and urgent family and workplace commitments to attend to, these preventions can easily be left behind.

When problems mount, and death, divorce, illness, job loss and other problems seem to threaten your sanity, balance and health, do something. Do anything but sit and moan. Walk, jog, swim, soak in a tub, take a sauna, see a movie, flirt, eat, read, argue, telephone your friends and talk. Talk a mile a minute, but talk (Culligan and Sedlacek, 1980: 167).

Prevention should always be the primary focus and not a fill-in activity. Principals need to acknowledge the benefits and make a personal decision to fuse relaxation and hobbies into a normal lifestyle pattern. Within the Conceptual Model these style of activities are the "great balancers". Their preventative powers are enormous and they can be easily applied at any stage

of life.

2.36 Spiritual and Meditative Resources

While stress research has gained momentum in the past forty years and the effects of distress and burnout become clearer, Western culture continues at a tempo that ensures disorders created by stress remain a major medical and social problem. Perhaps more self-directed techniques, as practised in other cultures for centuries, may be of assistance in our fast paced lives. There are many variations of such self-control procedures including meditation, yoga, progressive muscle relaxation, biofeedback, and autogenic training. Culligan and Sedlacek advocate their use but offer a cautionary note:

The increasing popularity of all these techniques, plus their physical and mental effects, demonstrates that they are fulfilling a need. We would like to offer one cautionary note on any technique that has its origins in religion or mysticism and implies a disregard for the physical body. While it might be helpful or necessary for some to lead the ascetic life, it does have its limitations for the general physical as well as mental health of people and society at large (1980: 178).

Meditation has been used in societies throughout history to alter consciousness in a way that is generally perceived as beneficial. Meditation allows people to limit the reception of outside stimuli and is usually practised in a quiet environment. Proponents of meditation claim that it:

- * can reduce the amount of stress people experience
 - * can help people handle tasks in a more efficient manner
 - * has anti-addictive properties
 - * lessens irritability and depression and
 - * can improve self-development and physical coordination
- (Darley et al. 1984: 140).

Meditation also has detractors who claim it can produce temporary discomfort

and that it is a technique which requires careful training and ongoing guidance. Some forms of Eastern meditation are not suitable for many Western cultures.

Darley et al. caution:

Unless one studies under the guidance of an expert instructor who is trained to impart a traditional form of meditation with great care, it is safest to use those methods which have been studied and found to be appropriate for the average person (1984: 142).

For the average practising principal, serious traditional Eastern meditation may not be much of an option for a variety of reasons, however, there are some important and practical advantages that can be adopted and adapted into the Lifestyle Perspective. Some time each day, spent in the absence of outside distractions focusing on relaxation and peace of mind, using controlled breathing and muscle relaxation, may well be a serviceable medium for some people. In rushed and chaotic days, with pressing home problems and little time for oneself it is easy to see the value in ten to fifteen minutes spent thus.

Another very private area of personal life, and one not covered heavily in the stress literature is attention to the spiritual dimension of life. Many ordinary, working people find great strength, renewed commitment and value in the regular practice of faith or personal spirituality. Be it through formal religion or of a more individual nature, it can reach the centre of life, uplift and inspire in times of great stress. This is a very individual habit as recognised in people's devotion to scriptures, meditation, prayer, religious literature, music, nature, service to others, community gatherings and socials. Covey believes the benefits to leaders who have a developed spiritual dimension are great because

their lives are based on values.

Even though our goals, roles and daily activities represent our values, they are not the same. Values are timeless. They transcend roles, goals and activities - they give meaning to them. We are not so much developing our values through spiritual activities as we are discovering them. We will find ways of applying our values that we weren't aware of before (1990b: 160).

There can be no doubt that such activity requires an investment of time and in Covey's Time Matrix such pursuits would be Quadrant 2 activity - not urgent but important. As with many things in life, these are the precisely the types of activities that are first to go when principals are faced with choices of a more pressing nature. Along with relaxation and hobbies, attention to spiritual needs and meditation help balance activities in the Lifestyle/Workstyle Perspective. In a holistic model they are not "time out" activities but should be regarded as "time in" activities. Some of the greatest leaders of our time have used their spiritual resources to see them through and show others their true strength and character. People like Martin Luther King Jr., Victor Frankl, Gandhi and others show their character and values to those who follow them through their attention to the spiritual side of life.

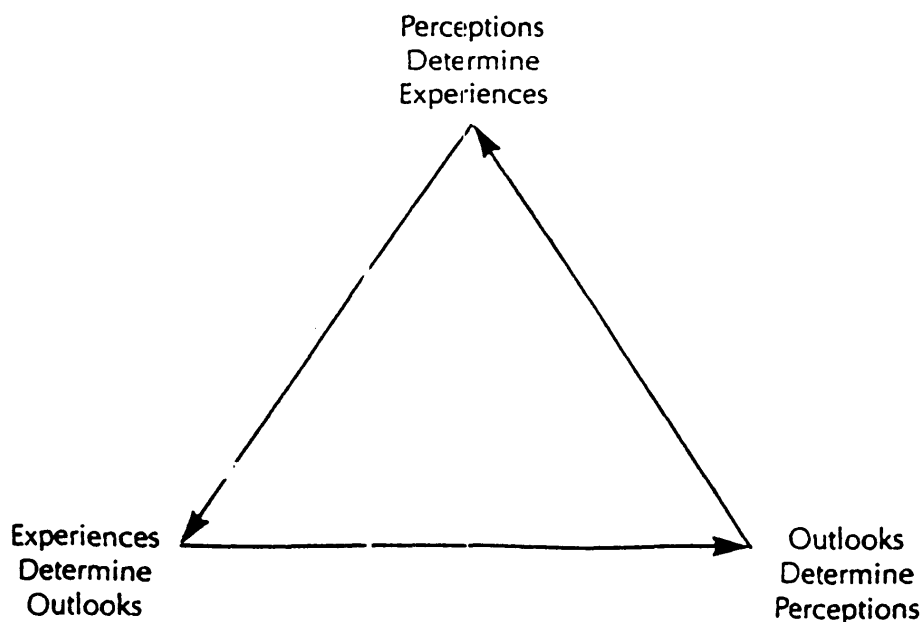
2.4 STRESS AND THE PSYCHOLOGICAL PERSPECTIVE

This is the second of three sections to examine the Conceptual Model in greater detail. The Psychological Perspective embodies another domain that is rich in diversity and fascinating in depth. While the body's reaction to physiological change is relatively limited the subtleties of psychological expression are richly varied (Karpman, 1989: 57). Indeed, our range of emotional responses to stress can include any one, or a combination of anxiety, tension, nervousness, frustration, aggression, irritability, apathy, boredom, depression, joy, laughter, anger fear, satisfaction, impatience or enthusiasm. Trying to understand the workings of the mind is indeed a perplexing task. Knight reflects on such issues and regards its study as more philosophical than scientific (1987: 76). Our thoughts are our most private possessions, and even the owner can be forgiven for not discerning why he or she is feeling a certain way. Stress, personality, mental health, the psychological outlook and temperament are closely linked. This section of the literature review is based on this and the following assumptions:

- * The Psychological Perspective may not be the "key" to understanding stress but in this holistic study it assumes a pivotal position, hence its placement on the model at the convergence of the other two perspectives.**
- * The researcher regards this perspective not as the "key" perspective but as the one that allows stress from wherever it comes from to be conducted into, or insulated away from the person.**

- * **The Psychological Perspective has a number of sub-factors and an understanding of these for persons in stressful management situations is a definite advantage.**
- * **While it is a separate and distinct area of study in a holistic sense it is very difficult to consider and write about it as such. Monterio (1990: 80) contends that every physiological change is accompanied by a change in the emotional state and vice versa. Biddle and Fox (1989) talk about a "health psychology".**

Adams believes strongly in the "self fulfilling prophecy" theory where people who have optimistic outlooks and who feel they are in charge of their lives will remain strong and healthy. Conversely people who have negative and pessimistic outlooks lead to their becoming what they think about (1989: 15). A robust psychological outlook is important and Adams believes that people can find it and work towards it through Figure 9:



(Adams, 1990: 44).

Figure 9
Relationships Among Perceptions, Experiences and Outlooks

Perceptions (what problems we expect to find) determine experiences, experiences (beliefs and attitudes that are formed) determine outlooks and outlooks (self-directed, optimistic, positive, empowered, negative or pessimistic) determine perceptions. In a rather elementary, cyclical way Adams points out that to be successful in any way with stress control it is highly likely that the person may have to break the cycle or it becomes self-fulfilling and self-reinforcing. The addition of new perceptions will create an improved outlook. This is an uncomplicated theory and worthy of comment, but one that becomes complicated in the practice of life, where we are conditioned by our genetic makeup, social and cultural factors.

Reznick focuses on psychological responses and divides them into negative and positive tensions. It is usual for people to regard tension as undesirable or unpleasant, however it may well be positive, enabling difficult tasks to be accomplished with efficiency and speed (1989: 219). The challenge for each person is to find the mental resources to turn as many tensions as possible into a positive tone. The concept of a "problem" helps to explain why certain situations prove stressful for some and not others. A problem can be defined as a situation in which there is a disparity between what a person wants to happen - or demands should happen - and what is actually happening, with no immediate way of removing the disparity (Ostell, 1991: 12). Any situation can become a problem if it is at odds with personal beliefs. Ostell maintains that it is most often not the actual problem, but the perceived costs and the disparity, that causes the distress. He defines psychological distress as:

... a state of affairs which arises when people perceive a situation as being a problem which has significant costs for them and they react in such a way as to tax or exceed their coping resources (1991: 12).

In this study of the Psychological Perspective the sub-factor of personality and temperament assumes central importance because it is intimately related to many reactions including temper, avoidance behaviours, motivation, sense of humour, character, ethics and personal morality.

2.41 Personality and Temperament

As a sub-factor personality is extremely difficult to measure. Its definition however is somewhat easier to understand. Sedgwick maintains that even from a young age we are a mixture of "habits, attitudes and prejudices acquired from our upbringing and experience. We become fixed in our behaviour and our pattern of reaction to things around us is known as personality" (1983: 21). The importance of personality in stress literature cannot be understated, especially from a sociologist's perspective where personality and coping behaviours are closely linked. Fleishman describes personality as "general dispositions or orientations that are relevant in a variety of situations" (1984: 231). This general theme also suits Darley et al. who submit that personality "is the organised and distinctive pattern of behaviour that characterises an individual's adaptation to a situation and endures over time" (1984: 409). This distinctiveness enables us to distinguish one individual from another and makes any study of personality rich in theories about how and why we behave in

certain ways. In the study of stress, coverage of the personality angle is vital because responses to situations by different principals will always be varied and subject to the dictates of personality and temperament.

Describing personality traits is another perplexing task and authors use a variety of terms to describe what they mean by traits. Hellreigrel et al. list these traits that can be related to the stress reaction:

- * Self-esteem
- * Tolerance for ambiguity
- * Introversion/Extroversion and
- * Dogmatism (1989: 490).

Cattell and Kline employ 16 source traits with a high score/low score description for each trait. The low score description is on the left and the reverse high score to the right:

Reserved, detached, critical, aloof	Outgoing, warm, participative
Dull intelligence	Bright intelligence
Emotionally less stable, easily upset	Emotionally stable, mature
Humble, mild, docile	Assertive, aggressive, stubborn
Sober, serious	Enthusiastic, happy, eager
Expedient	Moral strength, staid
Shy, timid, threat sensitive	Venturesome, socially bold
Tough minded, self-reliant	Sensitive, over-protected
Trusting, accepting	Suspicious, hard to fool
Practical, down to earth	Imaginative, absent minded
Forthright and genuine	Astute, polished
Self-assured, placid, secure	Insecure, worrying, troubled
Conservative, traditional	Liberal, free thinking
Follower, group dependant	Self-sufficient, resourceful
Undisciplined, follows urges	Controlled, will-power
Relaxed and composed	Tense, frustrated, driven

(1977: 44).

Dolan et al. note that personality traits or behavioural styles play a role in the development of hypertension. They include: lack of assertiveness, lack of

social competence, inhibited power motivation and suppression of emotions as factors (1992: 233). Their studies were conducted on male college students and used Blood Pressure (BP) monitoring devices to test the hypothesis that repressive coping styles lead to higher BP readings. Fleishman identifies several important personality traits in his studies including mastery, denial, and self-esteem (1984: 232). There are many personality type tests that have been developed to identify personal traits including the Myers-Briggs Type Indicator and the Enneagram. The Enneagram represents a journey into self and can bring the participant a whole new understanding of one's personality. It is based on nine personality types and each one is identified in a negative way although each number type has positive characteristics. The investigation of the Enneagram begins with the study of each number type according to its specific avoidance.

- Type No. 1 Ones avoid personal anger and expressing anger to others.
- Type No. 2 Twos avoid recognising personal needs and are preoccupied in serving others' needs. They do not admit to needing help and take pride in helping others.
- Type No. 3 Threes avoid failure. A three will be driven to success.
- Type No. 4 Fours avoid ordinariness and strive to be special. A four will try to be unique at all times
- Type No. 5 Fives avoid emptiness and are preoccupied with increasing knowledge through personal efforts. In this pursuit a five shares little and is usually a poor socialiser.
- Type No. 6 Sixes avoid deviance and see life as being governed by rules and norms. A six will be preoccupied with rules and authority and will value loyalty to the group.
- Type No. 7 Sevens avoid pain and are optimistic, fun loving persons. A seven will fail to see pain or distress in others and will fail to carry out what they have planned because of the discomfort involved in the execution.
- Type No. 8 Eights avoid weakness and take glory in being seen as a strong person. Life for an eight is a struggle for what is right and a battle against injustice.
- Type No. 9 Nines avoid conflict and will feel uncomfortable with any group tension or lack of harmony. Peace is vital at all costs as is personal

tranquillity (Beesing et al., 1984: 11-13).

These types of instruments are gaining in popularity because they can allow people to be matched to jobs that suit their personality. Regular and formal inservice of principals along these lines is not conducted but the benefits of such may well warrant future attention. As Darley et al. write:

Some people enjoy stress and ought to have jobs in which they will be presented with challenging tasks; others would fall apart in a job with constant stress, challenging or not (1984: 430).

Another form of personality or trait categorisation that has provided much debate over the past decades and has an enormous amount of literature devoted to it is Type A/Type B personality casting. While its use may be in the descendant at the current time, it deserves attention in this literature review because its application is still widely argued and links are drawn to it and disease by researchers such as Eysenck (1988).

2.42 Type A and Type B Personality Theory

Type A behaviour pattern (T_A) was introduced in the 1950s as a complex clinical syndrome believed to be related to coronary heart disease (CHD). Friedman and Rosenman believe that "persons chronically struggling against time, events and other people were believed to be at greater risk for CHD" (Thorsen and Powell, 1992: 595). Medically, such behaviours were believed to result in:

- * Chronic overstimulation of the sympathetic nervous system

- * Elevated catecholamines and corticosteroids
- * Increased blood pressure and heart rate
- * Arterial constriction and
- * The release of fatty acids (Thorsen and Powell, 1992: 595).

Friedman and Rosenman were so convinced by their findings that they stated in the introduction to their book:

In the absence of Type A behaviour patterns, coronary heart disease almost never occurs before seventy years of age, regardless of the fatty foods eaten, the cigarettes smoked or the lack of exercise. But when this behaviour pattern is present, CHD can easily erupt in the thirties and forties (1974: Introduction).

TA behaviour patterns occur in individuals who are "engaged in a relatively chronic struggle to do more and more, in less and less time, often in competition with other people or opposing forces in the environment" (Rosenman and Chesney, 1982: 549). Cooper et al. say that TA personalities are driven, obsessed with time, unfulfilled by accomplishments and unable to relax while TB personalities are relaxed, unhurried and mellow (1988: 201). Sedgwick describes the TB personality as:

... content to take things as they come, working away at tasks in a steady manner, reluctant to do more than one thing at a time and they are relaxed and non-competitive (1983: 22).

Adams provides examples of TA and TB reactions displaying themselves in ordinary life situations such as behaviour in a traffic jam or standing in line at a bank. Losing temper, cursing and becoming verbally or physically angry will do little to speed up the line, but it may well speed up the heart attack (1990: 48).

TA and TB personality casting is a contentious issue and while there was initially much enthusiasm in medical circles for this construct there are many who now take a more sceptical and balanced view of TA and CHD links.

Karpman agrees:

The early, impressive indications that TA behaviour was an independent risk factor for CHD is now regarded as misleading by many scientists who work in the field. The character of stresses that influence the development of CHD appear to be far more complex than previously thought, and cannot therefore be divided simply into TA and TB categories (1989: 61).

Research into TA behaviour continues and Ivanevich and Matteson have developed an integration model of TA behaviour and stress. They have worked on this theoretical framework to focus, deepen and integrate understandings on TA behaviour. The Figure below shows some similarity to the Conceptual Model for this study in that the response phase shares a significant resemblance to the three perspectives.

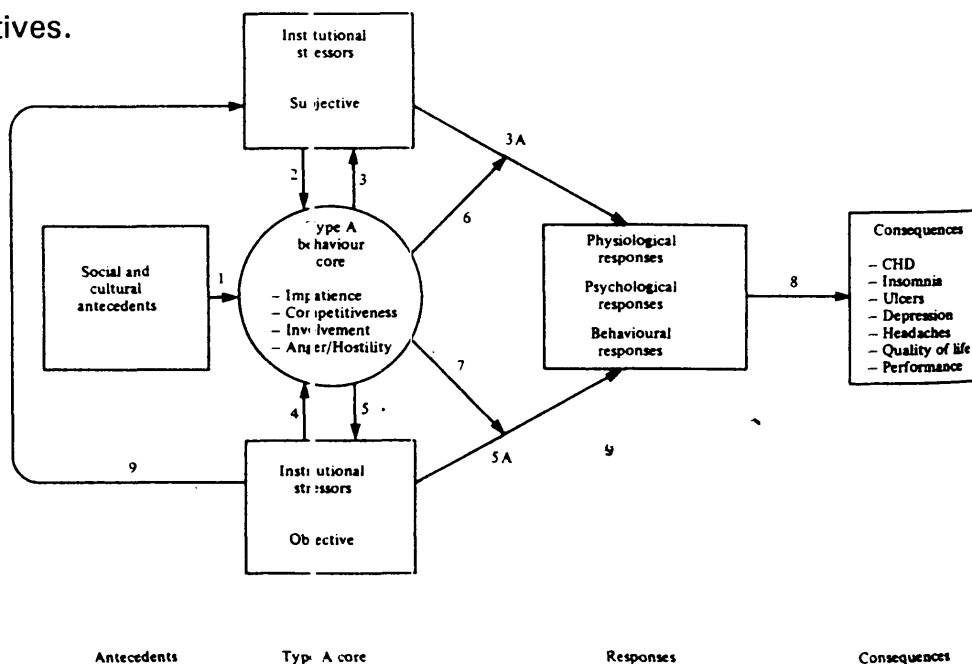


Figure 10
Integration Model of TA Behaviour and Stress

Figure 10 is presented because as Thorsen and Powell state "despite confusion and controversy, there is clearly something worthy about this elusive, multi-dimensional syndrome called Type A that deserves enquiry" (1992: 601). For these researchers the way TA is viewed over the years has changed with new knowledge. It is not regarded as a homogeneous trait-like construct that can be assessed on one occasion and remain stable over future years.

2.43 Practised Avoidance Behaviours

The Psychological Perspective can be further understood by examining the behaviour variables that mediate a person's response to stressful situations. Studies by Holahan and Moos (1987) reported associations between the "easy-going" personality and (a) better psychological health and (b) the tendency to rely less on avoidance coping responses. Sedgwick claims that we should not avoid stress but that it should be understood and, when appropriate, limited by the use of avoidance behaviours. All people develop coping mechanisms when faced with situations that need to be avoided. It is possible to reduce the impact of a particular problem by using one or more of the following methods:

- * **Rationalisation.** People can rationalise failure and avoid censure by believing that the original problem lies elsewhere and not with them. This is probably the most common avoidance behaviour.
- * **Avoidance.** By simply not confronting the issue, person, phone call, letter or event people can defer any expected problems and discomfort. While expedient, it is only temporary and the challenge may have to be faced.
- * **Denial.** This is regarded as rather dangerous because in doing so the person distorts reality. It is commonly heard in the phrase "it couldn't happen to me" and is often the sign of a fool-hardy character.
- * **Repression.** Stress is forced into the subconscious and buried there,

usually under the welter of day-to-day activities. Easier activities are handled first.

- * **Projection.** Frequently used and often dangerously so by people who put their own stress on to someone else at home or at work. In an office situation a manager may transfer his or her stress to a work associate by being unduly demanding and critical.
- * **Obsessive behaviours.** A ritual, personal behaviour may be effective in combating stress but it can become very distracting. Obsessive behaviours may also be passive; not noticed by other people. This is not necessarily a poor option.
- * **Reaction formation.** The development of an opposite attitude to that felt internally. Often displayed in people who denounce something publicly but are obsessed by it privately.
- * **Realisation.** The ability to see a problem in its true perspective. Logical assessment without exaggeration. A very positive coping strategy.
- * **Acceptance.** Stress can be reduced and avoided when a person knows they can cope with the problem.
- * **Compensation.** The ability to accept stress in one situation (work) and look for comfort, relaxation and satisfaction elsewhere (home). This is perhaps the best avoidance behaviour of all (Sedgwick, 1983: 97-99).

Within the Psychological Perspective these are exceedingly important considerations. Psychologists would regard some of these as healthier options than others. Some of these would be advocated (realisation, acceptance and compensation) and others considered inappropriate (denial). It is important to note that as humans we all practise each of the above behaviours.

In school administration Lemley has suggested ten basic avoidance behaviour patterns that a principal may use when confronted by threatening events.

1. Reducing the amount of time devoted to important tasks
2. Redefining ownership and shifting boundaries to escape ownership
3. Blocking out new information

4. Engaging in superficial involvement
5. Giving up
6. Practising cynicism
7. Acting depersonalised or detached
8. Wasting time
9. Using inappropriate humour and
10. Being unavailable or inaccessible (1987: 135-137).

Lemley believes that chronic difficulties always begin with minor shifts in behaviour and he cautions administrators to be aware of subtle changes to ensure these ten signs don't become a habitual part of a principal's leadership skills (1987: 137).

Avoidance behaviours can be easily masked and justified by the principal involved, so much so that they become part of the character. Principals need to recognise what avoidance behaviours they are prone to and then genuinely assess whether such traits are supporting their development or hindering professional growth. The Conceptual Model would support the claim that principals who buffer stress using what Sedgwick describes as acceptance, realisation and compensation, and who know the personal solutions to Lemley's ten administrative behaviour problems, will insulate themselves effectively against stress. Conversely, those who use inappropriate avoidance techniques and who regularly fail to lift themselves out of the common administrative behaviour problems, will inevitably and surely conduct stress into themselves. Practised avoidance behaviours are closely tied to personality traits.

2.44 Sense of Humour and Fun

Knight maintains that "it is a rare and precious gift to be able to laugh at yourself" (1987: 205). To this should be added the ability to laugh with others. The role of humour in school administration appears to have received little research attention, which is somewhat surprising given its ability to relax people in social and business situations. Goodson believes that humour and schools don't mix and writes:

Schools are not places where laughter and fun are readily accepted. In fact you could define schools as social mechanisms concerned with the replacement of fun by seriousness, and plagued by work. In general, the teacher is expected to project a rather grim and professional image if he or she is really to teach (1991: 75).

Houel and Godefroy concur with this assessment and suggest that some people make a conscious effort to take things seriously because it makes them more important (1994: 96). Other authors dispute this claim and characterise schools as places where humour and fun occur spontaneously. Dardick encourages educators to see the lighter side to problems thereby taking the edge off potentially depressing situations (1990: 32-34). Jansen regards authentic humour in schools as a valuable but basically unexamined topic. She sees humour as assisting people in multifaceted ways and uses the following metaphors to describe its qualities

Shield	Providing a protective shield, a means of self-defence and a way to bounce back after being hurt or defeated.
Safety valve	When dealing in crisis management all day humour can be used to hit back and make things more light hearted.
Counter balance	Must education be regarded as all that serious all the time?

Humour can provide some equilibrium.

- Adhesive** Humour has the ability to bond groups and build up strong relationships. Humour is wonderful in work teams to strengthen spirit.
- Spark** Humour can connect people and establish communication across all ages and gender. It can also provide a bridge to understanding between two people seemingly at odds.
- Razor** It can scrape off outer layers of protective defences in people by deflating pretentious behaviour. A certain amount of good natured ridicule reduces the tendency to pomposity.
- Wings** Humour has the ability to transcend the mundane and reach new creative and alternative perspectives in schools (1993: 13-14).

A note of caution is provided by Lemley who maintains that inappropriate humour can be hurtful and dangerous. People who resort to inappropriate humour (sarcasm):

...may see themselves as clever, witty and even imaginative. The tastelessness of inappropriate humour is undetected by the user and is actually a cover up (1987: 137).

While the administration of schools is an earnest business, schools are places tailor made for the opportunity to laugh with others in healthy ways. Humour can be an immensely liberating force. Within the Psychological Perspective the role of humour as part of a person's "buffering system" is a precious medium. Principals who have an appropriate and mature sense of humour and fun will find themselves better placed to withstand the constant seriousness of schools. Jansen believes humour can:

... relieve our stresses, diffuse a situation, restore our equilibrium, promote trust and human bonding, deflate our pomposity and lift us out of the every day (1993: 14).

A sense of humour can assist in dealing with difficult people because it can take the drama out of situations. Schools can be places of high drama when a teacher's fragile sense of influence is offended by the principal. Humour can neutralise delicate situations by:

- * Allowing a principal to say NO without offending the other party
- * Allowing a principal to reformulate ideas and break out of a preset pattern
- * Releasing tension after long hours at the job
- * Opening up new avenues of thinking in situations that have reached an impasse because people have adopted entrenched positions
- * Reaching people who have turned a deaf ear by attracting their attention
- * Overcoming those occasions of tension because of age, race, education, social standing and diverse interests and
- * Relaxing people in public situations and capturing their attention (Houel and Godefroy, 1994: 96).

These examples show that it is a precious means of ensuring prosperous interpersonal relations. Principals find themselves caught in a web of relations and often act in a mediator's position. While it is flippant to suggest humour will solve everything there are times when it can effectively distance the principal and allow parties to revive a spirit of cooperation leading to an acceptable outcome. If indeed it can do all these things, and principals neglect to actively use it, then educational administration will be done a great disservice. It is one of the useful "balancers" of the Psychological Perspective.

2.45 Character, Ethics and Morality

Crump asks if a person has risen to a position of power, can it be assumed that he or she is particularly moral or ethical, or astute in communicating moral values? (1993: 72). In situations full of human

complexities, dependencies and frailties, what must be remembered is that values are manifested by what people do to other people. The character, ethics and morality of a person are tightly bound together. Covey's research identifies the character ethic as the basis of any success in any walk of life. Included, in his foundations of success are qualities including; integrity, humility, fidelity, temperance, courage, justice, patience, industry, simplicity, courtesy and modesty (1990: 18). Kefford offers this opinion on a principal's personal qualities:

The principal must be a well-balanced person, with a secure self-image, and a confidence based on an inner strength of character, and a willingness to accept criticism. He or she, must be sensitive to, and tolerant of others and be honest and fair in all dealings. All of these qualities are linked to intelligence, judgement, tough mindedness and resilience (1987: 66).

To be clear, Kefford regards principals as more than competent or senior teachers. An essential quality is the self-possession that comes from an inner strength of character. Each day, decisions are made which affect the lives of others in some way, be it substantial or modest. Awarding a teaching contract is an increasingly interesting real life case where prestige and money are involved as well as the possible test of character in selecting the foremost candidate. Evers (1987) lists five issues related to the moral dimension of leadership:

- * Most decisions made by leaders that have consequences for others have a moral dimension.
- * Moral knowledge is not a separate or distinct form of knowledge.
- * Leaders and participating individuals should be open to moral appraisal.
- * Educative leaders must create and promote learning throughout all levels

of their organisation.

- * To be educative means to promote enquiry, value problem solving, welcome criticism and encourage participation.

Covey spends some time drawing distinctions between the character ethic and the personality ethic. The former is something that has emerged in the past thirty years and exhibits itself in popular sayings such as "Your attitude determines your altitude" and "Smiling wins more friends than frowning" and so on. For Covey it is often manipulative and deceptive.

Reference to the character ethic became mostly lip service; the basic thrust was quick fix influence techniques, power strategies, communication skills and positive attitudes (1990: 19).

Covey does not regard these techniques as unessential but calls them signs of "secondary greatness". Primary greatness is found in strength of character and ethical behaviour at all times. If this is missing then no technique can compensate and before long people will see through the veneer. Deep integrity and fundamental character strength lead to long term success. These issues are things that simply can't be read and written about. Block earnestly believes that:

The hardest thing for any of us is to live by the rules we create. It's difficult enough to live by the rules others create. It is brutal and fierce to live by the rules that we create (1990: 105).

Kouzes and Posner report on studies by O'Reilly who investigated the credibility of management in several companies. Using the criteria of trustworthiness, expertise and dynamism O'Reilly examined relationships

between these three qualities and employee commitment on the basis of shared values. This is called "moral involvement". He found that when top management is perceived to have low moral involvement employees are more likely to:

- * Produce only when watched
- * Be motivated only by money
- * Say good things about the organisation at work but think differently in private
- * Consider looking for another job in tough times (1990: 22).

For school leaders an atmosphere marked with such spirit would signify declining morale, poor relationships, power struggles, little pride, no vision and lack of loyalty. A truly lamentable situation which would take an immense effort to turn around.

Tannock provides a list of ten qualities for principals in Catholic schools. Many of these can be related to character, ethics and morality, however, under "personal characteristics" he becomes quite specific and includes the following:

... honesty and openness, intelligence and creativity, a sense of humour and an optimistic outlook on life, a strength of character, perfectionist aspirations and a good personal presentation (1991: 1).

Principals with strong character, sound ethics and fine morality will find that these qualities act as a buffer in times of great stress. People recognise the principal for who he or she is. If others see signs of quality they are far more inclined to be forgiving of mistakes, far more agreeable to take the harder course and far more understanding of the personal pressures on the principal. They will be more inclined to act as one and support the leader in times of change or

challenge. One might consider the damaging alternative if this were not the case and the leader was judged by others to be of shallow character with mediocre ethics.

2.46 Reaction to Change Events

- | | |
|--------------------------------------|----------------------------|
| * It's not been done that way before | * It's not part of our job |
| * It won't work | * There's not enough money |
| * We're too small for that | * Why start now? |
| * It needs more study | * It's not our problem |
| * We can't do everything at once | * Let's form a committee |
| * Too much paperwork | * Too academic |
| * Too early (or late) | * What about the union? |

This small selection of possible negative responses to change events is enough to show that for a principal the management of change and the personal reaction to change are decisive events. In an institution as sizeable as the education system multiple forces impact on an individual school from a myriad of angles including government, business, media, system authorities, parents, teacher unions, other schools and children. Some calls for change are quite direct and made by people devoted to the school. Other forces of change can be indirect and brought about as a result of government policy, funding issues or media pressure. Change may be enthusiastically initiated by the principal, or reluctantly accepted as necessary after proposals from school interest groups. Successful planned change requires whole-hearted staff support and widespread parental acceptance. The administrative implications of planned change are heavy. Wherever the calls come from, and in whatever form, it is clear that the change agent in a school is the principal. Miller proposes some forces inhibiting

change:

- * Traditionalism
- * Laziness
- * Fear and insecurity
- * Administrative reticence
- * Rut of experience
- * Educational bureaucracy
- * Insufficient finance
- * Community indifference
- * Inadequate knowledge about the process of change
- * Inadequate teacher preparation (1967: 2).

Unplanned change also requires sound administrative practice because change affects people and, when poorly communicated, timing and procedures can be easily misinterpreted. Rogers (1962) classifies principals in five categories according to how they take up change:

- | | | |
|----|-----------------------------|-------|
| 1. | Innovators (venturesome) | 2.5% |
| 2. | Early adopters (respectful) | 13.5% |
| 3. | Early majority (deliberate) | 34% |
| 4. | Late majority (sceptical) | 34% |
| 5. | Laggards (traditional) | 16% |

It should be emphasised that the key to successful change in schools lies not in when the change occurs but on how the people implicated are handled by the principal. Change, it seems, is very much a "people process". Feitler and Tokar believe effective principals:

... exhibit common attitudes and leader behaviours such as supportiveness, tolerance, and tender strength, they spend time in classrooms, interact frequently with teachers and have the ability to develop alternatives (1986: 225).

For a principal to be in a position to handle change effectively the following qualities will be of great benefit:

Problem analysis, judgement, organisational ability, decisiveness, leadership, sensitivity, stress tolerance, oral

communication, written communication, range of interests, personal motivation, and educational values (Walker, 1990: 48).

If change is not handled competently it is very possible that principals could:

... make themselves anxious about feeling anxious, depressed about their depressions and inadequate about their adequacy. An enormous, vicious circle of self-flagellation leading to further self-denigration thereby results (Ellis, 1978: 209).

Because change is such an all pervasive aspect in our lives today, a principal's reaction to change is a vital part of the Psychological Perspective. Many people in society are disillusioned with so many departures from former practice. Mackay believes that all over Australia people are operating on a short fuse and little things, which in the past were easily tolerated, now seem to assume bigger proportions (1993: 11). Handled poorly, change increases the level of concern about education in the local community and may impact on the principal in the form of complaints, letters, interviews, cancelled enrolments, families leaving, teacher dissatisfaction and poor public relations. Handled well, it can only enhance the standing of the principal, giving people confidence and faith in their ability to provide direction and vision. Once again the Psychological Perspective can be seen to be the vital link in the Conceptual Model. A certain robustness in this area is crucial to insulating against stress.

2.5 STRESS AND THE PHYSIOLOGICAL PERSPECTIVE

This is the third major component of the Conceptual Model and it is a field which represents growing knowledge and interest as it relates to stress issues. As in the other perspectives it is rich in diversity and fascinating in depth and as a result there is continuing research, debate and conjecture on issues surrounding this perspective. It completes the wholistic approach to understanding stress. The nature of this perspective means that its emphasis is basically medical, although aspects of health psychology and sociology also come into play. The following points are made to guide the reader:

- * This researcher considers stress as one factor that may lead to coronary heart trouble and other problems in the physiological perspective.**
- * Stress can be mediated by certain planned activities within the Physiological Perspective and conversely a failure to attend to these in lifestyle choices can serve to increase a person's level of stress.**
- * There is a variety of medical ways to measure physical well-being. This study has been structured around the measurement of blood pressure (BP) in the individual principals.**
- * Davis and George note that, despite increasing expenditure on health care and promotion, there has been only a modest improvement in the health status of Australian society in the past thirty years. The problem has been blamed on lifestyles. Factors such as social class, ethnic origin, genetic inheritance, predisposition, occupation and sex all play a role in lifestyle (1993: 90).**

In 1988 the Australian Bureau of Statistics listed the major causes of death and their percentages as:

1.	Diseases of the circulatory system	46%
2.	Cancers	26%
3.	Diseases of the respiratory system	8%
4.	Accidents	4.8%

(Davis and George, 1993: 71).

Davis and George believe lifestyle diseases are provoked by the way we live and include factors such as smoking, diet, alcohol consumption, stress and the motor car as the prime causes of such disease. The National Heart Foundation reports that the proportion of Australian men who are over their ideal weight has jumped to 55.6% and the proportion of women who are overweight has risen 10 points to 38.3%. More alarming are the figures for obesity (over 20% more than ideal body weight) which show 11.5% of men and 13.2% of women are in this category (Elmer-Dewitt and O'Neill, 1995: 44). These marked increases have occurred in the so called "health conscious" times in which we are supposed to live. Since 1980 there has been a steady increase in the proportion of men and women who are overweight. Increases have also been reported in the United States and the United Kingdom (Abrahams et al., 1995: 71).

In an attempt to control these problems the Australian Self-Assessment Plan (ASAP) is a cardiovascular risk reduction plan endorsed by the National Heart Foundation and designed to make local doctors aware of the need to reduce CHD in society. Doctors are encouraged to do more than simply diagnose a risk of CHD. They are asked to prepare with the patient a joint action plan which includes attention to the following variables:

- * Cholesterol and diet considerations
- * Blood pressure measuring to test for improvements
- * Cigarette and alcohol intake control
- * Physical activity programmes instituted/adjusted and

* Weight control measures taken if necessary (ASAP, 1992: 1-17).

These variables will be examined in the following review of stress and the Physiological Perspective.

2.51 Blood Pressure and Stress

Within the Physiological Perspective blood pressure (BP) readings are one medical way to measure changes in the body's physical state. For this particular study BP readings form an prominent part of the daily data gathering process. Understanding the medical physiology behind blood pressure is important. The terms and explanations presented in this section are derived from several medical textbooks. Sources are acknowledged, however, the researcher has simplified some definitions without compromising true meaning.

The body's nervous system affects the global distribution of blood to different areas of the body by increasing the pumping activity of the heart. The means by which the nervous system controls circulation is almost entirely through the autonomic nervous system (Guyton, 1991: 194). This control has the capability to cause very rapid increases in arterial pressure during which three major changes occur simultaneously:

1. Almost all the arterioles of the body are constricted. This impedes the run off of blood and increases arterial pressure.
2. The veins and other large vessels of circulation become strongly constricted. This displaces blood out of circulation towards the heart increasing the volume of blood in the heart chambers. The heart then beats with increased force and pumps out increased volumes of blood thus increasing arterial pressure.

3. Finally the heart itself becomes stimulated by the nervous system increasing heart rate. The heart can beat up to three times the normal rate and for several minutes can pump out at least two times as much blood as under normal conditions (Guyton, 1991: 198).

Nervous control of arterial pressure is characterised by rapid response after stimulation which often increases blood pressure to twice normal range beginning seconds after an incident. Such reactions can be caused by exercise, stress or extreme fright.

Blood pressure is a measure of the force that circulates blood through the body. As it circulates the walls of the blood vessels face pressure changes. BP readings have two separate components. The first and higher number, the systolic blood pressure (SBP), is the pressure in the arteries when the left ventricle ejects blood into the aorta. SBP is therefore a measure of the pressure in the arteries when the heart contracts. The second number, diastolic blood pressure (DBP) is the pressure in the arteries between heartbeats when the left ventricle is filling up with more blood. A BP reading of 110/70 is read as 110 over 70 (Karpman, 1989: 43). Blood flow patterns change when a body responds to stress. It may be the stress of physical work, the stress of exercise or psychological stress. Mason notes that for many people the blood is redirected away from the extremities into the major muscle groups and central nervous system when stress is faced. This results in an elevated BP reading (1980: 121). In general increases in cardiac output raise the systolic reading rather than the diastolic. So after a heavy exercise session the SBP and DBP will not increase uniformly. Increases to the peripheral resistance tend to elevate diastolic pressure because it impedes blood flow (Ganong, 1979: 452). This

explains a doctor's concern about higher diastolic readings before the systolic. High blood pressure, called hypertension, is potentially fatal and readings of 140/90 are considered borderline hypertensive and merit efforts to bring them down (Adams, 1990: 50; ASAP, 1993: 12). In general terms, the higher numbers, the higher risk of developing heart disease. Blood pressure rises with age because the walls of the arteries become increasingly rigid while coping with the same level of cardiac output. The recognised problem with high blood pressure is that there is often no external symptoms so that when circulation is restricted, it is frequently undetected and complications with the major organs can set in. This is why it is referred to as a "silent killer" (Karpman, 1989: 44). "The first evidence of target organ involvement is all too often stroke, myocardial infarction or sudden death" (Boone, 1991: 633). The table below provides a useful presentation of BP variations in a variety of ages and over a 24 hour period.

Table 7

Blood Pressure Load in Normal Subjects

AGE		20-29	30-39	40-49	50-59	60-69	70-79
(number of patients)		(22)	(24)	(18)	(25)	(23)	(16)
SYSTOLIC mmHg	24-hour	122±9	121±8	120±10	124±12	127±12	133±16
	Awake	125±10	125±9	124±11	127±12	130±12	137±17
DIASTOLIC mmHg	24-hour	67±7	71±5	73±7	75±7	75±4	69±9
	Awake	70±8	74±5	75±8	77±7	77±5	71±9
BP LOAD*	Systolic	9±14	8±11	8±10	13±16	18±19	25±20
	Diastolic	3±7	4±6	6±8	6±7	6±7	4±7

**Clinical
Recommendations**

(Zachariah, Sheps and Bailey et al., 1989: 2).

Doctors also use the term Pulse Pressure (PP) to describe the difference between systolic blood pressure and diastolic blood pressure. The instrument used in this study to test for BP can make this calculation. In general PP should be around 40 although if it varies a doctor needs to make a judgement if it is serious. In the analysis of data the term Mean Arterial Pressure (MAP) is used and is calculated by dividing the Pulse Pressure by three and adding the diastolic blood pressure. MAP gives a single figure rather than two numbers and it is the average pressure reading between contraction of the heart (systole) and relaxation of the heart (diastole). The machine used in this study will make a MAP calculation every time a reading is taken.

Testing for blood pressure is simplicity itself and requires only a BP test. The auscultatory method is the traditional way to measure BP using a stethoscope and arm cuff. The stethoscope is placed lightly over the brachial artery and the cuff inflated to 20-30 mmHg above the usual SBP. Pressure is slowly released and a determination of BP is made by the practitioner from listening to the sounds heard in the stethoscope. The noises heard are called the sounds of Korotkow and are made as blood begins to flow after the artery has been occluded. There are four different sounds of Korotkow, varying in intensity and volume (Judge and Zuidema, 1974: 143).

Drug and natural therapies can be used to reduce blood pressure. Mason details a range of drug treatments commonly used by doctors which include; tranquillisers, muscle relaxants, diuretics and beta blockers (1980: 122). As

with most drug treatments there are dangers of uncomfortable negative side effects and the bulk of the literature surveyed recommends natural methods as a first option. Australian doctors using the ASAP material with patients are given the following proven measures to reduce BP:

- * Weight reduction Up to 10-20 mmHg
- * Vegetarian diet Up to 3-5 mmhg
- * Exercise Up to 10 mmhg
- * Stress management Up to 7 mmhg
- * Alcohol restriction Up to 5 mmhg
- * Salt restriction Up to 5 mmhg

(1993: 13).

Researchers from the Australian Institute of Health and Welfare in the publication Australian Health Trends 1995 make the following comments regarding the general state of blood pressure in the Australian population of 25-64 year olds:

- * Hypertension is more common in men than women.
- * Hypertension is a major independent risk factor for stroke, coronary heart disease and other cardio-vascular disease.
- * On average the risk of cardio-vascular disease is two to four times greater among hypertensive people than among non-affected people of the same age.
- * In 1989 17.2% of men and 11.1% of women were hypertensive (diastolic pressure above 95mmHg)

(Abrahams et al., 1995: 72).

Gmelch and Thomas come to the conclusion that "one can generalise about stressful occupational characteristics but not specific occupations" (1989: 3). Over the years there have been many interesting studies on such diverse occupations as air traffic controllers, fire-fighters and monastic nuns. Research results reviewed agree with Gmelch and Thomas's view that certain occupational characteristics can lead to higher than average BP readings. These might include:

- * Time pressures
- * Lack of control
- * Responsibility for people and
- * Intense concentration.

When combined with other mediating factors, such as poor eating habits, high alcoholic intake, home problems, lack of exercise and insufficient relaxation, serious problems may develop.

2.52 Links Between the Heart and Stress

In modern times stress is included as a risk factor in heart disease. Within the Conceptual Model as proposed for this study when this risk factor is combined with a lack of exercise, Type A behaviours and long hours it may well become a serious risk factor. Karpman acknowledges:

Strong evidence now exists that mental stress can significantly reduce coronary artery flow, and that such stress frequently precedes the development of symptomatic heart disease (1989: 57).

While the media are determined to make society aware of the dangers of AIDS and alcohol there appears to be inadequate attention paid to the fact that heart disease is by far the major cause of death in industrialised countries. Krantz and Raisen report that occupational and social environments promote the development of heart disease (1988: 14).

The job of principal has been clearly shown to be demanding. When the state of psychosocial factors (the three perspectives in this study) are such that they exert further physical and mental demands on the principal, then symptoms

of CHD may present themselves. These include chest pain, breathlessness, fatigue, headaches and palpitations. Studies by Boone indicate that, for people working in demanding positions, sudden death is clustered disproportionately between 6.00 a.m. and noon. In summarising his findings Boone concludes:

Clearly these data refute the contention that acute myocardial infarction (MI or heart attack) is a random occurrence without relation to the events of the day (1991: 630).

This is somewhat sobering news for people working in those demanding positions.

2.53 Nutrition and Stress

Within the Physiological Perspective of the Conceptual Model nutrition covers a number of areas including level of blood fat, weight and height ratio, personal energy level and general health. It is an important aspect of this perspective and also a factor that needs study. In terms of the unfortunate story of Grabwell Grommet who died at an early age of "natural causes", Adams advises that sound dietary practice is essential to long term health and stress management because the body's resistance to disease is built up around a healthier lifestyle (1990: 46). While such considerations are widely published and the public are well aware of the consequences of not doing so, it remains a difficult task to convince people otherwise in today's quick convenience society. Scientific evidence suggests that over a million Australians are at increased risk of diabetes, hypertension, heart disease, stroke, gout, arthritis, cancer, impotence and infertility simply because they are overweight (Elmer-Dewitt and

O'Neill, 1995: 44). The economic costs alone are devastating. In order to reduce the risks of CHD and for increased personal vitality, we are urged by dietitians to adopt a low fat, low cholesterol, high fibre daily eating plan. In general the public now knows that limiting the use of processed foods and such items as white flour, salt, sugar, caffeine, artificial additives and alcohol is advisable. Positive correlation of diseases with diet are provided by the New South Wales Department of Health:

High sugar intake	Dental decay
High alcohol intake	Cirrhosis of the liver
Excessive salt	Hypertension and strokes
Excessive kilojoules	Onset of diabetes
High cholesterol	CHD
Low fibre	Diverticulosis
High fat	Cancers of colon, breast and prostate

(1984: Appendix 3.3)

The response to these known dietary side effects is for governments and health authorities to exhort populations to adopt a prudent diet with decreased intakes of fat, salt, alcohol, meat and dairy products and increased intakes of vegetables, fruit, fish, cereals and breads. This however overlooks the way food today is produced, packaged, advertised and retailed to people. In 1994 Australians spent per person \$210.95 on take away food. A \$20 increase over the previous year (Elmer-Dewitt and O'Neill, 1995: 45). These figures suggest that the awareness raising exercise is not working. Indeed it could be argued that this eating frenzy is akin to a national disorder and a sign of social decay not dissimilar to the Romans who gorged themselves as society collapsed. Before eaten preservatives, tenderisers, colour agents, flavour enhancers, sugar

and salt are added (Davis and George, 1993: 49). Persons with the best of intentions can find it almost impossible to strictly follow a prudent diet. Orwell knew this fifty years ago, with his memorable comment as to why the unemployed miners of Wigan ate "white bread and marge and sugared tea". It was nutritionally unsound but psychologically comforting, despite the advice of professionals to eat brown bread, raw carrots and orange juice (1962: 86). Today's equivalent of nutritionally unsound but psychologically comforting food might be the "Big Mac" with 30g of fat or the humble Aussie pie with five teaspoons of fat hidden in the pastry.

Cholesterol and its relationship to a healthy heart has received much attention of late. The ASAP booklet advises doctors, "There is a continuous and graded relationship between serum total cholesterol and CHD mortality" (1993: 14). Excess cholesterol is deposited on the walls of the arteries "clogging" them leading to heart attacks and strokes. The body produces cholesterol naturally. Australian doctors using the ASAP material are advised that the desirable levels for cholesterol are:

Total cholesterol	< = 5.5mmol/l
LDL cholesterol	< = 3.4mmol/l
HDL cholesterol	> 1.0mmol/l

Studies in the Australian population indicate that 65% of men and women have a cholesterol reading over the 5.5mmol/l indicated as acceptable. One in four males and one in five females have cholesterol levels above 6.5mmol/l (ASAP, 1993: 14). These figures are cause for uneasiness.

2.54 Fitness, Vitality and Stress

The image of the Australian worker as tall and strong is a myth. At the turn of the century, when the general lifestyle was considerably tougher than today, 213 000 out of 590 000 army recruits were rejected because of problems with fitness and health. A further 13 800 were returned without seeing active service because they were judged unfit (Pearse, 1984). This refutes the mythology of a strong, bronzed rural worker. Adams maintains that the modern person has become quite sedentary compared to those of the 1850s, where one third of the power needed for work came from human muscle. Today the figure is less than one half of one percent (1990: 47) which is a dramatic shift brought about by technological innovations taking people out of factories and fields and putting them behind desks, mobile phones, in elevators, escalators and ride-on mowers. The danger is that a sedentary lifestyle pattern develops and we become "less sharp mentally, less coordinated physically and sluggish" (Adams, 1990: 47). The National Heart Foundation figures show Australians are bulging not just because too many calories are consumed, but because too few are burnt off. The New South Wales Department of Arts, Sport and the Environment reported in 1992 that 52% of men and 61% of women are totally inactive in their leisure time (Elmer-Dewitt and O'Neill, 1995: 48). The old saying that a woman can't be too rich or too thin doesn't hold true these days.

The great majority of exercise studies suggests that regular exercise significantly reduces the risk of CHD, and that a sedentary existence is a significant risk factor, quite independent from all other risk factors (Karpman, 1989: 49).

Biddle and Fox conclude that the efficacy of regular physical activity in reducing the risk of debilitating health conditions has been known for some time but that the significance of exercise in improving mental well-being and in aspects of motivation has been underestimated (1989: 205). In the physical sense regular exercise is known to:

- * Lower blood pressure
 - * Lower resting pulse rate, improve heart functioning
 - * Increase levels of HDL and reduce levels of LDL
 - * Decrease weight
 - * Improve digestion and normalise metabolism
- (ASAP, 1993; Adams, 1990; Biddle and Fox, 1989).

Physical health and fitness is viewed positively and valued highly in our society (Hayes and Ross, 1986: 388). Figures above might cynically suggest that while it is viewed positively, it might only be viewed on television. Exercise improves the functioning of the major body systems especially the cardiovascular and respiratory systems. Under the ASAP guidelines Australian doctors recommend exercise programmes which include 30 to 40 minutes of aerobic activity, three to four times a week at 60 - 70% maximum work capacity (ASAP, 1993: 15). For all this, results obtained from a Queensland Teachers Stress Survey indicate that there is a high correlation between those persons "under stress" and their lack of physical exercise. The results show that almost 50% of teachers who rate the job extremely stressful spent one hour a week or less in physical exercise. In contrast, those who coped well or found teaching "mildly stressful", exercised a great deal more (QTU, 1983: 94).

Vigorous exercise can produce a general feeling of well-being because the body produces and releases natural substances called endorphins as well as burning up adrenalin (Sedgwick, 1983: 99). Exercise can be a time consuming process and a balance is required where other domestic and family matters may need consideration. The American National Institute of Mental Health has produced a set of consensus statements on the mental benefits of exercise.

There is general agreement that:

1. Exercise is associated with a reduced anxiety state
2. Exercise has been associated with a decreased level of mild to moderate depression
3. Long term exercise is usually associated with reductions in traits such as neuroticism and anxiety
4. Exercise may be an adjunct to the professional treatment of severe depression
5. Exercise results in reduction of various stress indices and
6. Exercise has beneficial emotional effects across all ages and both sexes (Morgan and Goldston, 1987).

Biddle and Fox believe:

The exercise and mental health issue remains an intriguing problem for exercise psychologists. It provides a forum for collaborative research between exercise and clinical psychologists, psychiatrists, physiologists, biochemists and other scientists, so that exercise psychology has a truly cross-disciplinary structure (1989: 209).

Within the wholistic approach exercise provides principals with opportunities to improve physical and mental functioning. This sub-factor in the Physiological Perspective shows that when a proper and balanced exercise programme is consistently and faithfully followed the effects of stress can be mediated. Further, the nature of this sub-factor cuts across the perspective boundaries to include substantial psychological benefits to those who choose to

seriously implement and maintain some form of exercise regime.

2.6 CONCLUSION

This chapter has transversed a wide spectrum of the literature on stress as it relates to the three perspectives of the Conceptual Model. A mountainous supply of literature is available causing the researcher more angst than satisfaction, simply because the sheer volume can be confusing and overwhelming. Hence the decision has been made to research under the three perspectives of:

- 1. Lifestyle/Workstyle**
- 2. Psychological and**
- 3. Physiological.**

In each perspective a number of sub-factors have been identified and discussed to give the reader a clear understanding of what is meant by the terms. This model is based on a holistic understanding of stress and does not fragment aspects of home life, social life and work life. By thinking of the perspectives as linked, interacting with each other and representing the major foci of working people, a reader can see how "stressful experiences don't spring out of a vacuum but typically can be traced back to surrounding social structures" (Pearlin, 1989: 242). The model addresses eight issues proposed by Ivancevich and Matteson (1980) and listed earlier in this work. Specifically the approach and model can:

- * Improve understanding of stress and work relationships
- * Appeal to a wide cross section of management professionals and not just to the teaching profession
- * Easily integrate medical and psychological approaches which in the past have been separated and
- * Suggest suitable courses of action for stressed persons.

The model takes into account the value of "before the event" preventative measures and "after the event" relief measures. It allows a person to look at aspects of his/her life and make a personal judgement on where his/her strengths and weaknesses may lie. Stress attacks in highly individualistic ways and the same stressor can be disastrous to some and inconsequential to others. The reason is that it is not so much the stressor, as how it is perceived by the person. It becomes a matter of choice and our personal psychology plays a vital role in insulating or conducting the stressor. Hence its importance at the centre of the interlocking circles.

The model allows for personal responsibility and Chapter 2 has attempted to follow this theme. It is a fundamental point and the story of Grabwell Grommet illustrates this skilfully. Persons who persist in ignoring warning signs, fail to heed advice, operate intensively for prolonged periods and neglect suitable lifestyle choices can only accelerate potentially fatal problems. Balance in life is essential for those who work in high demand and low control jobs. If the choice is to neglect relaxation time, attention to fitness, sleep, friends, hobbies, cultural pursuits and family, then trouble awaits. If the choice is to engage in a cross section of these activities, in good humour and moderation, then the sharpness and energy needed for work will always be present.