

CHAPTER 4

SALUTOGENIC FUNCTIONING

With reference to chapter 1, section 1.7.1, the aim of this chapter is to conceptualise and integrate the existing literature on salutogenic functioning.

In this chapter, a history of the salutogenic paradigm will first be presented, followed by a discussion of the definition and model of salutogenesis. Thereafter the selection and discussion of salutogenic constructs to be used in the study will be presented. This will be followed by a discussion of coping theory, which includes a discussion of the definition, models and dynamics of coping. In the discussion on coping, salutogenic constructs will be discussed in terms of how they act as coping mechanisms in stress and burnout.

This chapter will conclude with an integration of the theoretical aspects as discussed in chapters 2, 3 and 4; including an assessment of whether salutogenic personality constructs have the ability to differentiate between copers and noncopers.

4.1 HISTORY OF THE SALUTOGENIC PARADIGM

The term “salutogenesis” (from Latin: *salus* = health, Greek: *genesis* = origin) was coined by Antonovsky (1979). This paradigm became well known in the publication, *Health, stress and coping*, where Antonovsky (1987a, p. 47) advances that at any time at least one third of the world’s population of any industrial society is characterised by some morbid pathological condition and illness, and that this is not a rare deviance but a normal state of the human condition. He argues that given the ubiquity of pathogens—microbiological, chemical, physical, psychological, social and cultural – everyone should succumb to this bombardment and should constantly be dying. However, Antonovsky (1979) noticed that this clearly was not the case, since many individuals survive and even flourish under these difficult circumstances.

Salutogenesis started as a paradigm developed from a number of independent yet related constructs, such as sense of coherence concept (Antonovsky, 1979), potency (Ben-Sira, 1985), hardiness (Kobasa, 1982), learned resourcefulness (Rosenbaum's, 1980), locus of control (Rotter, 1975) and stamina (Thomas, 1981). The reason for the conceptualisation of salutogenesis from concept to paradigm was to counterbalance the pathogenic orientation (Kraft et al, 1993; Schröder et al, 1993).

Salutogenic thinking has challenged the traditional pathogenic orientation which still dominates medical research (Johnsen, 1992). Pathogenesis, as a paradigm, is concerned with the origin of disease, while salutogenesis focuses on the unravelling of the mystery of health and is an attempt to address how people manage stress and stay well (Strümpfer, 1995). Salutogenesis recognises that stressors are endemic in our lives and that there is a need to manage this stress and tension. It rejects the commonly held assumption that stressors are inherently bad, in favour of the possibility that stressors may have salutary consequences. Thus, the salutogenic question is concerned with how individual's learn to live and live well with stressors, and possibly even turn their existence to their advantage. In contrast, the pathogenic orientation is concerned with how individuals can eradicate stressors from their life (Antonovsky, 1984 in Strümpfer, 1996, p. 267).

Another important difference between the two paradigms, is that in the pathogenic orientation, the individual is either sick or well; and in the case of the salutogenesis, the individual is not categorised as being either diseased or nondiseased. Rather, individual functioning may be plotted anywhere along the line from one pole of ease to the other pole of disease (Antonovsky, 1982, p. 37). The focus of concern in the salutogenesis becomes the ease/dis-ease continuum, rather than the health-disease dichotomy. In this regard, Antonovsky (1987b) introduced the concept of "generalised resistance resources" (GRRs). GRRs are generalised factors relevant to all diseases, which attempt to explain what facilitates our movement towards the most salutary end of the breakdown continuum when searching for specific, disease-relevant factors. According to Kraft et al (1993, in Schröder, 1993, p. 339), this shift from the pathogenic stress research to the salutogenic resources research has also changed the

understanding of health. According to these theorists, two issues become pertinent in the new conceptualisation of health:

- Cognitive processes and coping strategies are now incorporated in the understanding of health.
- Exchange processes between the person and the environment are responsible for the maintenance and restoration of an organismic state of balance.

An important clarification in the salutogenic understanding of health is that it is possible for individuals to take responsibility for their health, provided that their environment enables them to act autonomously and to cope with health impairing stressors (Antonovsky, 1982).

4.2 DEFINITION OF SALUTOGENESIS

Salutogenesis emphasises health promotion and disease prevention rather than the pathogenic origins of disease (Wolf & Ratner, 1999, p. 183). Antonovsky's (1987b, p. 7) famous question; "Whence the strength?" characterises the key to salutogenic thinking and has since inspired much research into why some cope successfully in spite of omnipresent stressors and others do not. From this query, salutogenesis has become associated with man's ability to thrive on adversity, receive gratification from work and generate health (Antonovsky, 1987b). As a paradigm, Antonovsky defines salutogenesis as the study of the strength individuals exhibit in order to manage the tension and stress in their lives and not succumb to illness (Onega, 1991).

Strümpfer (1995) suggests that the term "fortigenesis" (from Latin: fortis = strength and Greek: genesis = origins) seems to be more descriptive of the field of salutogenesis, because the focus of salutogenesis is more on the enhancement of strength in the individual, rather than on why and how people stay well.

4.3 THE SALUTOGENIC MODEL

The salutogenic model focuses on the origins of health and wellness and was developed as an answer to the salutogenic question (Antonovsky, 1987a, p. 47). This model was developed and presented by Antonovsky in his book, *Health, stress and coping* (Antonovsky, 1979). The main thrust of the salutogenic model is that stressors are omnipresent in human existence, and yet many people survive and even flourish under these difficult circumstances. Salutogenic thinking has since inspired much research into why some individuals cope successfully in spite of omnipresent stressors and others do not (see Antonovsky's salutogenic model of health in fig. 4.1).

The salutogenic model is conceptualised as a cyclical process whereby an individual can feature anywhere at any point in time along a "health ease/disease continuum" in which health-ease is at the optimal end of the continuum and disease at the unfavourable end (Antonovsky, 1979, pp. 182-197). According to this model, an individual's position and direction of movement along the continuum are determined by the interplay of opposing forces of environmental threat (eg stressors), one's resistance (eg generalised resistance resources), and the strength of one's sense of coherence (SOC).

Antonovsky's answer to the question of how some people manage to maintain psychological health, is expressed in the concept of generalised resistance resources (GRRs). GRRs form the basis of understanding the salutogenic model. According to Antonovsky, individuals develop GRRs through life experiences. GRRs refer to any characteristic of the individual, group, subculture or society that facilitates effective tension management (Antonovsky, 1979, p. 99). More complexly defined, a GRR is a "physical, biochemical, artifactual-material, cognitive, emotional, valuative, attitudinal, interpersonal-relational, macrosociocultural characteristic of an individual, primary group, subculture, society that is effective in avoiding/combating a wide variety of stressors" (Antonovsky, 1987b, p. 105).

Antonovsky (1987b, p. 198) advances that “the extent to which our lives provide us with GRRs is a major determinant of the extent to which we come to have a generalised, pervasive orientation that I call a strong sense of coherence”. The fundamental property of a GRR is that it is a resource. It is something which in the possession of a group or individual, makes possible either the avoidance of stressors or the resolution of tension generated by stressors.

The extent to which GRRs are available to one plays a decisive role in determining one’s location and movement on the health ease/dis-ease continuum. Antonovsky (1979, p. 100) identifies the GRR concept to Selye’s (1976) concept of “resistance stage” in his stress model (see chap. 2 for a discussion of Selye's stress model). Just as the GRR concept refers primarily to characteristics that facilitate dealing with and overcoming the stressor, so Selye (1976) highlights the actions directed at containing and offsetting the expressions of the alarm reaction, in order that the organism not enter the third stage of exhaustion.

In the salutogenic model (see fig. 4.1), Antonovsky points to the relationship between stressors and movement toward the dis-ease end of the health ease/dis-ease continuum. Stressors (physical stressors and psychosocial stressors) have an impact on GRRs. Unlike psychosocial stressors, whose impact is always mediated through GRRs and the sense of coherence, biochemical and physical stressors can be of such direct traumatic magnitude as to bypass interaction with the sense of coherence. These stressors (physical and biochemical) are, therefore, sufficient to overcome even substantial resistance resources. When, however, the standard of living in a society reaches a level of adequacy, when differences in health level no longer are overwhelmingly determined by biochemical and physical stressors, then psychosocial stressors and the SOC become crucial variables. Antonovsky (1987b) adds that at this point, salutogenesis becomes at least as intriguing and important a question as pathogenesis.

The role of the SOC, as indicated in the salutogenic model (see fig. 4.1), is three directional (Antonovsky, 1987a). Firstly, by mobilising the GRRs as well as specific resistance resources (SRRs) available to an individual, a strong sense of

coherence can avoid one succumbing to some stressors. Secondly, it allows individuals to define some stimuli as welcome, which might otherwise be perceived as stressors to others. Thirdly, the sense of coherence operates decisively to what extent an individual will move on the health ease/dis-ease continuum.

From the model, it is evident that salutogenesis is a cyclical process of life experiences functioning from the GRRs to strong salutogenic constructs which feed back to the GRRs which, depending on previous experiences of overcoming stressors, enhances the salutogenic construct or not.

4.4 SALUTOGENIC CONSTRUCTS

This section is aimed at motivating for and discussing four different salutogenic constructs and the role they play in coping with stress and burnout in general and in the medical profession.

Since Antonovsky's first public statement of the salutogenic orientation in 1973, numerous other personality constructs (besides Antonovsky's SOC) have been added to the salutogenic framework. It is important to point out that some of these constructs were developed prior to Antonovsky's sense of coherence theory, but are now being categorised for the first time under the umbrella term of "salutogenesis" (Strümpfer, 1990). Keeping with the aims of this study, it was deemed important to include some of these constructs which have come to be commonly known as the salutogenic constructs.

In numerous reviews, the following independent constructs are identified as sharing common ground with the salutogenic model in their emphasis on successful coping and maintenance of or return to health. Strümpfer (1990, p. 265) reviews the following five constructs as sharing similar salutogenic properties: Antonovsky's (1979, 1987) "sense of coherence", Kobasa's (1982a) "hardiness", Ben-Sira's (1985) "potency", Thomas (1981) and Colerick's (1985) "stamina" and Rosenbaum's (1988) "learned resourcefulness". In a different study, Parkes (1994) indicates five dimensions of personality that play a role in buffering the relationship between work stress and health outcomes: Rotter's "locus of control",

Kobasa's "hardiness", Matthews and Haynes' "type A behaviour", Eysenck and Eysenck's "neuroticism" and Scheier and Carvers's "dispositional optimism". Later, Antonovsky (1979; 1987b; 1991) himself confirmed that these constructs formed part of the "generalised personality orientation", which was studied in relation to successful coping and salutogenic outcomes. The confirmation of these studies mentioned above, motivated the incorporation of the following salutogenic constructs for the purpose of the empirical study: Antonovsky's sense of coherence, Kobasa's hardiness, Rosenbaum's learned resourcefulness and Rotter's locus of control. It is important to indicate that Strümpfer (1990, p. 265) considers the locus of control as a salutogenic related construct and not per se a construct that clearly falls within the salutogenic paradigm.

The literature indicates that coping resources can be divided into internal and external resources (Kraft et al, 1993). In terms of salutogenic functioning, the internal or personal resources will be discussed as mechanisms of coping with stress and burnout in the medical profession. According to Kraft et al (1993, p. 341), personal resources include a list of personality constructs (most of which are salutogenic) and can be identified as bearing two core similarities:

- self control
- psychological sense (meaningfulness)

From this theoretical understanding, it can be assumed that health protective behaviour corresponds with a person's beliefs and expectations; the maintenance of health lies within an individual's own hands, an individual can control his or her life and job conditions and can experience them as meaningful (Kraft et al, 1993, p. 341).

What is common to all salutogenic constructs is their preoccupation with successful coping, and the studying of health instead of disease. The four constructs selected cover a range of personality characteristics and skills which research has proved to be linked to managing stress and keeping well (Antonovsky, 1991, p. 68; Strümpfer, 1990, p. 264; Sullivan, 1993, p. 1775).

Based on the above motivation for inclusion in this research, a discussion of the following four salutogenic constructs will serve as a background to the empirical study in chapter 5:

- Sense of coherence: Antonovsky (1979)
- Hardiness: Kobasa (1979)
- Locus of control: Rotter (1966)
- Learned resourcefulness: Rosenbaum (1988)

4.4.1 Sense of coherence (Antonovsky)

“Antonovsky, puzzled and impressed by those individuals who defied the odds which would seem to predict poor health, hypothesised that a well developed sense of coherence was at the heart of this success” (Johnson, 1992, p. 5).

A sense of coherence (SOC) is defined, according to Antonovsky (1987b, p. 19), as a “global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that the stimuli deriving from one’s internal and external environments in the course of living are structured, predictable, and explicable; the resources are available to one to meet the demands posed by the stimuli; and these demands are challenges, worthy of investment and engagement.”

Three personality characteristics, namely, comprehensibility (making sense of the stimuli in the environment), manageability (coping with the stimuli with available resources) and meaningfulness (identifying emotionally with events), arise from the definition of SOC (Antonovsky, 1984). These three components form the key of the SOC. The SOC is a crucial variable in determining movement on the health ease/dis-ease continuum. Antonovsky (1983) cautions that the SOC should not be confused with a particular coping style, rather, a strong SOC enables the selection of the most appropriate coping strategy to deal with the stressor being confronted.

At certain points in time, particular experiences are known to affect a temporary and minor shift in one's sense of coherence. Such changes, however, occur around a stable location on the continuum. In this regard, Antonovsky (1983) advances that the SOC is shaped and tested, reinforced and modified not only in childhood but throughout one's life.

A strong SOC, includes a solid capacity to judge and see reality and it is often taken to mean "I am in control" and associated with the concept of an internal locus of control (Antonovsky, 1979, p. 123). However having a strong sense of coherence is not necessarily praiseworthy, since Antonovsky (1987b, p. 157) cautions that a person with a strong sense of coherence is quite capable of being what many would consider as insensitive, unpleasant, inconsiderate and exploitative.

Whilst not conclusive, Antonovsky (1987b, p. 163), reports that evidence does lend itself to indicate that a relationship exists between the sense of coherence and health. He groups five areas of studies and data that provide evidence for this relationship: social structural variables, cultural variables, psychological variables, situational variables and animal studies.

According to Antonovsky (1979), given the nature of human existence, it is difficult to conceive any one being extremely high on the ease-continuum, as this would require an unimaginably stable world and an inconceivably unchanging internal and external environment. Only someone who is totally out of touch with reality could claim to have absolute sense of coherence – otherwise called by Antonovsky, a fake sense of coherence

With reference to figure 4.1, arrow A signifies life experiences which are said to be crucial in shaping a sense of coherence. Antonovsky (1987b) advances that though life experiences, individuals develop "generalised resistance resources" (GRRs), which he defines as any characteristic of the individual, group, subculture or society that facilitates avoiding or combating a wide variety of stressors. In essence, a GRR provides one with sets of meaningful, coherent life experiences. Examples of artifactual-material GRRs are money, shelter and food. Cognitive

GRRs include factors such as intelligence or knowledge. Interpersonal relation GRRs are factors such as social embeddedness and social support. Macro, socio, cultural GRRs are factors such as rituals and religions. In essence then, the development of an individual's SOC is made possible through the generalised resistance resources that help to make sense of the countless stimuli with which one is constantly bombarded (Antonovsky, 1979, p. 121).

When the individual regularly experiences the availability of GRRs, a personality construct develops, which Antonovsky (1979) calls the sense of coherence. If a strong sense of coherence is to develop, an individual's experiences must not only be predictable but also rewarding (with some measure of frustration and punishment) (Sullivan 1993, p. 1774). Put simply, the outcome depends on the underload-overload balance.

Antonovsky (1987b, p. 124), advocates that the SOC is explicitly and unequivocally a generalised, long-lasting way of seeing the world and one's life in it. It is perceptual with both cognitive and affective components, and forms a crucial element in the basic personality structure of an individual which is rooted in the particular sociocultural and historical period of one's life. The SOC develops as a single dimension of personality, consisting of three interwoven components: comprehensibility, manageability and meaningfulness (Antonovsky, 1991:93). Each of these components will be addressed in turn.

4.4.1.1 Comprehensibility

The component of comprehensibility refers to "the extent to which one perceives the stimuli that confronts him or her as making cognitive sense, as information that is ordered, consistent, structured, and clear, rather than as noise-chaotic, disordered, random, accidental, inexplicable" (Antonovsky, 1987b, pp. 16-17). The main principle underlying the component of comprehensibility is that life events which come one's way are perceived as making cognitive sense (Strümpfer, 1990). The person who scores high on comprehensibility, will expect future events to be predictable, orderly and explicable. Although stimuli may not

be of a desirable nature, (eg accidents), these stimuli and its consequences are viewed as challenges and within one's coping capacity.

4.4.1.2 Manageability

Manageability is defined as “the extent to which an individual perceives that the resources at one's disposal are adequate to meet the demands posed by the various stimuli that bombard one” (Antonovsky, 1984, p. 118). This component is characterised by good load balance. Resources “at their disposal” may refer to resources under the individual's own control or resources controlled by legitimate others, such as friends, colleagues, God, political affiliations, professional help – anyone upon whom one can count on and trust. An individual who scores high on manageability will not feel that their life is “out of control”; rather he or she will by his or her own resources or with the support of legitimate others feel that he or she is able to “cope and will not grieve endlessly” (Antonovsky, 1984). This element of manageability coincides with Kobasa's hardiness component of control, where the individual with a good sense of control is characterised as having the ability to exercise control over the pace of events (Kobasa, Maddi & Courington, 1981).

4.4.1.3 Meaningfulness

Zika and Chamberlain (1992, p. 144) report, in conjunction with other research, that a positive relationship exists between psychological wellbeing and meaning in life. According to Antonovsky (1984, p. 119), the meaningfulness component refers to “the extent to which an individual feels that life makes sense emotionally, rather than cognitively”. This component is a move away from the cognitive emphasis as indicated in the previous two components. The component of meaningfulness, within the sense of coherence, recognises that individuals play a role in determining their own destiny and daily experiences. Thus, people who score high on meaningfulness feel that life makes sense emotionally. Furthermore, problems faced are seen as challenges and are perceived as worthy of investing energy, commitment and engagement (Antonovsky, 1984).

Initially, comprehensibility was considered by Antonovsky (1984) as the most crucial component of the SOC. This was later changed to recognise the

meaningfulness component as the most integral of the three components. For an individual with a meaningful life, the resultant commitment and caring provides an advantaged access to gaining understanding and resources. Comprehensibility follows in importance, since high manageability is contingent on understanding (Johnson, 1992, p. 16).

4.4.2 Hardiness (Kobasa)

The concept of “personality hardiness” is defined as “a constellation of personality characteristics that function as a resistance resource in the encounter with stressful life events” (Kobasa, Maddi, & Kahn, 1982, p. 169). Kobasa (1982) introduced this concept as a result of her search for the reason why some individuals do not succumb to illness under high levels of stress. The root of this construct is embedded in an existential theory of personality, based on the belief that individuals behave in characteristic ways by consciously recognising and acting on their environments (Manning, Williams & Wolfe, 1988, p. 205). Kobasa’s (1979a) work on the hardiness construct, although developed independently, runs parallel to Antonovsky’s conceptualisation of the sense of coherence construct.

According to Maddi and Kobasa (1984) in Funk (1992, p. 335), hardiness is a general quality that emerges from rich varied, and rewarding childhood experiences, and this general quality manifests itself in feelings and behaviours that are characterised as commitment, control and challenge – the three components of the hardiness construct.

Kobasa (1979a) advocates that individuals who score high on hardiness, appraise events from an optimistic point of view and are rarely overwhelmed by stressful events. In addition, hardy individuals decisively transform situations into a less stressful form as opposed to avoidance or becoming overwhelmed by the stressor. In possessing these characteristics, a hardy person is able to remain healthy under stress. The following is a description of the three personality dispositions that make up the hardiness construct (Kobasa, 1982).

4.4.2.1 *Commitment*

Commitment is defined as a belief in the truth, importance and value of what one is and what one is doing; also a tendency to involve oneself actively in many situations in life, for example, work, family, friendship and social organisations (Kobasa, 1982, p. 6).

This concept seems to stem from Kobasa's allegiance to existential psychology, which sees "the person as a biological, social, and psychological being whose primary task is the search for and establishment of meaning" (Kobasa & Maddi, 1977, p. 399). The commitment disposition is expressed as a tendency to involve oneself in rather than alienate from whatever one is doing or confronted with. In other words, committed persons' relationships to themselves and to the environment involve activeness and approach rather than passivity and avoidance.

Individuals who score high on commitment tend to have a generalised sense of purpose and ability to find meaning in the circumstances and relationships they find themselves in. As far as action is concerned, the highly committed individual is sufficiently empowered to the self and the relationship to the social context, for such a person not to give up easily under pressure (Kobasa et al, 1982).

4.4.2.2 *Control*

The concept of control in the existentialist view of personality, was originally operationalised by Kobasa using Rotter's locus of control measure (Antonovsky, 1991, p. 89). According to Kobasa (1982, p. 7), this refers to a tendency to believe and act as if, by and large, one can influence the events of one's life through what one imagines, says and does, with an emphasis on personal responsibility. This does not imply the naive expectation of complete determination of events and outcomes, but rather implies the perception of oneself as having a definite influence through the exercise of imagination, knowledge, skill and choice.

According to Kobasa et al (1982, p. 169), control affects individuals on two levels. Firstly, control enhances stress resistance on a perceptual level, by increasing the

likelihood that events will be experienced as a natural outgrowth of one's actions and, therefore, not as foreign, unexpected and overwhelming experiences. Secondly, control affects coping in that a sense of control leads to actions aimed at transforming events into something consistent with an ongoing life plan and is, therefore, seen as less threatening.

Even if an event or situation is not under one's control, individual's high on control incorporate the event, through processes and actions, into broad, longer term plan and as such, the situation seems consistent with their view of life.

4.4.2.3 Challenge

The concept of challenge seems to be most closely related to the spirit of existentialism in its search for meaning, the orientation to the future, the zest involved in confronting choices, the ever-becoming (Antonovsky, 1991, p. 89).

Challenge is defined as an expectation that change, rather than stability is the norm in life and that change will present one with opportunities and incentives for personal development (Kobasa, 1982). Individuals who rate high on the challenge dimension, mitigate the stressfulness of events on the perceptual side by colouring events as stimulating rather than threatening. Kobasa et al (1982, p. 170), advocate that in coping behaviours, challenge will lead to attempts to transform oneself and thereby grow, rather than to conserve and protect, what one can of the former existence.

Kobasa (1979b, p. 4) advances that individuals who feel positively about change are catalysts in their environment and are well practised in responding to the unexpected. Furthermore, challenge fosters a sense of openness and flexibility, and thus allows for effective appraisal of change and difficult life events.

4.4.3 Locus of control (Rotter)

Locus of control (LOC) is probably the most-cited construct in psychology and is used most often in empirical studies (Antonovsky, 1991, p. 79; Hurrell & Murphy, 1991, p. 133). The construct of locus of control is conceptually rooted in Rotter's social learning theory (1954), which maintains that behaviour in a specific situation is a function of expectancy and reinforcement value (Rotter, 1966). Rotter and his colleagues at Ohio state university formulated the locus of control construct in an attempt to explaining the failure of people to respond in a predictable manner to reinforcement (Antonovsky, 1991). He (Rotter) believes that the control construct is a global characteristic, which is relatively stable over time and across situations.

As a general principal, internal versus external control refers to the degree to which persons expect that a reinforcement or an outcome of their behaviour is contingent on their own behaviour or personal characteristics versus the degree to which persons expect that reinforcement or outcome is a function of chance, luck, or fate, is under the control of powerful others, or is simply unpredictable (Rotter, 1992; Lefcourt, 1966, p. 207). Internal locus of control has always been associated with positive coping. In this regard, internal locus of control was positively correlated with high self-efficacy (Antonovsky, 1991, p. 79), high learned resourcefulness (Rosenbaum, 1980, p. 119), and the control construct of Hardiness (Kobasa, 1982). However, Rotter (1975) in Antonovsky (1991, p. 79) cautions that one should by no means generalise that internals are the "good guys".

People according to Rotter (1966, p. 1) can be differentiated on the basis of their "generalised expectancy" concerning internal and external control of reinforcement. If an individual perceives reinforcement to be contingent on his own actions (ie has an internal orientation), then positive or negative reinforcement will strengthen or weaken the behaviour. If, on the other hand, the individual believes that reinforcement is externally controlled by chance, fate, or powerful others, then reinforcement will not strengthen or weaken the behaviour.

Antonovsky (1991, p. 78) analysed Rotter's locus of control along with other salutogenic constructs. In conclusion of his review, Antonovsky (1991), places the structural origins of an internal locus of control under four headings: internality as a reflection of the objective situation, internality and culture, the concept of powerful others, and responsible versus defensive internality. Each of these structural origins will now be addressed:

4.4.3.1 Internality as a reflection of the objective situation

In societies or situations such as concentration camps or poverty-stricken circumstances, the objective reality of peoples lives are such that their fate becomes largely determined by powerful others or by chance. These forces are beyond their control and even their comprehension. In these situations, individuals will accurately come to see the world, in term of their frame of reference, as externals. Antonovsky (1991) indicates that, dynamically over time, this outlook becomes a self-fulfilling prophecy as it is deemed more functional for survival to have externalised beliefs. On the other hand, high internality is fostered in atmospheres of autonomy and freedom for effective action.

4.4.3.2 Internality and culture

Guarding against ethnocentrism, Rotter (1966), made reference to "fatalistic" cultures as engendering an external locus of control. Antonovsky (1991, p. 83) reiterates this by stating that "internality is likely to be nurtured in social contexts in which there is indeed room, objectively, for the individual to affect his or her environment and fate". In certain cultures such as those that resort to magic, the inadequacy of knowledge or opportunity for control fosters a culture of externality.

4.4.3.3 The concept of powerful others

At the outset, it is important to indicate the distinction between powerful others and authority. According to Levenson (1981, p. 15), "powerful others" refers to a belief that the outcome of circumstances is in the hands of those with power, who are at best uninterested in the individual's welfare (Antonovsky, 1991). On the other

hand, with regard to “authority”, it is believed that those in control have legitimate power and act in one’s own interest. Based on this differentiating factor of legitimate versus illegitimate power, it cannot always be assumed that being under the control of powerful others engenders externality. There are, for example, some family structures, religions and health care settings which acknowledge that parents, god, or the doctor have special knowledge or authority, encouraging proactive behaviour (Antonovsky, 1991). Growing up or living in such sociocultural settings might well foster strong benevolent powerful other beliefs which correlate positively with internality.

4.4.3.4 Responsive versus defensive internality

Firstly, negative experiences over which there is little control are conducive to the development of high beliefs in external control and low belief in internal control (Wallston, 1981 in Antonovsky, 1991). This, according to Antonovsky (1991, p. 85) raises an important question: “Does internality facilitate coping with stressors because it means taking credit for good outcomes while rejecting blame for unfortunate ones (defence), or does it do so because it expresses a willingness to assume responsibility, whatever the outcome (control)?”

Internality could facilitate coping with stressors, because it means taking credit for good outcomes while rejecting blame for unfortunate ones (defence). Also, internality could be characterised by a willingness to assume responsibility whatever the outcome. On the other hand, in the absence of control over outcomes, externality could foster the development of “self-blammers” (Antonovsky, 1991). In addition, “defensive internals” are characterised by verbally giving external reasons for past failures but in the belief that own behaviour will determine outcomes (Rotter, 1992, p. 128).

4.4.4 Learned resourcefulness (Rosenbaum)

Rosenbaum (1988), inspired by the works of Meichenbaum (1977), developed the term “learned resourcefulness”. Meichenbaum believed in the effectiveness of coping skills training through self-regulation. He advocated that once clients

acquire coping skills, they change their perceptions of their condition from “learned helplessness” to “learned resourcefulness” (Meichenbaum, 1977; Rosenbaum & Jaffe, 1983, p. 216). This construct has its theoretical base in the field of behaviour therapy.

4.4.4.1 Learned resourcefulness as a personality repertoire

The term “learned resourcefulness” refers to an acquired repertoire of behaviours and skills by which a person self-regulates internal events (such as emotions, pain, and cognitions) that interfere with the smooth execution of a target behaviour (Rosenbaum & Jaffe, 1983, p. 215).

Learned resourcefulness is not a personality trait, but a “personality repertoire” which is a set of complex behaviours, cognitions and affects that are in constant interaction with the individual’s physical and social environment and are evoked by many situations; they also provide the basis for further learning (Strümpfer, 1990, p. 273). In essence, learned resourcefulness then is a basic behavioural repertoire that is learned from birth and serves as a basis for coping with stressful situations (Staats, 1975 in Rosenbaum & Palmon, 1984, p. 245).

According to Rosenbaum and Ben-Ari (1985, p. 200), the specific behavioural skill that constitute learned resourcefulness include

- use of cognitions and self-instruction to cope with emotional and physiological responses
- application of problem-solving strategies
- ability to delay immediate gratification
- general belief in one’s ability to self-regulate internal events

4.4.4.2 Learned resourcefulness as a self-controlled behaviour

The above skills come into action when the individual is confronted with stressful events. According to Rosenbaum (1988), all coping with stressful events call for

attempts at self-regulation or self-control. It is for this reason, reports indicate, that subjects scoring high on the SCS are found to have an internal locus of control (Rosenbaum, 1980, p. 119). The process of self-regulation, according to Rosenbaum (1980), occurs in three phases:

- Representation phase: The individual experiences, without any conscious effort, a cognitive and/or emotional reaction to changes within himself or herself or the environment.
- Evaluation phase: The evaluation of the changes, first, as desirable or threatening, then, if threat is appraised, evaluation whether anything can be done about it.
- Action phase: Action is taken (or coping) to minimise the negative effects of the internal or external changes.

Over time, individuals who succeed to self-regulate their internal responses acquire skill in doing so. The learned resourcefulness thus provides a basis for further learning and becomes a source of information for judgements or self-efficacy in coping (Rosenbaum, 1980).

The individual who measures high on learned resourcefulness will be able to deal with stressors by means of problem-focused strategies. Negative thoughts and emotions are regulated, enabling the individual to persistently deal with the stressor, whilst delaying gratification of personal needs. This enhances self-efficacy, since the perception of the self as effective and efficient motivates the individual to persist with the task (Rosenbaum, 1988). On the other hand, the individual who measures low on learned resourcefulness is not goal-oriented or problem-focused in dealing with stressors. In this case, negative internal responses are not controlled, thus hindering persistence in dealing with the stressor. This inculcates reduced feelings of efficacy and leads to self-perceptions of inefficiency and helplessness.

In addition, Rosenbaum (1989, p. 249) postulates that learned resourcefulness is necessary for both redressive self-control and reformative self-control. Redressive

self-control is aimed at resuming normal functions that have been disrupted, such as going to a dentist when you experience pain in a tooth. Reformative self-control is directed at breaking habits in order to adopt new and more effective behaviours such as going to the dentist for a check up as a preventative measure.

Rosenbaum (1988, p. 484) concludes that individuals high in learned resourcefulness use more self-control methods during a stressful encounter than low resourceful individuals.

4.5 COPING

The following section attempts to present the key issues on coping as identified in the literature. Coping is crucial in the understanding of salutogenic functioning, which is essentially concerned with positive outcomes of the stress process. The section will concentrate on a transactional discussion of coping (see fig. 4.2) which is a continuation of the transactional theory of stress discussed in chapter 2. To conclude this section, the role that salutogenic constructs play as a coping mechanism in the face of stress and burnout, will be discussed individually.

4.5.1 Definition of coping

The concept of coping is a crucial part of the overall view of stress, determining to a large extent the outcome of a stressful encounter (Lazarus & Folkman, 1984b). Most comprehensive models of stress view coping as a buffer factor (see fig. 4.2) that mediates the relationship between stressors and outcome, or between antecedent stressful events and negative outcomes (Endler & Parker, 1990b; Folkman et al, 1986, p. 571).

According to Cox (1987) in Cooper and Payne (1991, p. 19), a transactional definition of coping is “the cognitions and behaviours adopted by the individual, following the recognition of a stressful transaction, that are in some way designed to deal with that transaction”. In the transactional model, coping includes cognitive and behavioural efforts to master, reduce or tolerate internal and external demands (Lazarus & Folkman, 1984b). This view is expressed in figure 4.2.

Theoretically, coping follows three stages: the primary appraisal, the secondary appraisal and lastly the coping stage (Lazarus & Folkman, 1984b). This third stage, called coping, is crucial in determining outcome of the stress-response interaction. Individual differences play a key role in the selection of coping option; these different coping options thus have implications for moderating the stress-outcome relationship.

Coping has two major functions: dealing with the problem that is causing the distress (problem-focused coping) and regulating emotion (emotion-focused coping) (Lazarus & Folkman, 1984 cited in Dreary et al, 1996, p. 4). Reports indicate that people use both types of coping in virtually every type of stressful encounter, although there are marked individual differences in how people cope with stress (Cooper & Payne, 1991, p. 10).

In terms of coping success, it is likely that people will cope better when they are able to access coping strategies which are comfortable and familiar. Furthermore, coping success depends on the degree of fit between preferred coping strategy and situational constraints (Carver, Scheier & Weintraub, 1989).

The transactional model of coping (Heim, 1991) is built on the transactional theory of coping of Lazarus and Folkman (1994).

4.5.2 General themes in understanding coping

The following is a look at five general approaches to coping.

The first approach focuses on characteristics of the personality that are antecedents of coping (Kobasa, 1979; Wheaton, 1983). Wheaton (1983) considers fatalism and inflexibility, while Kobasa (1979) considers hardiness. According to Folkman et al (1986), the assumption underlying this approach is that personality characteristics dispose the person to cope in certain ways that either impair or facilitate the various components of adaptational status. However, there is little evidence that these personality characteristics do in fact significantly influence actual coping processes (Cohen 1984; Fleishman, 1984).

The assumption underlying the second approach to coping is that the way in which a person copes with one or more stressful events is representative of the way he or she copes with stressful events in general (Moos & Billings, 1982; Folkman, et al, 1986, p. 571). This involves assessing the way in which a person actually copes with one or more stressful events.

The third popular approach to coping, focuses on characteristics of the stressful situation that people experience. The assumption of this approach is that people who are repeatedly exposed to uncontrollable situations experience helplessness, become increasingly passive in their coping efforts, and ultimately experience demoralisation and depression (Krohne & Laux, 1982 cited in Folkman et al, 1986, p. 571).

The fourth and most sophisticated approach to coping is illustrated in the works of Pearlin and Schooler (1978). According to Folkman et al (1986), this approach deals with the contribution of personality characteristics and coping to psychological outcome. This approach advocates that personality characteristics and coping responses have different effects that are relative to each other,

depending on the nature of the stressful conditions. Results, according to this school of thought, indicate that personality characteristics are more helpful to the stressed person in those areas in which there is little opportunity for control (eg at work), whereas coping responses are more helpful in areas in which the person's efforts could make a difference (eg in the context of marriage).

Finally, the approach to coping to be accepted for the purposes of this research, draws from all the other approaches within a framework of cognitive theory of psychological stress and coping. Here coping reflects a dynamic, mutually reciprocal, bi-directional interplay between personal and environmental factors, and the appraisal and coping processes that occur within this context (Folkman et al, 1986) (see fig. 4.2). This approach is transactional and is rooted in the works of Lazarus and Folkman (1984b).

4.5.3 Models of coping

Understanding how coping may be related to outcomes has been approached from several perspectives. The following is a brief account of the development of coping models.

4.5.3.1 Psychoanalytic theory and ego psychology

Freud (1955) in Moos and Billings (1982), believed that ego processes serve to resolve conflicts between an individual's impulses and constraints of external reality. The function of ego-processes is to reduce tension by enabling the individual to express sexual and aggressive impulses indirectly, without recognising their true intent. These ego processes are cognitive mechanisms, although they do have behavioural expression.

4.5.3.2 Lifecycle perspectives

This perspective focuses on the gradual accumulation of personal coping resources over an individual's life span. The main assumption underlying this perspective is that adequate resolution of the transitions and crises that occur at

each point in the life cycle leads to coping resources that can help resolve subsequent crises (Moos & Billings, 1982, p. 213).

4.5.3.3 Evolutionary theory and behaviour modification

Darwin's evolutionary perspective on adaptation provided the basis for a behaviourally oriented counterpoint to the psychoanalytic concern with intrapsychic and cognitive factors (Moos & Billings, 1982). This orientation led to emphasis on behavioural problem-solving activities that contribute to individual and species survival. More recently, the cognitive oriented components have been included to the traditional focus of problem-solving behaviour, and has become known as cognitive behaviourism (Goldberger & Breznitz, 1982). Bandura and Adams (1977) advocate that individuals must believe that they can successfully accomplish a task in order for them to engage in active efforts to master that task.

4.5.3.4 Cultural and socioecological perspectives

The perspective highlights an adaptation to the conditions of the physical and cultural environment, by the facilitation of cooperative efforts of the human community (Moos & Billings, 1982). The concept of environmental coping resources emerged from this perspective. An important aspect of this perspective is social networks, which can provide such interpersonal resources as emotional understanding, cognitive guidance and tangible support. Moos and Billings, (1982) point out that, according to this approach, environmental resources can affect the appraisal of the threat implied by an event, as well as the choice, sequence and relative effectiveness of coping responses.

4.5.3.5 An integrative conceptual framework (transactional model of coping)

The elements identified by the four perspectives reviewed above, have been integrated in a framework that conceptualises the link between life stress and functioning (as mediated both by personal and environmental coping resources), and by cognitive appraisal and coping processes, as well as their

interrelationships. The transactional model of stress and coping has its roots in this perspective (Lazarus & Folkman, 1984). This conceptual model illustrates that life events, and the personal and environmental coping resources related to such events, can affect the appraisal–reappraisal process, as well as the selection of coping responses and their effectiveness (Moos & Billings, 1982, p. 214). The following is a comprehensive description of the transactional model of coping (Lazarus & Folkman, 1987):

a Coping strategies

Once a situation is perceived as threatening, an individual appraises how dangerous or problematic it is and what kind of coping strategy he or she will need to use to reduce the potential harm to his or her mental and/or physical wellbeing (Dewe, 1992).

i Problem-focused strategy

Problem-focused strategy is concerned with directly confronting or dealing with the source of stress. It is characterised by solving the problem and seeking information and alternative rewards. This can be done in a cool, rational, deliberate manner or it can be done aggressively.

ii Emotion-focused strategy

Emotion–focused coping is characterised by heightened negative emotional responses which interfere with effective problem solving. This type of coping includes distancing, self-controlling, seeking social support, escaping-avoiding, accepting responsibility, and positively reappraising. Note that emotion-focused coping involves purely cognitive activities that involve changing the meaning of stressful encounters. If the individual is successful, there is no reason to experience emotional distress, since the harmful or threatening relationship has been made subjectively benign (Lazarus & Folkman, 1984).

According to Lazarus and Folkman (cited in Moos & Billings, 1982), people who perceive an event as controllable should be able to mobilise more effective problem-focused coping responses and consequently may experience less emotional arousal and distress.

Cognitive appraisal and coping are all transactional variables. Folkman et al (1986, p. 572) assert that neither of these variables refer to environment or the person alone, but rather to the integration of both in a given transaction.

Recently, it has come to be recognised that there is no one best way to cope. Rather, a successful outcome is engineered by the individual fitting the right strategy to the situation (Cooper & Payne, 1991, p. 23). Furthermore, individual differences play a crucial role in which coping options an individual will employ; this decision is not confined to utilising a single strategy, but to utilising a combination of options – an indication of the complexities surrounding person-environment transactions.

b Coping resources

According to Heim (1991, p. 96), Manning, Williams and Wolfe (1988, p. 205), the coping process not only depends on situational factors such as the stressors themselves, but it is strongly influenced by the intrinsic or extrinsic resources of the person, mostly his or her personality assets, social networks, constitutional predispositions and economic status (see fig. 4.2).

Coping resources are a complex set of personality, attitudinal and cognitive factors that provide the psychological context for coping (Moos & Billings, 1982, p. 215). Such resources are relatively stable dispositional characteristics that affect the coping process and are themselves affected by the cumulative outcome of that process. For the purpose of this study, the four salutogenic personality dispositions of sense of coherence, hardiness, locus of control and learned resourcefulness will be discussed.

The review indicates that social support and personality seem to be the main motivational factors functioning to enhance or inhibit the transformational coping process (Antonovsky, 1982; Maddi, 1990; Kobasa, 1979).

i Social support

This issue of social support, acting as a moderating variable, has already been discussed in chapter three on burnout. To avoid replication, the role of social support as a moderating variable in the stress phenomenon will be discussed.

According to Etzion (1984), Ratcliff and Baum (1990), the resources provided by virtue of belonging to a group and the emotional support associated with the belief that one is loved, valued and esteemed, may provide a buffer between people and the stresses and strains of modern life.

Research concerning social support have not been consistent: some indicate protection against illness, some show a buffering effect and yet others show no effect at all (Jayaratne, Himle, & Chess, 1988; House, 1981 in Maddi, 1990, p. 140; Steptoe, 1991, p. 221). Such inconsistency is not surprising in view of the conceptual, definitional and measurement ambiguities surrounding the concept (Friedman, 1990).

Presently, one of the major questions being asked in social support research is whether social support is a subjective impression in the mind of the person or a fact of social embeddedness (Maddi, 1990, p. 140). Despite these imprecisions, recent research findings indicate social support, as providing a buffer function in the stress-illness relationship. This is true regardless of whether it is the social resource or the subjective impressions sense of the factor that is emphasised. Whilst one function of social support may be to motivate coping efforts, this tends to only occur in individuals scoring high on salutogenic personality constructs. Kobasa and Puccetti (1983) discovered that managers who score low in hardiness were soliciting and accepting of pampering from their significant others. This resulted in dependence which is converse to assisting one to decisively cope with

their problems. Thus personality was found to play a role in whether the outcome of social support will be activist or pampering.

ii Personality

Historically, four models of personality have predominated: trait, psychodynamic, situationism and interactionism (Endler & Edwards cited in Goldberger & Brenitz, 1982, p. 36). The development of personality theory parallels the development of stress and coping theory. Clinicians and the personality trait theorists have emphasised traits as dynamic sources within the individual, whereas social psychologists and social learning theorists have emphasised situations and their psychological meaning for individuals. More recently, the interactionist position recognises the essential contributions of both person and situation factors.

Folkman et al (1986, p. 578) report that personality variables, together with appraisal and coping, have a significant relation to psychological symptoms. Personality variables motivate through their influence on how individuals think about themselves and their world (Maddi, 1990).

According to Kobasa et al (1982, p. 168), personality dispositions have both cognitive, appraisal and action aspects. At the cognitive appraisal level, personality dispositions constitute bases for experiencing stimuli in a particular fashion and as having a particular meaning. At the action level, given the particular perceptions that have occurred, personality dispositions energise a particular set of activities experienced as appropriate. According to this position, personality dispositions can influence coping processes and this may be the mechanism whereby personality exercises a buffering effect on stressful events.

The criteria for what constitutes a "healthy personality" include dispositions that have the cognitive appraisal effect of rendering the events as not so meaningless, overwhelming, or undesirable, and the action effect of instigating coping activities that involve interacting with and, thereby, transforming the events into less stressful form rather than avoiding (Kobasa et al, 1982, p. 169; Lazarus, 1966). Individuals with personality dispositions of this sort possess a valuable aid in

avoiding the illness-provoking biological and psychological states, and should remain healthy while experiencing events that would be debilitating for others without those personality dispositions. Steptoe (1991, p. 215) point out that several personality dispositions may be associated with active and passive coping, including locus of control, hardiness and self-esteem. Other notable personality factors that have earned recognition in moderating the stress-illness relationship are sense of coherence and learned resourcefulness.

Personality constructs which are known to moderate the stress-illness relationship have become known as salutogenic personality constructs. Details of these salutogenic constructs and how they act as coping mechanism are discussed in sections 4.4 and 4.6. In a nutshell, individuals scoring high on salutogenic variables, tend to use transformational coping in favour of regressive coping, and reports show that this decreases illness both at the main effect and at a buffer level (Antonovsky, 1982; Kobasa & Puccetti, 1983; Maddi, 1990; Rosenbaum, 1988; Rotter, 1966).

In addition, Scheier and Carver (1985 cited in Steptoe, 1991, p. 216) have argued that optimists may cope better with stressful encounters, because they take effective action and engage in sensible forward planning. Self-efficacy which, refers to the beliefs that the person has the skills or competence to master the situation, is also associated with stress tolerance (Bandura, 1977).

Whilst emphasising the role of personality dispositions in the outcome of coping, it is important not to neglect other important variables that determine coping success, such as living in a favourable physical and social environment, nurturant parents, intelligence, education, supportive friends, social skills or financial standing. According to this, even under conditions of high stress, well endowed children and adults are more stress resistant and have a much better chance of getting along well without pathology than poorly endowed children and adults (Lazarus in Friedman, 1990, p. 114).

c Distinguishing between mediating and moderating factors in coping

Mediating and moderating factors are both coping resources and these terms are often used interchangeably. They are, however, both essentially different concepts.

According to Cooper and Payne (1991, p. 12) a mediator variable is one that is responsible for the transmission of an effect, but does not alter the nature of the effect. In contrast a moderator variable is one whose preference or level alters the direction or strength of the relationship between two other variables.

Several investigators have argued that the major mediating variables between stress and illness is strain. According to Maddi (1990), subjective signs of prolonged strain reaction include physiological and psychological symptoms. As the exhaustion caused by prolonged strain reaction deepens, the risk of wellness breakdown increases.

Moderating variables, according to Maddi (1990, p. 132), qualify as buffers or resistance resources against illness. Among these factors are health practices, coping, personality and social support, constitutional dispositions or hereditary.

d Treatment of the strain reaction

From the above, strain is acknowledged as being the major mediating variable between stress and illness (Maddi, 1990). To combat the physiological and psychological symptoms of prolonged strain, treatment of the strain reaction is important to avoid exhaustion as a result of the prolonged strain reaction.

i Symptomatic coping

According to Cooper and Baglioni (1988), symptomatic coping involves health practices that are well suited to decreasing strain. They do not, however, address the causes of strain and are, therefore, considered symptomatic treatment rather than a cure. Health practices, such as targeted dieting, are effective in reducing

physiological strain reactions, such as blood pressure and cholesterol levels. Regular practice of relaxation techniques and meditation appears to reduce mental tension, pain and even blood pressure. The use of prescription medication, such as tranquillisers is known to be effective in treating anxious or depressed moods.

Physical exercise may help, because strain is the sustained mobilisation of the “fight or flight” reaction (Maddi, 1990). When one jogs or plays racquet ball, for example, one is using the mind and body in the way it was intended to be used since it expresses the mobilised energy of the strain reaction, physical exercise is relaxing. On the other hand, when engaging in relaxation techniques, such as a hot tub, one tries to shift organismic balances away from the adrenaline-rich, sympathetic nervous system of the fight or flight reaction.

ii Transformational coping versus redressive coping

According to Maddi (1990), the stress resistance factor called coping more closely approximates a cure in the sense that it aims to decrease the stressfulness of events impinging on the person. According to the literature, coping can be done transformationally or redressively (Kobasa, 1982).

Transformational coping involves attempts to more or less permanently nullify the stressfulness of an event, so that it can be experienced subsequently without engendering much strain (Kobasa, 1982; Maddi, 1990). Transformational coping has both mental and action components. At the mental level, what is involved is setting the stressful circumstances in a broader perspective, so that it does not seem so terrible after all; then, by analysing it into its component parts, it is easier to identify the location of the stress and how to formulate steps to deal with it. According to Maddi and Kobasa (1984 cited in Maddi, 1990, p. 133), once these mental steps have been taken, the decisive actions of transformational coping completes the work by efforts to change the tasks, roles, individuals and their reactions, that have constituted the stress.

On the contrary, regressive coping also has mental and action components to it, but they are used negatively (Kobasa, 1982). At the mental level, the person will

highlight the stressful and negative aspects of the situation and then use denial as a defence against the pain. Being thus unable to mentally take grasp of the situation, the person acts evasively rather than decisively. Actions could comprise avoiding thinking about or avoid acting towards the stressful situation. Common examples of this are substance abuse, excessive sleeping or watching television. The evasion associated with regressive coping, may provide some short-term relief, but it is not as effective in the long-term because it is not aimed at solving the essence of the problem (Maddi, 1990). On the other hand, transformational coping increases one's pain in the short-term, by directly confronting the initiating problem; it forces one to think more about the stressful circumstance and take action that brings one closer in contact with the problem. However, by dealing with the problem, there are long-term advantages for the individual. An important component to transformational coping is resistance factors (Maddi & Kobasa, 1984).

4.5.4 Interventions aimed at decreasing stressful events

The transactional models of stress emphasises that people not only respond to, but also create their environments. This "reciprocal determinism" introduces the possibility of preventative actions (Cameron & Meichenbaum cited in Goldberger & Breznitz, 1982, p. 705). The teaching of coping skills rests on the assumption that given the right tools, one can cope effectively with most sources of stress (Goldberger & Breznitz, 1982). The following is a discussion of different approaches to intervention.

4.5.4.1 Ergonomic approach

This approach emphasises changing the environment in which the individual exists, in order to decrease the rate and severity of stressful or disruptive events (Maddi, 1990, p. 141). In this approach, there is no attempt to alter the person's appraisals, coping efforts or physical reaction. An example of this is to clear out the clutter on one's desk or to perhaps take a vacation.

In an organisational context, by analysing job descriptions, supervisory relationships, equipment and technical features of work, environmental reforms may be made to decrease the rate and intensity of stressful events (Robbins, 1996). This approach to alleviating stress has been criticised, because it is often difficult or impossible to exert influence over the environment. In the case of the public health sector, for example, it is impossible to improve working conditions for staff, because of government under-funding (Ellis, 1996).

4.5.4.2 Health practices as stress intervention

Health practices are often the most cited forms of stress intervention (Cooper & Baglioni, 1988). It is aimed at the individual in an attempt to decrease the vulnerability of the physical body in breaking down. Among the most common health practices are physical exercise, relaxation, sound nutrition and guided use of prescription medications. It is important to note that health practices are symptomatic treatment.

Health practice intervention programmes tend to be presented in a structured format and entail procedures that are geared to accomplishing the health aim. This type of intervention is used commonly in weight loss programmes, decreasing cholesterol, stopping smoking and relaxing. Once again, like the ergonomic approach, health practices may not completely deal with the source of the stress. It does, however, play a vital role in dealing with the strain reaction caused by the stressor. This approach, does give more credit to human capability than in the ergonomic approach, but some aspect of frailty still remains when health practices are exclusively emphasised (Maddi, 1990).

4.5.4.3 Coping as stress intervention

The coping approach aims at decisive cure rather than the symptomatic treatment found in the two approaches above (Maddi, 1990). Stress intervention approaches that assume the coping approach, conceive the problem as an absence of the skill necessary for dealing with upheavals and changes. Thus, coping approaches emphasise engagement in skills training contrary to

emphasising motivation or cognition (Maddi, 1990). Overall, these approaches are essentially behaviouristic in their insistence on needed behaviours as the means to decrease stress. Examples of skill development intervention are assertiveness training and time management training. Relying exclusively on coping training and the development of useful skills, is limited for the reason that some individuals who have the necessary skills will not use them, failing in the motivation, cognitive appraisal, or both, that would usually bring the skill into play (Maddi, 1990). Since cognitive and emotional aspects of coping are hardly taught in coping training, another problem with assertive and time-management training is that they may be applied blindly in situations which do not require that behavioural skill. It is recommended that coping approaches should be used in combination with other stress interventions.

4.5.4.4 Lifestyle approaches to stress intervention

This is a more complex form of stress intervention than the ones previously discussed. Here training is targeted to reform how people think, feel and act, that is, what might be called their lifestyle (Maddi, 1990, p. 144). Lifestyle approaches incorporate elements of the above approaches, but their emphasis is on comprehensive changes and the power to influence one's own destiny. According to Maddi (1990), the following are popular lifestyle approaches to stress intervention:

a Social support

Lifestyle interventions also promote social support, based on the assumption that significant others have the ability to provide resources and appreciation, encouragement, empathy and compassion, and that are able to ease the debilitating effects of stressful circumstances (Etzion, 1994; Ratciff & Baum, 1990).

This approach will teach individuals who are lacking social support, its benefits and how to get it. Social support stress interventions, for example, typically establish a group for the target person to belong to and require that the group contribute resources and administration to its members, rather than being

competitive and punitive. Some groups are known to live beyond the training period such as Alcoholics Anonymous, in which the target person is regarded as in danger of backsliding without membership in an ongoing group. In social support interventions where the group is not perpetuated, the assumption made is that once people realise the importance of interaction with others, there will be few obstacles to their searching out such interaction in their own life contexts (Maddi, 1990).

b Targeting the individual in group training

This type of intervention occurs in a group context, but focuses on the individual. According to Friedman & Ulmer (1984), the assumption is that the person can achieve for himself or herself benefits similar to those that may be derived from social support given by others. Although the training occurs in a group, the purpose is to teach individuals beneficial things about their own powers to cope with stressful circumstances. Stated simplistically, an example of this is to teach individuals showing type A behaviour to express type B behaviour instead (Cooper & Baglioni, 1990).

c Cognitive-behavioural therapy

The general assumption behind this lifestyle approach is that the way people think influences how they feel and act (Beck, 1967). Catastrophising (feelings of inadequacy, failure and worthlessness) is a phenomenon at the root of debilitating reactions to stress. Catastrophising leads to depression and possibly to a range of physical symptoms as well. Therefore, the intervention of cognitive therapy focuses on helping trainees to overcome the tendency to appraise experience by catastrophising. According to Maddi (1990), this is done either directly by confronting cognitions, or indirectly by attempting to shift emotional and or action patterns following from the cognitions. Basically, the intervention operates on highlighting undesirable emotional and action patterns. Individuals are asked to perform tasks such as keeping a diary, making a list of alternatives, approaching goals by gradation with a view to shifting recalcitrant thoughts, feelings and actions (Beck, 1967).

d Stress-inoculation training

This lifestyle approach is complex, as it is aimed at altering thoughts, feelings and actions. According to Meichenbaum (1985), this training programme, which may be done in groups or on an individual basis, has three phases: conceptualisation, skills acquisition and rehearsal, and application and follow-through.

In the conceptualisation phase, the trainer establishes a relationship with trainees. The trainees are educated about the transactional nature of stress and coping, and about the role that cognitions and emotions play in engendering and maintaining stress. Furthermore, a conceptualisation is recommended to the trainee on how to reduce stress (Meichenbaum, 1985).

In the skills acquisition and rehearsal phase, the trainer helps the trainee learn relaxation, cognitive appraisals and problem-solving approaches in dealing with stress. Finally, in the application and follow-through phase, the trainee is encouraged to use what has been learned. Techniques used here are imagery rehearsal, behavioural rehearsal, role-playing, modelling, graduated in vivo exposure and relapse prevention (Maddi, 1990, p. 149). Follow-up sessions are planned to provide continuing social support for implementing what has been learned.

Stress-inoculation training has been criticised for not having standardised procedures. According to Maddi (1990), there is a fairly wide latitude as to what will be done; virtually any available technique or approach can be incorporated. Since stress-inoculation covers such an inconsistent variety of practices, there is no empirical evidence of its effectiveness.

e Personality training

This is the final type of lifestyle intervention. Conceptually, this approach assumes that the direct solution for stressful circumstances is transformational coping, in the sense of both optimistic cognitive appraisal and decisive actions, that is, appraisal and action must transform the stressor into some less stressful form, for it to lose

its ability to induce strain which leads to a breakdown of wellness (Lazarus & Folkman, 1984).

Personality training is largely motivational based. Results indicate that individuals can be taught those skills needed to cope. If, however, individuals lack the motivation to carry out these behavioural skills, it would result in avoidance rather than confrontation of the stressor. Hence, personality training emphasises the skills involved in transformational coping and the motivation inherent in certain beliefs about the self and world that support the utilisation of these skills (Moos & Billings, 1982)

A trainee can be trained to develop his or her personality salutogenically, since research findings show that those who score high on salutogenic constructs are better copers than those who score low on salutogenesis (see sec. 4.4 and sec. 4.6 for the discussion of salutogenic construct scores). This research focuses on four salutogenic personality variables, namely sense of coherence, hardiness, locus of control and learned resourcefulness in term of how they act as coping mechanisms. Only hardiness training will be looked at in this section, in order to give the reader an idea of how this type of lifestyle intervention operates. It is important to bear in mind that the approach explained below can similarly be applied to the other salutogenic personality constructs.

According to Kobasa (1982), the fifteen hours of hardiness training courses are organised into several discontinuous sessions. The courses are offered on a small group basis, including social support elements. Trainees make individual presentations. Basically, the format of the hardiness training involves the following stages: introduction, practice, enactment and concluding sessions (Maddi, 1990, p. 149):

The *introductory session* involves mutual sharing of stressful circumstances from the present and recent past. In the preliminary stage, trainees are informed about the hardiness model in order to understand and cope with stresses.

The *practice session* involves the teaching of the three techniques for transformational coping which are situational reconstruction, focusing and compensatory self-improvement (Maddi, 1987 in Maddi, 1990, p. 149).

In the *enactment session*, the three techniques are used together in mental and action transformations of current stresses. Finally, the feedback gained in this process is used to deepen the trainee's sense of commitment, control and challenge which all contribute to hardiness. In addition to this exercise, trainees are provided with the motivation to undertake transformational coping which has the desired effect of deepening the natural motivation (hardiness in this case) for coping.

The *concluding session* is characterised by follow through of trainees' anticipation of stresses likely to be encountered in the near future, and how they anticipate to cope with them. This type of lifestyle intervention requires the involvement of highly skilled clinicians; it is imperative that the trainer only serves as facilitator without imposing any particular view of self or world, except to assert that no one needs to be overwhelmed by stresses. According to Maddi (1990), hardiness training is true to its existential conceptual underpinnings.

The definition, models and dynamics of coping have been presented. The next section will look at how salutogenic constructs act as coping mechanism in stress and burnout.

4.6 SALUTOGENIC CONSTRUCTS AS COPING MECHANISMS

The following discussion looks at how the four salutogenic constructs, chosen for this research, act as coping mechanisms in stress and burnout.

4.6.1 The sense of coherence (SOC)

From section 4.4.1 above, it is apparent that the SOC focuses on factors that enable coping and wellbeing, rather than looking at risk factors promoting diseases. This salutogenic perspective is based on Antonovsky's (1979) premise

that the SOC is a major variable in determining the health of an individual. In psychological terms then, one might conceive the SOC as a personality characteristic or coping style – an enduring tendency to see one's life space as more or less ordered, predictable and manageable (Antonovsky & Sagy, 1986, p. 14).

Using Lazarus's multistage model of coping as a paradigmatic model of the coping process, Antonovsky (1987b, pp. 130-151) argues that individuals scoring high on SOC are not only more flexible in how they view and manage their resources and coping techniques at the secondary appraisal level of coping, but are also more likely to define stimuli as nonstressors and to define the stress, attributed to stimuli perceived as stressors as benign or irrelevant.

Furthermore, other reports have indicated a negative relationship between scores on the SOC scale and measures of anxiety (Antonovsky and Sagy, 1986; Carmel & Bernstein, 1990), life stress (Flannery & Flannery, 1990), emotional distress and high risk behaviours (Nyamathi, 1991), alcohol problems (Midanik et al, 1992) and major depressive disorder (Carstens & Spangenberg, 1997, p. 1213). With regard to major depressive disorder, Carstens & Spangenberg (1997) found that life-skills programmes aimed at strengthening young people's sense of coherence can play a role in the prevention of depression. Wolf and Ratner (1999, p. 182), found stress and recent traumatic events to be inversely related to SOC. Like other salutogenic constructs, they also found that social support was positively related to SOC. Wolf and Ratner (1999, p. 196) add that the concept of SOC may be a useful clinical indicator when assessing vulnerable populations.

Gilbar (1998, p. 39) reports that individuals with a strong sense of coherence experience less burnout than those with a weak sense of coherence. Gilbar (1998) points out that the manageability component of the SOC, which is defined in stress theory as the perception that resources are available to meet the demands, was found to predict emotional exhaustion – a component of burnout.

Meaningfulness is one of three components of the sense of coherence concept. Zika and Chamberlain (1992, p. 144) report a clear relation between psychological

wellbeing and meaning in life. According to Geyer (1997), success will create new experiences that again influence further development of one's SOC. In particular the comprehensibility component of the SOC will be promoted by consistent learning experiences.

According to Lazarus and Cohen (1977 in Antonovsky, 1987b, p. 111) people use different coping strategies in relation to the particular stress situation within which they are acting. Antonovsky (1991) argues that this is fostered by the relationship between coping strategies and Generalised Resistance Resources (GRRs). Antonovsky (1987b, p. 112) defines a coping strategy as an overall plan of action for overcoming stressors. One traditional way of categorising coping strategies is the fight-flight-freeze triad. Scott and Howard (1970 in Antonovsky, 1979) reformulate this category with more sophistication, using the terms "assertive", "divergent" and "inert responses". Antonovsky cautions that this approach is misleading. He argues that despite our cultural prejudice in favour of fighting (at least for males), an assertive response is clearly not always the most effective strategy for coping with stressors. Antonovsky (1987b) points to three major variables that enter into every coping strategy: rationality, flexibility, and farsightedness. These are not situation-contingent characteristics. The more a coping strategy is high on these variables, the more effective a GRR it will be.

Rationality refers to the accurate, objective assessment of the extent to which a stressor is indeed a threat (Antonovsky, 1987b). To adopt a transactional approach, that is, to stress the meaning of a stimulus to the perceiver, is not to deny objective reality. One's rational definition of a situation is decisive in determining the outcome.

Flexibility refers to the availability of contingency plans and tactics, and of a willingness to consider them (Antonovsky, 1987b). Given the dynamic character of coping with stressors, the strategy that is open to constant, built-in evaluation and subsequent revision, is bound to be more successful than other strategies.

The third element of a coping strategy that contributes to making it a GRR, is farsightedness or, as Antonovsky (1987b) puts it, being a good chess player.

Farsightedness is linked to rationality and flexibility, but goes beyond them in that it seeks to anticipate the response of the environment, inner and outer to the actions envisaged by the strategy.

Emotional affect is the fourth important characteristic of a coping strategy. Lowenthal and Chiriboga (1973 in Antonovsky, 1987b, p. 114) suggest that some people prototypically respond to stressors by feeling overwhelmed, while others are challenged. There is a general tendency for individuals to move in one direction or the other. According to Antonovsky (1987b), unlike rationality, flexibility and farsightedness, one cannot say that the more one tends to perceive a stressor as a challenge, the more effectively one is likely to cope with the stressor.

Behaviour is shaped by many variables, including coping strategies. It is important to note that a coping strategy is a plan for behaviour, not the behaviour. Antonovsky (1987b) suggests that it is possible to have an enduring, general coping strategy that is characterised by a high level of rationality, flexibility and farsightedness. Such a coping strategy can be considered an important GRR.

Antonovsky (1987b) refers to social support as interpersonal-relational GRRs. This is often referred to as the GRR of deep, immediate interpersonal roots. Reports indicate support for the notion that social supports contribute to positive health outcomes and that social ties are indeed a GRR (Berkman, 1977 in Antonovsky, 1987b, p. 117; Philips & Friedman).

The above findings confirm Antonovsky's (1979) hypothesis that the answer to the salutogenic question lies in the sense of coherence. It has been established that the stronger the sense of coherence of individuals and groups, the more adequately they will cope with the stressors imminent in life, and the more likely are they to maintain or improve their position on the health ease/dis-ease continuum. However, the extent to which coping is effective, depends on where one is located in the social structure. Social classes, ethnic and racial groups, and men and women do not all share the same set of life experiences which are conducive to establishing a strong SOC.

From the link between the sense of coherence and coping established above, the real issue is whether the societies, in which future generations are raised, facilitate or impede the development and maintenance of a strong sense of coherence. Improvement in health status is contingent on such analysis and on a programme of social action that could follow.

4.6.2 Hardiness

According to Kobasa (1982), individuals who view stressful situations as meaningful and interesting (commitment), see stressors as malleable (control); they construe difficulties as challenges (challenge) and are, therefore, defined as hardy. Kobasa et al (1981) have proposed that individual coping, defined as the cognitive appraisal of events and the subsequent actions directed towards those events, is influenced by the hardiness personality orientation, that is, individual differences in “hardiness” moderate the stress-outcome relationship (Cooper & Payne, 1991, p. 15).

According to the literature, hardiness is conceptualised as facilitating positive perception, evaluation and action that reduces an individual’s life stress and leads to more healthy adjustment. However, reviews on pre-1991 and post-1991 research present a different picture of hardiness construct which has implications for coping (Funk, 1992).

Manning et al (1988, p. 206) report that the hardy individual engages in decisive interactions with life situations, in order to resolve these situations or to transform them into less stressful forms, as opposed to avoiding the events and behaving in a redressive manner. Also, regressive coping was associated with low ratings of job performance, higher levels of burnout and low levels of hardiness (Pierce & Molloy, 1990 in Funk, 1992, p. 339; Manning et al, 1988, p. 213).

Antonovsky (in Cooper & Payne, 1991, p. 70) also advocates that hardiness is a generalised personality orientation, which has been studied in relation to successful coping and salutogenic outcomes and which can offer direct as well as buffering contributions to health.

In addition, Kobasa et al (1982) found that a hardy personality disposition was prospectively linked to fewer reported illnesses and symptoms and demonstrated that hardiness functions as a resistance resource in buffering the effects of stressful events. These theorists assert that this is similar to that of self-efficacy (Bandura, 1977).

A positive relationship was also established between hardiness and social support. Kobasa et al (1985) assert that hardiness affects coping directly and indirectly through social support. High hardy individuals are found to seek relationships that support transformational coping in times of stress and low hardy individuals were found not to seek these relationships which increased their tendency to use regressive coping when stressed.

Numerous studies also reveal that positive appraisals and successful coping produced by hardiness reduce organismic strain and thus reduce illness (Contrada, 1989; Wiebe, 1991 in Funk, 1992).

Early research on hardiness reports that hardy individuals, by virtue of their generally disciplined and realistic approach, engage most conscientiously in positive health practices. However, the post 1991 reviews have challenged these findings and have all raised the same methodological and conceptual problems associated with the hardiness concept (Funk, 1992, p. 341). The theorised buffering effect of hardiness has not been supported by the following evidence.

Factor analyses have failed to support hardiness either as a unitary construct or as consisting of three separate components. Whilst some factor analyses have found three factors, others have found one or two factors (Orr & Westman, 1988).

In addition, there is evidence that the hardiness scales inadvertently measure neuroticism because of the heavy reliance on negative indicators, such as alienation, insecurity, powerlessness and lack of personal control (Rowe, 1997, p. 164). Hardiness critics have, therefore, de-emphasised healthy personality characteristics and pointed out the relation between hardiness and the more pathological characteristic of neuroticism.

Funk (1992) and Rowe (1997) report that the buffering effects of hardiness occur only for working adults, for men only, or not all. Also, in certain cases, hardiness was not found to be a predictor of illness or physical symptoms (Hannah, 1988). Hardiness was also found to contribute nothing to the prediction of future wellbeing, except for the predictive ability of the commitment dimension (Florian, Mikulincer & Taubman, 1995).

The above findings demonstrate that hardiness does not consistently mediate or serve as a buffer to the stress-strain connection, and if any relationship does exist, it is ambiguous. The review indicates that present studies have failed to replicate the earlier Kobasa investigations (Rowe, 1997, p. 169).

Strümpfer (1990, p. 272) concludes with the following: “In view of these conceptual, measurement and validity problems, I am inclined to consider the hardiness constructs as part of the salutogenic paradigm but both its operationalisation and the supporting evidence is still very much in the pathogenic paradigm.”

Hardiness theory, despite its limitations, has played an instrumental role in the development of salutogenic thinking. Whilst hardiness does not cause good health, it is directly associated with health and its related outcomes. In the words of Manning et al (1988, p. 215), “hardiness appears to be an intriguing concept requiring more research to adequately explain its relationship with health-related outcomes, especially under conditions of stress”.

4.6.3 Locus of control (LOC)

LOC is a generalised personality orientation which has been studied in relation to successful coping, and salutogenic outcomes can make direct and buffering contributions to health (Antonovsky in Cooper & Payne, 1991, p. 70). The notion of locus of control (Rotter, 1966) is based on the belief that outcomes (reinforcements) are either due to personal factors (internality) or caused by factors external to the individual (ie fate, chance or significant others).

The literature indicates that LOC, as a salutogenic construct, does play an important role in buffering the stress-illness relationship.

According to Hurrell et al (in Cooper & Payne, 1991, p. 136), the reviews indicate that “externals have been shown to report more burnout, job dissatisfaction (Spector, 1982), stress (Halpin, 1985, Lester, 1982), alienation (Korman, Wittig-berman & Lang, 1981) and lower self-esteem (Lester, 1986).”

According to Heim (1991, p. 94), family physicians demonstrate that low locus of control is not only related to experienced stressors, but also to perceived work productivity. Having little control of the work situation and experiencing high stress leads to low productivity.

External locus of control implies a learned helplessness and has been directly linked to burnout (Ellis, 1996b; Kobasa, 1979a). It is this sense of helplessness that predisposes a feeling of being burned out and a reluctance to seek help. Control coping, according to Leiter (1991, 1992), may function in distinct ways in alleviating or preventing burnout. Firstly, control coping may influence a worker's capacity to endure stressful events and to reduce the likelihood of a stress reaction (emotional exhaustion). Secondly, the use of control coping cognitions or actions may enhance workers' assessments of their accomplishments when they are effective in their management of the environment. Furthermore, merely attempting to address work-related problems in a manner consistent with professional aspirations may be sufficient to enhance self-appraisal. Thus, according to Leiter (1991, p.141), individuals who use cognitive and action control strategies to address difficulties at work, tend to be less exhausted and to have a more positive assessment of their personal accomplishments; those who use escapist cognitive and action control strategies, tend to experience greater levels of emotional exhaustion.

In situations appraised as amenable to change, internals reported high levels of direct coping and low levels of suppression than compared to externals. Hurrell et al (in Cooper & Payne, 1991, p. 141) report that externals are thought to experience more adverse health outcomes, because they define events in their life

as outside of their control and believe that their actions will have little influence on the stressors.

Overall, the empirical reports indicate that internals do better at coping with stressors. However, Rotter (1966) very explicitly warns against thinking that internals are the “good guys”. Also, Goldberger and Breznitz (1985, p. 5) point out that many workers in the health professional field make the value judgement (implicitly or explicitly) that an internal locus of control is preferable to an external locus of control, because self-control can be used effectively to combat the potentially deleterious effects of stress. However, these generalisations fail to take into account that all stressors do not leave room for control, and thus passive acceptance may be the most appropriate coping strategy in such situations (Lazarus, 1990).

Lazarus and Folkman (1984a) reiterate that control coping should not always be equated with success. They point out that the potential virtue of escapist coping behaviour (opposite of control coping) when one is faced with stressful situations for which there is no possible solution. This has important practical application, because simply training human service workers to use more cognitive control coping techniques is unlikely to lead to major advances in the control of burnout. An assertive approach to job-related problems has to occur in a context of organisational and supervisory support. Furthermore, one cannot reasonably hope to develop control-oriented patterns of thinking about work-related problems without developing behaviours with control implications as well. In short, “we do not think as if we are in control when we know we are not” (Leiter, 1991, p. 143).

4.6.4 Learned resourcefulness

According to Rosenbaum (1989, p. 253), an individual’s self-control behaviour and attitudes are an enduring characteristic of that person. Learned resourcefulness describes an acquired repertoire of behaviours and skills (mostly cognitive) by which an individual self-regulates internal responses (eg emotions, cognitions or pain) that interfere with the smooth execution of a desired behaviour (Rosenbaum & Ben-Ari, 1985, p. 200).

The theory of learned resourcefulness is derived from the growing literature on the nature of stress handling methods and from the various coping-skills therapies proposed by the cognitively oriented behaviour therapists (Meichenbaum, 1977; Rosenbaum & Jaffe, 1983, p. 216). The discussion below gives evidence that high resourceful individuals use more effective coping methods and are reported to have a greater trust in their ability to control their emotions and cognitions when faced with stressful events than low resourceful subjects.

The essence of this theory is that successful coping with stressful events involves self-regulation, which is likely to produce perceptions of self-efficacy (Rosenbaum & Ben-Ari, 1985, p. 213). Perceived self-efficacy forms an integral part of the learned resourcefulness theory and is in many ways similar to Bandura's (1977) concept of self-efficacy. This refers to the conviction that one can successfully execute the behaviours to produce the outcome. Bandura (1977) hypothesised that expectations of personal efficacy determine whether coping behaviour will be initiated, how much effort will be expended, and for how long it will be sustained in the face of obstacles and aversive experiences.

The following literature findings support the notion that highly resourceful subjects cope more effectively with stressful events than low resourceful subjects. Studies indicate the relationship between resourcefulness and physiological functioning. Rosenbaum (1988), in two experiments, asked subjects to immerse their nondominant hand in ice-cold water (the pain stimulus) for as long as they could (the targeted behaviour). Rosenbaum found that highly resourceful subjects tolerated the cold stressor longer than the low resourceful subjects. According to this, effective coping means that highly resourceful subjects overcome the interfering effects of pain on the performance of a targeted behaviour better than low resourceful subjects.

Similarly, other studies as mentioned in Rosenbaum (1989, p. 256) found that "highly resourceful dialysis (Carey et al, 1988) and diabetic patients (Amir, 1985) adhered to healthful behaviours more successfully than low resourceful individuals, and highly resourceful individuals were found to be more successful in

weight reduction programmes (Smith, 1979) and to the self-control of nail biting (Frankel & Merbaum, 1982)".

According to Rosenbaum (1990), highly resourceful individuals are also reported to use cognitions and self-instruction to cope with emotional and physiological responses; apply problem-solving strategies such as planning, evaluating alternatives and anticipation of consequences; have the ability to delay immediate gratification and have a general belief in their ability to self-regulate internal events. Success in cognitive behaviour therapy indicates that highly resourceful clients do not differ in their ability to learn self-control skills to low resourceful clients, but that highly resourceful subjects indicate greater ability to implement these skills on a long-term basis (Rosenbaum & Ben-Ari, 1985, p. 200).

4.7 INTEGRATION

The conceptualisation of salutogenesis offers a comprehensive and critical perspective of how individuals manage to stay well intrapsychically, interpersonally, socially and in the organisational setting (De Wet, 1998). Salutogenesis, as a paradigm, was presented as an antithesis of pathogenesis and can be considered a sound and descriptive paradigm with great utilisation potential. The salutogenic model has proved an excellent model to use in understanding coping, because its focus is on health and not illness. The most important consequence of thinking salutogenically is that it focuses our attention on those factors that contribute to coping. The answer to the salutogenic question, therefore, lies in understanding how people cope, or as Antonovsky (1987b) puts it, "in successful tension management".

While stress response is ordinarily directed at or is initiated by an event (the stressor), similar environment or situational events may not always be considered "stressful" from one individual to another or from one moment in time to another (Ratcliff & Baum, 1990, p. 227). From a salutogenic perspective, individuals who experience high degrees of stress without falling ill have a personality structure differentiating them from persons who become sick under stress. The discussion of salutogenic constructs serves as an application of coping theory with special

focus on the role that personality constructs play in moderating the stress illness relationship. The four salutogenic constructs discussed, namely, sense of coherence, hardiness, locus of control and learned resourcefulness, concentrated on how individuals manage stress and stay well. These constructs collectively measure generalised personality orientations and serve as an indication of successful coping (Antonovsky, 1991). According to Antonovsky (1979) the concept of sense of coherence is proposed as the core of the answer to the salutogenic question. For Kobasa (1982), the answer to the salutogenic question lies in the concept of hardiness. For Rotter (1966), the answer lies in the locus of control construct and for Rosenbaum (1988), in the learned resourcefulness concept. In section 4.6, the role that sense of coherence, hardiness, locus of control and learned resourcefulness play as coping mechanism in the face of stress and burnout, were discussed.

In Antonovsky's words, "thinking salutogenically not only opens the way for, but compels us to devote our energies to the formulation and advance of a theory of coping" Antonovsky (1987b, p. 13). Following the transactional model of stress and coping, all the salutogenic constructs share the assumption that an individual's perception of his or her world is the most crucial aspect of coping. The transactional approach to coping is considered to be the most holistic and dynamic description of the coping process. This approach draws from all the other approaches within a framework of cognitive theory of psychological stress and coping (Lazarus & Folkman, 1984). Here coping reflects an interplay between personal and environmental factors, and both sources of influence are considered significant. According to De Wet (1998, p. 139), the answers individuals have to the salutogenic question have roots in intra-psychic, interpersonal, social and occupational functioning, and there is not necessarily a single correct answer to the complex salutogenic question.

What has been achieved in chapter 4, is a better knowledge and understanding of salutogenic functioning. The information of the influence of salutogenic constructs as moderator variables in stressful situations, permit an informed discussion of the related questions in the empirical analysis of the research.

4.8 CHAPTER SUMMARY

This chapter presented a conceptual analysis of the existing literature on salutogenic functioning. The history of the salutogenic paradigm was presented, followed by differentiation from the pathogenic paradigm. A working definition of salutogenesis was accepted for the purposes of this research. The salutogenic model was first presented, followed by a comprehensive look at four salutogenic constructs, namely sense of coherence, hardiness, locus of control and learned resourcefulness. These constructs were selected for the purposes of the empirical study and as an answer to the salutogenic question. The definition and models for coping were presented and the transformational model for coping was accepted as a heuristic framework for organising knowledge about the coping processes. The coping review also included a discussion of coping strategies, the role of mediating and moderating variables in the coping process and variety of coping interventions available. The role that salutogenic constructs play as coping mechanisms in the face of stress and burnout was also considered.

- **REMARK**

With reference to the research methodology in chapter 1, section 1.7.1, phase 1, step 3. this research has completed its stated aim of conceptualising and integrating the existing literature on salutogenic functioning, together with the selection and discussion of salutogenic constructs as coping mechanism.

The next section, will look at integrating the literature reviews of chapters 2, 3 and 4.

INTEGRATION

With reference to the research methodology in chapter 1 (section 1.7, phase 1, step 4), the objective is to integrate the literature review of chapters 2 (stress), 3 (burnout) and 4 (salutogenic functioning) in order to ascertain the theoretical link between stress, burnout and coping salutogenically. An assessment of whether salutogenic personality constructs have the ability to differentiate between copers and noncopers will also be addressed. This will serve as the basis for the central thesis upon which the empirical study centres. This objective will be addressed systematically in the following four steps:

1 THE RELATIONSHIP OF PROLONGED STRESS AS AN ANTECEDENT TO BURNOUT

The literature review indicated that, overall, low to moderate amounts of stress enable individuals to perform their jobs better, by increasing their work intensity, alertness and ability to react. High levels or moderate levels of stress sustained over a long period of time, however, eventually lead to a breakdown of wellness and a decline of performance (Robbins, 1996, p. 622). This prolonged exposure to stress is referred to as the burnout experience. This view is in keeping with the notion that stress is a stimulus characteristic of the individual's environment (Cooper & Payne, 1991, p. 7). Initially, stress is said to produce a strain reaction. If the organism is continually exposed to the demand, a stage of adaptation or resistance emerges (Selye, 1976). According to this theory, a state of alarm cannot be maintained continuously; if the stressor is so drastic that continued exposure becomes incompatible with life, the organism dies during the alarm reaction. However, if the organism can survive, this initial reaction of alarm is followed by the stage of resistance. After prolonged exposure to the noxious agent, the acquired adaptation is lost and the animal enters into a third phase, the stage of exhaustion, also referred to as the burnout stage in the helping professions.

Despite certain popularity, the stimulus and response-based approaches have been criticised mainly for their failure to take into account individual differences which are imperative in relation to stress and the perceptual cognitive processes which underpin such differences (Cooper & Payne, 1991). Psychological approaches have attempted to overcome the weaknesses in these approaches – by recognising the issue of individual differences (personality), perception and appraisal (Goldberger & Breznitz, 1982).

From this, the following is established:

- Prolonged exposure to a stressful situation does lead to eventual breakdown or burnout (Maslach & Jackson, 1981).
- Stress and its effects on human health are the foci of the salutogenic model, which is based on the field of study that explores the links between stress and disease (Cooper & Payne, 1991, p. 7; Wolf & Ratner, 1999, p. 183).

The information presented here confirms the problem formulation as outlined in chapter 1 (sec. 1.2). The objective of relating stress to the burnout and salutogenic functioning (personality as variable in coping) has been established. This serves as basis to investigate the stress phenomenon in community service doctors, empirically.

2 THE RELATIONSHIP OF BURNOUT TO STRESS AND PERSONALITY MAKE-UP

Using burnout as an indicator of prolonged job-stress, the researcher, empirically wishes to see if personality - as a variable - plays a role in determining one's propensity to burning-out.

From everyday experiences, it seems reasonable to say that some differentiating individual traits exist to explain why some individuals react more strongly than others to environmental stressors. The literature findings continually confirm that

the personality of individuals may influence both the manifestation of burnout, as well as one's predisposition to burnout (Cherniss, 1980a; 1980b; Garden, 1989, p. 224; Welch, Madeiros & Tate, 1982). Lazarus (1966), in his work in the psychological stress field, claims that personality plays a vital role in the experience of stress and burnout. Maslach (1978, p. 115) states "What is emotionally painful for one staff person may not pose any special problems for the next." From a salutogenic functioning perspective, burnout is not a general phenomenon specific to any particular setting, since the cause may be sought among personal psychological factors; this does not, however, undermine the importance of creating positive work environments. Carroll and White (1982, p. 46) caution that there is no personality trait or personality configuration that, in and of itself, will cause someone to burnout. It is possible, however, that certain personality characteristics may predispose and/or make some individuals more vulnerable to burnout.

The following personality variables were found to have relationship with burnout. (For details on these personality variables relationship to burnout, see chapter 3.)

Type A personality research (Glass, 1977 in Farber, 1983a, p. 4), the concept of control (Freudenberger, 1989; Nixon, 1995), fears (Maslach, 1982b), empathy (Maslach, 1982b), affectivity (Iverson et al, 1998), self concept (Maslach, 1982b), self-esteem (Farber, 1983a, p. 245; Rosse et al, 1991, p. 429; Fischer, 1983 in Ratliff, 1988), self-efficacy (Bandura, 1989 in Schaufelli et al, 1993, p. 139), and flexibility (Khan & Rosenthal, 1961 in Ratcliff, 1988, p. 150)

Since the literature has established that certain personality characteristics may pre-dispose individuals to burnout, the next question to be asked is whether a burnout personality type exists? Garden (1989, p. 230) correlated burnout scores and personality profiles across human services and nonhuman services samples, and found the potential importance of personality as an explanatory variable in burnout research. There was general consensus that burnout-prone individuals are empathic, sensitive, humane, dedicated, idealistic, and people-oriented, but also anxious, introverted, obsessive, overenthusiastic and susceptible to over-identification with others (Cherniss, 1980b; Edelwich & Brodsky, 1980;

Freudenberger & Richelson, 1980 in Farber, 1983a, p. 4; Pines & Aronson, 1988). In accordance with Jungian theory of psychological types, human service professionals are “feeling types” instead of “thinking types”(Pines & Aronson, 1988). Pines and Kafry (1978) and Kadushin (1974) reiterate this by adding that this “dedicatory ethic” combined with the emotional intensity of caring, makes the process of burnout almost inevitable.

Maslach (1982b, pp. 62-63) presents the following profile, based on research findings, of the person who is most likely to experience burnout:

The prone individual is, first of all, someone who is weak and unassertive in dealing with people. Such a person is submissive, anxious, and fearful of involvement and has difficulty in setting limits within the helping relationship. This person is often unable to exert control over a situation and will passively yield to its demands rather than actively limiting them to his or her capacity to give. It is easy for this person to become overburdened emotionally, and so the risk of emotional exhaustion is high. The burnout-prone individual is also someone who is impatient and intolerant. Such a person will get easily angered and frustrated by any obstacles in his or her path and may have difficulty controlling any hostile impulses. He or she is likely to project these feelings onto clients and to treat them in more depersonalised and derogatory ways. Finally, the burnout-prone individual is someone who lacks self-confidence, has little ambition, and is more reserved and conventional. Such a person has neither a clearly defined set of goals nor the determination and self-assurance needed to achieve them. He or she acquiesces and adapts to the constraints of the situation, rather than confronting the challenges and being more forceful and enterprising. Faced with self-doubts this person tries to establish a sense of self-worth by winning the approval and acceptance of other people. In so doing the person may be so accommodating that he or she is overextended too often. This individual is more easily discouraged by difficulties and does not feel a sense of personal accomplishment and effectiveness in dealing with people.

Maslach (1982b) states that the above profile serves only as a guide as to who may be at risk, and cautions that possessing any one of the characteristics will not necessarily predispose you to burning out.

More specifically, the literature review indicates that it is possible to identify a relationship between the medical personality and burnout (see chap. 3 for details):

The research findings indicate that there is a correlation between personality type and choosing a career in medicine, and also a relationship between personality types and speciality choice. Keeping in mind that these variables do not function in isolation, most data in the medical occupation stress that personality differences are more important than background or situational variables in understanding differences in burnout in junior doctors (Lemkau et al, 1988, p. 688; 1994). The following personal characteristics are thought to be predisposing factors to burnout in the medical profession (Ellis, 1996a, p. 299):

- feeling indispensable
- high levels of energy and high expectations
- poor delegators
- perfectionists
- overconscientious
- type A personalities
- need to be in control and struggle to ask for help
- have fast consultation rates
- have difficulty in saying no
- repressed feelings
- need to be loved
- fear of failure
- masking of vulnerabilities
- denial of problems

In accordance with the above, Gabbard and Menninger (1989 in Ellis, 1996a, p. 299) states, "Up to 80% of doctors in general have been found to have compulsive

personality traits and apart from perfectionistic and obsessive features, this trait consists of doubt, guilt and an exaggerated sense of responsibility.”

From the review there is overwhelming evidence that personality as a variable plays a central role in the experience of burnout. Despite this, the importance of the job, the organisation and the societal factors should not be ignored in the study of burnout - especially at an aetiological level (Carroll & White, 1982).

The information presented above serves to confirm the problem formulation as outlined in chapter 1, section 1.2, of which the empirical study of this research is geared to address. It is thus established that there is a definite relationship between stress, personality functioning and burnout. In the section below, the relationship between salutogenic personality functioning and coping will be addressed.

3 SALUTOGENIC CONSTRUCTS AS COPING MECHANISM IN THE FACE OF STRESS AND BURNOUT

From the relationships established in sections 1 and 2 above, the researcher is now in a position to determine whether salutogenic constructs have the ability to differentiate between copers (those community service doctors not burning out) and noncopers (those community service doctors who show signs of burning out).

In chapter 4, the salutogenic construct was conceptualised by looking at stress that is relevant to the construct, and the stress responses of individuals were discussed.

Folkman et al (1986, p. 578) report that personality variables, together with appraisal and coping, have a significant relation to psychological symptoms. Personality variables motivate through their influence on how individuals think about themselves and their world (Maddi, 1990). The criteria for what constitutes a “healthy personality” include dispositions that have the cognitive appraisal effect of rendering the events as not so meaningless, overwhelming, and undesirable, and the action effect of instigating coping activities that involve interacting with and

thereby transforming the events into less stressful form rather than avoidance (Kobasa, Maddi & Khan, 1982, p. 169; Lazarus, 1966). The literature suggests that individuals with personality dispositions of this sort possess a valuable aid in avoiding the illness-provoking biological and psychological states, and should remain healthy while experiencing events that would be debilitating for others without those personality dispositions.

The literature indicates that individuals scoring high on salutogenic variables, tend to use transformational coping in favour of regressive coping, and reports show that this, in turn, decreases illness both at the main effect and at a buffer level (Antonovsky, 1982; Kobasa & Puccetti, 1983; Maddi, 1990; Rosenbaum, 1988; Rotter, 1966). In addition, Carver, Scheier, & Weintraub (1989) have argued that optimists may cope better with stressful encounters, because they take effective action and engage in sensible forward planning. Self-efficacy, which refers to the beliefs that the person has the skills or competence to master the situation, is also associated with stress tolerance (Bandura, 1977). According to this position, personality dispositions can influence coping processes and that this may be the mechanism whereby personality exercises a buffering effect on stressful events. From this we can assume that the salutogenic personality variables, together with appraisal and coping, have a significant relation to psychological symptoms, in this case burnout. Steptoe (1991, p. 215) point out that several personality dispositions may be associated with active and passive coping, including locus of control, hardiness and self-esteem.

Certain concepts from the salutogenic paradigm have proved valuable in predicting where an individual is on the health-illness continuum. Amongst many others is, Antonovsky's (1982) sense of coherence, Kobasa's (1982) hardiness, Rotter's (1966) locus of control and Rosenbaums's (1988) learned resourcefulness. Most of the studies on these concepts are empirical studies and the validity of the construct is, therefore, now generally accepted (see chapter 5).

The following is a description of how these salutogenic personality constructs act as coping mechanism in the face of stress and burnout (for details on this, see sec. 4.6):

3.1 Sense of coherence

Antonovsky (1983) hypothesises that the stronger the SOC world outlook of a person, the more likely he or she will cope successfully (Langius et al,1992, p. 166). Three personality components, namely, comprehensibility (making sense of the stimuli in the environment), manageability (coping with the stimuli with available resources), and meaningfulness (identifying emotionally with events) form the key to the SOC (Antonovsky, 1979). These components, provide a clear indication of the extent to which individuals will (cognitively) comprehend anxiety – provoking situations and view them as manageable (Antonovsky, 1983). In addition, manageability, indicates the extent to which an individual will select appropriate resources in order to actively (conatively) manage and make sense of the situation. In sum, the stronger the individual's sense of coherence, the better he or she will cope in stressful situations (Marais, 1997, p. 160).

3.2 Hardiness

Individuals who view stressful situations as meaningful and interesting (commitment), see stressors as malleable (control), and those who construe difficulties as challenges (challenge), are defined as hardy. Kobasa et al (1981) have proposed that individual coping, defined as the cognitive appraisal of events and the subsequent actions directed towards those events, is influenced by the hardiness personality orientation. According to the literature, hardiness is conceptualised as facilitating positive perception, evaluation and action that reduces an individual's life stress and leads to more healthy adjustment (Antonovsky, 1991; Cooper & Payne, 1991, p. 15; Funk, 1992). In addition, Kobasa et al (1982) found that a hardy personality disposition was linked to fewer reported illnesses and symptoms and demonstrated that hardiness functions as a resistance resource in buffering the effects of stressful events.

3.3 Locus of control

Locus of control is described as a generalised personality orientation that plays an important role in buffering the stress-illness relationship (Antonovsky in Cooper & Payne, 1991, p. 70). The notion of locus of control (Rotter, 1966) is based on the belief that outcomes (reinforcements) are either due to personal factors (internality) or caused by factors external to the individual (ie, fate chance or significant others). Internal and external components of this construct serve, inter alia, as an indication of the extent to which individuals have a strong belief (cognitively) that they can control stressful situations or the extent to which they view themselves as powerless (Rotter, 1966). In addition, this concept also has a conative aspect to it, taking into account the individuals response, alertness to the environment, willingness to accept responsibility and to take steps to improve the situation (Rotter, 1966, p. 3).

According to Leiter (1991, p. 141), individuals who use cognitive and action control strategies to address difficulties at work tend to be less exhausted and to have more positive assessment of their personal accomplishments, whilst those who use escapist cognitive and action control strategies tend to experience greater levels of emotional exhaustion. External locus of control implies a learned helplessness and has been directly linked to burnout (Cooper & Payne, 1991, p. 136; Ellis, 1996; Hurrell, 1988; Kobasa, 1979a).

3.4 Learned resourcefulness

Learned resourcefulness describes an acquired repertoire of behaviours and skills (mostly cognitive) by which an individual self-regulates internal responses (such as emotions, cognitions, or pain) that interfere with the smooth execution of a desired behaviour (Rosenbaum & Ben-Ari, 1985, p. 200). Highly resourceful individuals use more effective coping methods and are reported to have a greater trust in their ability to control their emotions and cognitions when faced with stressful events than low resourceful individuals. This refers to the conviction that one can successfully execute the behaviours to produce the outcome. In addition, Rosenbaum (1989, p. 253) postulates that this construct indicates, inter alia, to

what extent an individual will accept responsibility and apply problem-solving strategies to cope (conatively) with stressful situations.

The information presented above confirms that salutogenic constructs have the ability to differentiate between copers (those community service doctors not burning out) and noncopers (those community service doctors who show signs of burning out).

4 INTEGRATION OF THE LITERATURE REVIEW CONCEPTS IN THE ABOVE THREE STEPS

From the integration of the literature review concepts in the above three steps, the following is confirmed:

- Burnout is a consequence of prolonged stress.
- Personality, as a variable, plays an important role in stress and burnout.
- The profile of the burned out personality is inversely related to the profile of the copier, where better salutogenic functioning is related to coping and poor salutogenic functioning is related to noncoping or burning out.

Whilst the literature has emphasised, the role of personality dispositions in the outcome of coping, other important variables that determine coping success, such as, living in a favourable physical and social environment, nurturant parents, intelligence, education, supportive friends, social skills, or financial standing, are not to be neglected (Antonovsky, 1987b). According to this, even under conditions of high stress, well endowed individuals are more stress resistant and have a much better chance of getting along well without pathology than their poorly endowed counterparts (Lazarus, 1990).

A comprehensive analysis of stress, burnout and salutogenic functioning, was presented. The integration of the literature revealed a direct positive relationship between stress and burnout, where burnout is the consequence of prolonged stress. Burnout, as indicated by the literature, was found to be inversely related to

salutogenic functioning where salutogenic constructs were found to act as coping mechanism in the face of stress and burnout with the ability to differentiate between copers and noncopers. The relationships established here will serve as basis for the central thesis of this research upon which the empirical study centres. The objective of the empirical study to follow in chapter 5 and 6 is to confirm the relationships established by the literature review integration.

▪ **REMARK**

Thus, with reference to the research methodology in chapter 1, section 1.7, phase 1, step 4, the objective of integrating stress, burnout and salutogenic functioning including the assessment of the ability of salutogenic personality constructs to differentiate between copers and noncopers has been established.

The next chapter will look at the empirical study of this research.