

**COPING WITH STRESS AMONGST MALES AND FEMALES
IN PROFESSIONAL OCCUPATIONS**

by

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SUMMARY**COPING WITH STRESS AMONGST MALES AND FEMALES
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This study examines the impact of gender on the coping mechanisms employed to manage work-related stress.

The aim of the investigation was to determine whether male and female professionals differ in terms of the coping mechanisms that they employ in managing work-related stress. In order to achieve this aim an assessment battery containing a Biographical Checklist, the Coping Checklist, the Hassles Scale and the Daily Uplifts Scale was distributed to a sample of professional men and women.

The findings indicate that male and female professionals differ significantly in only two of the six coping mechanisms measured, namely social support and symptom management; that men and women do not differ significantly in terms of coping repertoire; and that women cope more effectively than their male counterparts with work-related stress.

Key terms

Gender; Professional status; Work-related stress; Coping mechanisms; Coping repertoire; Coping efficacy

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CHAPTER 1

INTRODUCTION AND MOTIVATION

Stress is a major 20th-century ailment, producing an increase in blood sugar level, adrenalin, heart rate, cholesterol level and blood pressure (Morgan & Baker, 1985). Heart attacks and strokes now kill more people than all other diseases combined (Scott & Spooner, 1989).

Work-related stress in particular often has negative consequences for individuals and organisations (McDonald & Korabik, 1991) - consequences which include employee dissatisfaction, withdrawal, high turnover, absenteeism, high accident rates, poor organisational climate, low morale, antagonism at work, low productivity (Huebner, 1993), a drop in quality and quantity of work, lower adaptability to change and to skill acquisition, lower organisational commitment, alienation, and more theft, sabotage and work stoppage (Chusmir & Franks, 1988). These factors, both individually and cumulatively, cost organisations today billions of rands, as does the impact of stress on the employee's physical and mental well-being (Di Salvo, Lubbers, Rossi & Lewis, 1988).

Research investigating both the causes of work-related stress and effective means of coping with it is consequently of topical interest not only to behavioural scientists, but also to workers and employers.

1.1 BACKGROUND TO THE STUDY

The process of selecting a research topic calculated to contribute to a deeper understanding of human behaviour in the work environment took the following factors into account:

- the adverse impact of psychological and social stressors, both on the mental and physical health of employees and on the economic health of the employing organisation

- the greater number of women entering the workplace
- the impact of gender on: which stressors are encountered in the workplace; how stress is perceived; how stress is coped with; and how stress is manifested (Martocchio & O'Leary, 1989)
- the lack of research on how men and women cope with stress
- contradictory research evidence on how men and women cope with stress
- the lack of research on how professionals cope with stress

Whilst research elucidating work as a significant source of stress is abundant, conflicting results have emerged from reviews examining the relationship between stress and gender. Martocchio and O'Leary (1989) do not support the view that gender differences exist in occupational stress. Crabbs, Black and Morton (1986) highlight the fact that women tend to perceive most work events as more stressful than do their male counterparts, and hypothesise that this can be attributed to past inequities in conditions of employment which obliged women in male-dominated careers to cope with gender-role stereotypes and occupational discrimination (Long, Kahn & Schutz, 1992). McDonald and Korabik (1991) have found that although women are subject to more work-related stress than are men in comparable positions, women are often better able to cope, an attribute which might serve to alleviate stress.

Another conflict apparent in the available research concerns the manner in which stress is manifested. Jick and Mitz (1985) suggest that women experience psychological stress (depression and emotional discomfort) more frequently than men, while men more often suffer physiological stress (coronary heart disease). Nelson and Quick (1985), on the other hand, maintain that employed women experience both psychological and physiological stress (Martocchio & O'Leary, 1989).

Although gender and stress are therefore undoubtedly related - gender influencing the choice of coping mechanisms, the manifestation of stress and the factors giving rise to stress - there is a great deal of controversy regarding the precise nature and direction of this relationship, hence the need for further research.

A number of scientists have categorised and elaborated upon factors giving rise to stress, and have explored differences in the impact of various factors on men and

women, also discussing the effects of stress on employees (Di Salvo et al, 1988; Crabbs et al, 1986). However, it is clear that the area of stress and coping has been largely neglected, particularly from the perspective of gender differences.

Cox (1987) mentions that the quality of life is dependent upon the ability to adjust to and cope with a wide range of psychosocial and physical demands, failure to do so resulting in the impairment of behaviour and in poor psychological and physical health. The implication for therapists, human resource practitioners and organisational development consultants is this: to improve the mental and physical health of employees, thus boosting staff morale and increasing productivity, one needs an in-depth understanding of the efficacy of different coping mechanisms, as well as an appreciation of the personality traits, work environment characteristics and situational characteristics (Long, 1990) which influence the coping process - and gender constitutes one such "personality trait".

The results of research into the impact of gender on coping remain mixed. Miller and Kirsch (1987) note that gender plays an important role in an individual's choice of coping strategies and coping style, the physiological and environmental or cultural differences between male or female affecting levels of stress and subsequent adaptation. Etzion and Pines (1986) refer to the role played by social norms pertaining to gender and culture in determining the appropriateness of certain patterns of behaviour in stressful situations, and to who can be relieved by such behaviours. Long (1990) fails to find any differences in the potential adaptation of men and women to demanding work situations, although women are more likely to have a greater coping repertoire. This contradiction in findings once again suggests a need for further research, as greater clarification is essential to a deeper understanding of coping in the context of male-female differences.

Apart from being clearly indicated by the shortcomings in existing work, the need for further research in this field also arises from the virtual absence of studies on the manner in which male and female professionals experience and cope with stress. This need is all the more apparent in the light of research suggesting that white-collar and professional workers are becoming increasingly vulnerable to stress-related illnesses and appear to suffer more from anxiety and emotional illness than many other groups of workers (Cooper & Marshall, 1980).

Other factors pointing to a need for further investigation include the lack of research carried out on certain coping mechanisms, and the impact of the influx of women over the past 20 to 30 years into the workplace and into professional occupations previously reserved for men (Martocchio & O'Leary, 1989).

It is evident from the above, then, that psychological and social stressors have an adverse impact both on the mental and physical health of employees and on the economic costs of employing organisations, with potentially disastrous consequences. This clearly indicates a need for further stress-related research - and the greater number of women entering the workplace implies that such research should pay closer attention to the role of gender in the sex-strain relationship in a work setting (Martocchio & O'Leary, 1989).

In addition, the gradual introduction of affirmative action programmes, with a consequent emphasis on the general upliftment of women into more senior jobs encompassing far greater responsibilities, necessitates a deeper understanding of the way in which women experience and cope with stress.

1.2 STATEMENT OF THE PROBLEM

The problem statement, formulated as a question, reads as follows:

"Do male and female professionals differ in terms of the coping mechanisms employed in the management of stress?"

The effect of an in-depth understanding of how men and women experience and cope with stress on activities such as recruitment, training, horizontal and vertical transfers and stress management programmes would undoubtedly be to reduce the negative consequences of work-related stress. However, the contradictory research findings on male-female differences result in too many organisations continuing to base recruitment, selection, transfer and other practices on stereotyped perceptions of sensitivity to specific stressors and coping ability.

If it can be shown that sensitivity to specific stressors, the intensity and frequency of daily hassles and uplifts, and ways of coping with stress are influenced by gender, and if the precise nature and direction of these relationships can be established, recommendations for more effective stress management can be formulated. Appropriately applied, these would help professional people and employing organisations reduce the adverse consequences of stress.

1.3 AIM AND OBJECTIVES OF THE INVESTIGATION

Arising from the problem statement, the aim of the study is to establish the differences between male and female professionals in the manner in which they cope with stress.

The theoretical objectives of the study are to define the concepts of stress and coping, and to determine whether previous research suggests gender differences in the way in which stress is experienced, manifested, and coped with.

The empirical objective of the study is to investigate whether men and women in professional occupations employ different coping mechanisms to minimise the impact of work-related stress.

The nature of specific gender differences is investigated in terms of

- the extent to which men and women employ the six coping mechanisms assessed
- the coping repertoire available to men and women
- the frequency and intensity with which daily hassles and uplifts are experienced by men and women

This study briefly discusses other issues marked by gender differences, such as the stressors encountered in the work environment and the psychological, physiological and behavioural symptoms of stress. Various aspects of coping, including its context and functions, also receive attention.

1.4 VALUE OF THE RESEARCH

Research into gender differences in the manner in which male and female professionals experience and cope with work-related stress will be of great value to such professionals, as well as to human resource practitioners and employing organisations, in that it will facilitate greater understanding of

- organisational and extra-organisational stressors affecting male and female professionals
- gender differences in: vulnerability to hassles and uplifts; the intensity with which hassles and uplifts are experienced; the level of stress experienced; the manner in which stress is coped with; coping repertoire; and specific coping strategies employed
- the relative efficacy of different coping mechanisms
- the impact of specific coping mechanisms, individual strategies and organisational interventions on the successful adaptation of professionals to work-related stressors
- professional differences in coping

An enhanced understanding of these issues will lead to the formulation and implementation of effective stress management strategies and programmes, which in turn will result in improved psychological and physical health, and hence increased productivity and improved performance, among male and female professionals.

1.5 THEORETICAL AND CONCEPTUAL BACKGROUND

This study, as outlined above, seeks to investigate the relationship between gender and coping with stress. For the purposes of the study, the terms "gender", "stress" and "coping" may be defined as follows:

- "Gender" refers to the male or female status of professional respondents.
- "Stress" refers to work-related stress. Work-related stress, defined by Di Salvo et al (1988) as resulting from an imbalance between environmental

demands and individual capabilities, is a significant contributor to an individual's level of stress. Events and conditions within the work environment which result in stress reactions in individuals include contextual job elements and work content (Crabbs et al, 1986).

- "Coping" may be viewed as a response to perceived stress and defined as constantly changing emotional, cognitive and behavioural efforts to manage specific external and internal demands appraised as exceeding and/or taxing the resources of the person (Lazarus & Folkman, 1984).

The theoretical concepts underlying this research paper are based upon Lazarus and Folkman's (1984) theory of stress, according to which a situation is only considered to be stressful if an individual perceives it as such. The theory defines stress as occurring in situations appraised by the person as taxing or exceeding his/her resources and endangering his/her well-being, and defines coping as encompassing the constantly changing cognitive and behavioural efforts to manage specific stressful situations (McDonald & Korabik, 1991).

1.6 OUTLINE OF CHAPTERS

Chapter 1 : Introduction and motivation

The background, aim, objectives and theoretical basis of the research are set out.

Chapter 2 : The nature of stress and coping

Numerous issues appertaining to stress and coping are explored, including literature on work-related factors that give rise to stress; the manifestations of stress; the functions of coping; contexts for coping strategies; and the six different coping strategies on which this investigation was based.

Chapter 3 : The impact of gender on stress and coping

This chapter examines gender differences in the manner in which men and women experience stress, in terms of both types of stressors and

symptoms of stress. The primary focus is on differences in the coping strategies men and women employ and the coping repertoire available to them.

Chapter 4 : Research design

The design of this research is described with reference to the research hypotheses, sample size and composition, as well as to the independent and dependent variables of the study. The test battery and research procedure are described.

Chapter 5 : Analysis of research

The chapter sets out the techniques and procedures used to analyse results, and the results themselves as they relate to the following: gender differences in the employment of six types of coping strategies and in the coping repertoire available to men and women; the relationship between hassles and uplifts; gender differences in the manner in which men and women experience hassles and uplifts; and differences in the use of coping strategies across professional groups.

Chapter 6 : Conclusions and recommendations

The dissertation concludes with a number of deductions based upon the findings of the research and relating back to the initial problem statement, hypotheses, and the findings of previous research. Recommendations are made for future research and practical guidelines offered, both for male and female professionals having to cope with stress and for their employing organisations.

CHAPTER 2

THE NATURE OF STRESS AND COPING

A theoretical objective of this study, as referred to in chapter 1, is to define and explain the concepts of stress and coping. Once they have been defined, stress and coping will be treated as a dynamic process consisting of four major components, namely environmental stressors; cognitive appraisal; physiological, behavioural, and psychological manifestations of stress; and coping behaviours or coping strategies (Latack, 1986).

2.1 THE NATURE OF STRESS

The description of stress will include the following: a definition of the concept of stress, stress defined in terms of hassles and uplifts, professional stress, and work-related stress.

2.1.1 Definition of the concept of stress

The most remarkable fact about the term stress is that it has persisted and grown into wide usage, although there is almost no agreement over what it means. (Ivancevich & Matteson, as cited in Forney & Wiggers, 1984, p. 35)

Stress researchers have yet to reach consensus on the meaning of the term "stress" (Green & Reed, 1989). Stress has been viewed as a stimulus (Holmes and Rahe; Anderson), as a response to demands made upon the organism (Selye), and as an interaction between a person and his environment (Lazarus; Cox) (as cited in Ghadially & Kumar, 1987; Lazarus & Folkman, 1984).

Some of the earliest research on stress, published in 1930, was conducted by Hans Selye (cited in Gardner & Hall, 1981). In his theory on the "General Adaptation

Syndrome", Selye postulates that the reaction to stress occurs in three stages - alarm, resistance and exhaustion - which take place irrespective of the source of the stress.

Selye emphasises that both positive and negative stressors alter the homeostatic process and produce the same physiological reaction, keeping people in a continual state of relative stress. He notes that such a state of stress is not necessarily destructive, as it often affords people the opportunity to grow and develop (Gardner & Hall, 1981; Green & Reed, 1989). Morgan and Baker (1985) point out that whilst moderate stress frequently enables people to reach peak performance, excessive stress results in inaction, physiological complaints, psychosomatic distress, cognitive impairment, behavioural disorders and organisational problems such as impaired performance.

Stress is generally defined in terms of a person's experience of negative emotion, unpleasantness or general discomfort. These experiences often result in a cycle of changes to the perceptions and cognitions of the person, and to changes in his/her behavioural and physiological functioning (Cox, 1987; Long, 1988).

Selye, quoted in Summers, DeNisi and DeCotiis (1989), attributes individual differences in reactions to potentially stressful situations, and in the way that stress is experienced, to

- internal conditioning factors (ie past experiences, personality, age, and sex)
- external conditioning factors (ie diet, drugs, climate, and social setting)

What is stressful for some is not stressful for others. The level of stress experienced by individuals is determined not only by environmental conditions, but also by personal characteristics (Summers et al, 1989). The variability of response to stressors is greater for ordinary life stressors than for extreme life conditions (Lazarus & Folkman, 1984).

Stress, as an individual psychological state, resides in one's perception or appraisal of the balance or "transaction" between the internal or external demands placed on

one and one's ability and resources to cope with these demands. Psychological stress is defined as a relationship between person and environment that is appraised by the person as being taxing, or as exceeding his/her resources and endangering his/her well-being (Lazarus & Folkman, 1984).

2.1.2 Stress defined in terms of hassles and uplifts

Lazarus and Cohen (quoted in Lazarus & Folkman, 1984) describe three types of stressors:

- major changes affecting large numbers of persons
- major changes affecting one or a few persons
- daily hassles

The first two types of stressors encompass largely negative experiences that are harmful or threatening and frequently involve catastrophes. This implies a definition of stress based on dramatic events, severely taxing situations and major life events. Lazarus and Cohen recognise, however, that a definition of stress based upon major catastrophe is somewhat limited when our lives are filled with "daily hassles" - far less dramatic stressful experiences arising from our everyday roles.

"Hassles" are the irritating, frustrating, distressing demands that to some degree characterise everyday transactions with the environment, and include practical and social problems (Lazarus & Folkman, 1984). The ten most frequently reported hassles, according to Kanner, Coyne, Schaefer and Lazarus (1981), are

- concerns about weight
- health of a family member
- rising prices of common goods
- home maintenance
- too many things to do
- misplacing or losing things
- yard work or outside home maintenance
- property, investment or taxes

- crime
- physical appearance

Individual perceptions of the resources available to meet demands, and the overall level of demands or hassles faced, determine which minor events are noticed or remembered and how bothersome they are considered. Global perceptions influence specific responses in any assessment of hassles. Specific details of hassles cited by a person remain less important than the overall level of hassles and the subjective stress they indicate (Kanner et al, 1981).

Lazarus and Folkman (1984) note that because daily hassles not only initiate the coping process, but also result from having to cope, a high number of hassles reflects not only the events and transactions of living, but also coping inaptitudes to a certain extent. They go on to suggest that hassles generated by coping inaptitudes and vulnerabilities are more detrimental to social and work functioning, morale and health than the ordinary hassles that stem from the environment.

According to Folkman and Lazarus (1980), the impact of hassles on physical and mental health is influenced by

- a chronically high frequency of hassles
- the heightening of hassles during a given period
- the presence of one or more repeated hassles of psychological importance
- major life events
- one's characteristic style
- one's routine environment
- poor adaptational outcomes
- the interaction of these variables

Folkman and Lazarus (1980) observe that the relatively minor stressors (hassles) and pleasures (uplifts) characterising everyday life have an adaptational significance for health outcomes. This significance is also recognised by Wallace (1992), who notes that stress arises more often from a string of life's little annoyances and hassles than from a major calamity, and by McLean (cited in

Kanner et al, 1981), who emphasises the cumulative value of these microstressors as potent sources of stress (Kanner et al, 1981).

"Daily uplifts" refers to positive experiences, such as the joy derived from love, and relief at hearing good news. The ten most frequently reported uplifts, according to Kanner et al, 1981, are

- relating well with one's spouse or lover
- relating well with friends
- completing a task
- feeling healthy
- getting enough sleep
- eating out
- meeting one's responsibilities
- visiting, phoning or writing to someone
- spending time with family
- home (inside) pleasing one

Folkman and Lazarus, and also Cousins (both cited in Kanner et al, 1981), argue that just as negatively toned stress (eg hassles) can cause poor adaptation and neurohumoral changes, positive experiences (eg uplifts) may serve as emotional buffers against stress disorders by preventing or attenuating the effects of stress. Folkman and Lazarus refer to three ways in which uplifts impact upon coping. They serve as

- "breathers" from regular stressful encounters
- "sustainers" of coping ability
- "restorers" that contribute to the replenishment of depleted resources in recovering from loss or harm

The decision to incorporate an assessment of both hassles and daily uplifts, rather than of major life events, into this study was based upon the arguments referred to above, supported by Kanner et al (1981), who cite their own findings as well as those of Folkman and Lazarus, Lowenthal and Chiriboga, Bradburn, and Epstein, amongst others. These researchers all argue for the measurement of both hassles and uplifts, and of both positive and negative emotions.

The writer supports the view of Kanner et al (1981) that the measurement of hassles in isolation without due regard to the impact of uplifts could produce a distorted conception of the postulated relationship between stress and illness, because hassles and uplifts are positively related to each other. People who suffer many hassles also tend to enjoy many uplifts, and those who experience or judge their hassles as intense tend to see their uplifts in the same light.

2.1.3 Professional stress

Occupational and gender status are crucial delineators of life situations and consequent experiences and perceptions (Otto, 1980). Occupational level and the type of work performed influence

- the duration, nature and intensity of exposure to organisational stressors (Turnage & Spielberger, 1991)
- events, demands, and threats experienced in the work-environment (Gadzella, Ginther, Tomcala & Bryant, 1990; Nelson et al, 1989; and Fletcher & Payne, as cited in Dharmangadan, 1988)
- the psychological and physical consequences of exposure to stressors (Fletcher & Payne, as cited in Dharmangadan, 1988)

There are also differences in the amount of stress experienced by employees who are in the same occupation or profession, but with different fields of specialisation (Joseph & Varghese, as cited in Dharmangadan, 1988). Just as the nature of work of a given occupational or professional group has distinctive features, the problems it experiences will differ from those of other workers (Powel, as cited in Dharmangadan, 1988).

2.1.3.1 Sources of professional stress

Professional stress or burnout originates from an interaction between environmental stressors (organisational factors and interpersonal factors) and individual

differences or intrapersonal factors (personality traits and competencies) (Huebner, 1993).

Organisational and interpersonal factors causing professional and managerial stress include (Glowinkowski & Cooper, 1986)

- stress in the job itself
- role based stress, including role ambiguity and role conflict
- relationships with subordinates, colleagues, and superiors
- career development factors, including fear of redundancy, organisational structure and climate
- the work/family interface

Wahlund and Nerell (cited in Dharmangadan, 1988) suggest that the following factors also contribute to high mental stress and strain in professionals:

- excessive demands for decision making and responsibility
- confinement to work
- too much control of work by others

White-collar and professional workers can be differentiated from blue-collar workers on the basis of three organisational and interpersonal factors (Cooper, 1981):

- high and variable workload
- responsibility for people
- job complexity and concentration

The following environmental stressors are significantly related to major depressive episodes and symptoms in professionals and managers (Phelan et al, 1991):

- the number of negative work-related events
- role conflict/ambiguity
- lack of intrinsic job rewards.

Intrapersonal sources of professional stress include (Cherniss, 1980)

- societal expectations of professional conduct
- accessibility
- competence
- needs and problems of the individual client served
- personal needs of the professional to be viewed as competent by his/her peers and clientele
- lack of specific criteria for acceptable job performance (Freudenberger, as cited in Hamberger & Stone, 1983)
- bureaucratic interference
- lack of stimulation and fulfilment
- lack of collegiality

In addition, four contemporary sources of managerial and professional stress have emerged in recent years (Burke, 1988):

- mergers and acquisitions
- retrenchment and budget cutbacks
- ambiguity and insecurity about job future
- occupational locking-in

Whilst the stressors referred to above apply to the professional and managerial population in general, older professionals often tend to experience additional stressors, such as (Burke, 1988)

- dealing with new technology
- lack of promotion possibilities
- dealing with potential skill obsolescence
- concerns about meeting performance expectations
- own health and health of spouse
- financial security

2.1.3.2 *Vulnerability of professionals to stress*

Educated, skilled and professional employees tend to experience lower rates of psychological distress and better mental health than the lower occupational levels (Payne, 1988; Kornhauser, as cited in Fletcher, 1988; Kessler & Cleary, as cited in Fletcher, 1988; Green & Reed, 1989). However, help-seeking behaviour, readiness for self-referral and the belief that one has stress problems increase as the occupational, income or educational level increases (Fletcher, 1988). Cherry (cited in Cooper & Marshall, 1980) records 54% of professional workers as having admitted to suffering from nervous strain at work, as opposed to 44% of skilled non-manual and 10% of unskilled manual workers.

Turnage and Spielberger (1991) attribute the tendency of professionals to report greater stress intensity and more frequent lack of support to the fact that they are not as well prepared as managers for dealing with organisational demands, their training focusing largely on the acquisition of technical skills.

The coping skills employed by professionals are not significantly better or worse than those of other occupational groups, according to Forney and Wiggers, 1984.

These findings are not unanimous, however. A number of researchers, including Cooper and Marshall (1980), have found that the better educated and those holding high-status professional and executive positions are more stressed and suffer from more anxiety and emotional illness than many other groups of workers - and this applies particularly to women.

2.1.3.3 *Professional stress syndrome*

Notwithstanding the argument that professional employees tend to experience less psychological distress and better mental health than employees at lower occupational levels, professionals are becoming increasingly vulnerable to stress related-illnesses (Cooper & Marshall, 1980). They display the physiological, psychological and behavioural manifestations of stress listed below, which, according to Gardner and Hall (1981), constitute the "Professional Stress Syndrome".

Physiological:

- anorexia
- uncontrolled eating
- urinary frequency
- insomnia
- lethargy
- muscle tension headaches
- rashes
- diarrhoea
- palpitations
- tightness in the chest
- increased blood pressure
- nausea
- increased perspiration
- hyperactivity

Psychological:

- feelings of disorientation or disorganisation
- anger
- frustration
- depression
- apathy
- helplessness
- fear
- irritation

Behavioural:

- a quickness to anger
- frustration responses
- suspiciousness
- excessive risk-taking

- feelings of omnipotence

If not timeously recognised and treated, this syndrome can result in physical and emotional disorders, such as coronary heart disease (CHD).

According to Cooper and Davidson (1982), both male and female managers and professionals at risk of CHD tend to display Type A behaviour, which is characterised by a set of values including competitiveness, aggressiveness and striving for achievement, and by a lifestyle displaying impatience, hyperalertness, and haste. Type A behaviour predicts the subsequent development of CHD (Barnett, Biener & Baruch, 1987; Carson, Butcher & Coleman, 1988) and increases the risk of cardiovascular disease through particular mediating physiological changes such as elevated blood pressure and serum cholesterol (Lazarus & Folkman, 1984). Not all components of the Type A pattern are equally predictive, however. Aggressiveness and hostility show the clearest correlation with heart disease (Carson et al, 1988).

The findings of the Framingham Heart Study (Matteson & Ivancevich, 1987; Carson et al, 1988) indicate that the association between the Type A behaviour pattern and CHD is limited to those of white-collar occupational and socioeconomic status, and does not apply to blue-collar workers (Carson et al, 1988). This finding is supported by Chesney and Rosenman (cited in Cooper, 1981), who have found Type A behaviour to be significantly related to socioeconomic status and occupational status for both males and females, occupational status being measured by rank, level of occupational prestige, income, education, and rapid career achievement.

Personal and institutional strategies recommended for the treatment of Professional Stress Syndrome include (Matteson & Ivancevich, 1987)

- the development of meaningful relationships with others
- recreational and physical activities
- escape from and/or modification of the normal working routine
- ventilation of feelings
- development of realistic goals

- job rotation
- taking a holiday

By alleviating stress and thereby reducing the incidence of physical and emotional disorders (Gardner & Hall, 1981), these interventions can play an important role in the management of stress among professionals. This is particularly significant considering the fact that CHD accounts for the greatest proportion of deaths in industrialised nations (Barnett et al 1987; Matteson & Ivancevich, 1987).

2.1.4 Work-related stress

"Work-related stress" refers to the uncomfortable feelings that derive from forces found in the workplace (Summers et al, 1989).

Workplace stress has reached epidemic proportions, with serious consequences for both individuals and organisations (Wallace, 1992). These include, according to Summers et al (1989),

- physiological consequences, such as high blood pressure and heart disease
- attitudinal consequences, such as intrinsic and extrinsic satisfaction, organisational commitment, motivation, and intention to leave
- behavioural consequences, such as voluntary turnover and increased absenteeism

Summers et al (1989) hypothesise that job stress is caused by

- personal characteristics (ie sex, tenure in present job, tenure in the company and number of dependants)
- structural organisational characteristics (ie formalisation and centralisation in structure)
- procedural organisational characteristics (ie the amount and quality of communication, the quality of training, the equity of the reward system, the nature of decision making, the quality of the performance appraisal and feedback system, and hours worked per week)

- role characteristics (ie job level, leadership received, role conflict, and role ambiguity)

Procedural organisational characteristics and role characteristics are far more important stressors than personal characteristics or structural organisational characteristics (Summers et al, 1989).

2.2 THE NATURE OF COPING

Individual well-being and quality of life are influenced not only by the amount of stress experienced, but also by how one copes with stress (Antonovsky, as cited in Edwards, 1988). Coping is of even greater importance in determining morale, health, psychological, physical and social well-being (Folkman, 1982) and long-term and short-term adaptation than the frequency and severity of the stressor itself (Lazarus and Launier, as cited in Kirmeyer & Dougherty, 1988).

2.2.1 Definition of the concept of coping

When individuals make deliberate attempts to master a problem situation, they can be said to be coping. "Coping" represents either an adjustment to a situation or an adjustment of a situation (Cox, 1987). Although coping is an organised activity (Cox, 1987), it often follows from the most minimal and biased processing of information, and therefore cannot be assumed to be rational or to reflect extensive information processing (Janis & Mann, as cited in Folkman, 1982).

Coping efforts are a response to stressful appraisals that signal harm or loss, threat, or challenge. Here "harm or loss" refers to damage that has already occurred, "threat" to harm or loss that has not yet occurred but is anticipated, and "challenge" to anticipated opportunities for mastery or gain (Folkman, 1982). The degree to which a person feels harmed, threatened, or challenged is determined by the relationship between the person and the environment in that specific encounter and is defined by primary and secondary appraisal (Folkman & Lazarus, 1980).

Coping has been construed, contradictorily, both as a shifting process (Folkman & Lazarus, 1980; Folkman, 1982), and as situation specific (Latack, 1986). The shifting aspect refers to the fact that one has to rely on different forms of coping at different times. Shifts in strategy occur as the situation changes, as the status of the person-environment relationship changes, and as new information from the environment is appraised and reappraised. They result in a re-evaluation of what is happening, its significance, and what can be done (Lazarus & Folkman, 1984). The situation-specific conceptualisation, on the other hand, defines coping as a process based upon reliance on a stable, preferred set of coping strategies that remain relatively fixed over time and across circumstances (Latack, as cited in Carver, Weintraub & Scheier, 1989).

Coping is defined by Lazarus and Folkman (1984) as constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person. Such management encompasses mastering, tolerating, reducing, and minimising stressful conditions (Cox, 1987). The Lazarus and Folkman (1984) definition is process-oriented, and hence

- it implies a distinction between coping and automatised adaptive behaviour
- it addresses the problem of confounding coping with outcome by differentiating between coping and coping effectiveness
- it avoids equating coping with mastery
- it defines coping in terms of efforts to exercise control
- it classifies coping by focus (Edwards, 1988)
- it focuses on coping behaviours or processes, rather than on a stable coping "style" or personality trait
- it applies to stress that takes the form of challenge, as well as harm or threat (Latack & Havlovic, 1992)

Any examination of coping would be incomplete without an explanation of the appraisal process. Appraisal is defined as the evaluative process that imbues a stressful situational encounter with meaning (Cox, 1987; Billings & Moos, 1981; Miller & Kirsch, 1987; Lazarus & Folkman, 1984). The appraisal of the stressor itself, and the choice and effectiveness of one's coping actions, are crucial to the

stress process (Long et al, 1992), the existence of stress being less important to well-being than how an individual appraises and copes with it (Antonovsky, as cited in Aldwin & Revenson, 1987).

Appraisal and coping continuously engender and influence each other throughout an encounter, appraisal and the context of an event being the most potent situational factors accounting for variability in coping (Folkman & Lazarus, 1980). Appraisal mediates stressful person-environment relationships and their immediate and long-term outcomes (Lazarus & Folkman, 1984), and is a potent predictor of whether coping is oriented toward emotion-regulation or is problem-focused (Lazarus & Folkman, 1984).

Appraisal has been found to explain significant variance in psychological distress symptoms (Folkman & Lazarus, 1980), cognitive appraisal of stressful work events being negatively associated with job-related anxiety, job satisfaction, and intention to leave an organisation (Latack, 1986; Nelson et al, 1990).

The process of cognitive appraisal, which need not be deliberate, rational or conscious (Lazarus & Folkman, 1984), offers a continual monitoring of at least four aspects of a person's interaction with his/her environment, and a continual evaluation of the balance between them. It takes into account one's perception of (Cox, 1987)

- the demands on one
- one's personal characteristics and coping resources - knowledge, attitudes, skills, and behavioural style
- the constraints that one is under when coping
- the support one receives from others in coping

Cognitive appraisal consists of three cognitive processes, namely primary appraisal, secondary appraisal and reappraisal.

(a) Primary appraisal

Primary appraisal is the ongoing process by which a person decides whether or not a situation is potentially threatening, and it occurs at a superficial level

of analysis. Three types of primary appraisal exist (Lazarus & Folkman, 1984):

- irrelevant (ie the environmental encounter does not affect the well-being of the person)
- benign-positive (ie the outcome of the encounter is construed as positive)
- stressful (ie harm/loss, threat, and challenge)

(b) Secondary appraisal

Secondary appraisal, which relates to the cognitive aspects of coping, may be defined as

a complex evaluative process that takes into account which coping options are available, the likelihood that a given coping option will accomplish what it is supposed to, and the likelihood that one can apply a particular strategy or set of strategies effectively (Lazarus & Folkman, 1984, p. 35).

It involves an assessment of the resources one has for coping with the threat. The perception that resources are adequate and can effectively reduce the threat results in less stress being experienced (Barnett et al, 1987).

Secondary appraisal does not constitute an ongoing activity, and is contingent upon the recognition that a problem exists. It involves a more detailed analysis of a problem, and the generation and evaluation of possible solutions (Cox, 1987).

(c) Reappraisal

Reappraisal follows earlier appraisals. It refers to changed appraisals based on new information from the environment and/or the person (Lazarus & Folkman, 1984).

Psychological stress is experienced when what is at stake is meaningful (Lazarus & Folkman, 1984) and coping resources are perceived to be inadequate. The greater the imbalance between the demands of the situation and perceived coping resources, the greater the stress (Folkman, 1982). The level of stress experienced and the extent to which deleterious effects occur depend on how, and how well, one copes in stressful situations (Latack, 1986).

Primary and secondary appraisal influence a person's relationship with the environment in particular encounters, and interact in determining the degree of stress experienced and the strength and quality of the emotional reaction. The effect of stress on well-being, and on the relationship between person and environment, therefore varies as a function of both processes (Lazarus & Folkman, 1984). These processes cause individual differences in the ability to cope, and such differences arise from the discrepancy between one's perception of demands and one's ability to cope.

Perception of ability to cope is not, however, synonymous with actual coping. Perception partly determines whether or not stress is experienced, whilst actual coping is the result of the experience of stress (Cox, 1987). The success or failure of attempts to cope influence a person's perception of his/her ability to cope and his/her overall appraisal of the stressful situation.

The appraisal process is influenced by a number of person characteristics, situational factors and temporal situational factors.

Person characteristics encompass commitments and beliefs. Commitments - to relationships, objectives and ideals - serve to

- sustain coping efforts
- guide people to and away from situations that can harm, threaten, or challenge them
- shape cue-sensitivity
- define areas of meaningfulness
- determine which encounters are relevant to well-being

Beliefs often operate on a tacit level, determining how a person evaluates what is happening or what is about to happen.

Commitments and beliefs

- determine what is salient for well-being in a given encounter
- shape the person's understanding of the event, as well as his/her emotions and coping efforts
- provide the basis for evaluating outcomes

The more ambiguous an event, the greater the impact of person factors in determining the meaning of the situation (Lazarus & Folkman, 1984).

The person characteristics - commitments and beliefs - work interdependently with situational factors and the timing of stressful events over the life cycle to determine the extent to which harm/loss, threat or challenge will be experienced.

Situational factors - novelty, predictability and event uncertainty - are the formal properties of encounters that create the potential for threat, harm or challenge. Novelty encourages appraisal inferences based upon related previous experience or on general knowledge, and event uncertainty is often extremely stressful and may cause mental confusion. Findings to date regarding the effects of predictability on humans are inadequate (Lazarus & Folkman, 1984).

Temporal situational factors which impact upon the appraisal process include the imminence of an event, its duration and temporal uncertainty. "Temporal uncertainty" refers to ignorance of when an event will occur, something which generates coping activity aimed at reducing stress reactions. The more imminent an event, the more urgent and intense the appraisal; the less imminent, the more complex the appraisal process (Lazarus & Folkman, 1984).

2.2.2 Theoretical approaches to coping

2.2.2.1 Psychoanalytic approach to coping

Investigators in the area of psychoanalytic and personality psychology define coping in terms of realistic thoughts and actions which solve problems confronting the individual.

Edwards (1988) notes that whilst psychoanalytic approaches should be taken note of, they define coping in terms of successful adjustment and imply that contact with reality is a necessary condition for successful coping, hence ignoring denial as an effective means of coping. This obscures the relationship between coping and outcomes.

2.2.2.2 *Coping as a personal trait or style*

Researchers cited by Edwards (1988), including Kobasa; Maddi and Courington; Lefcourt; and Friedman and Rosenman, conclude that individuals with certain predispositions are better able to cope with stress.

Several conceptual and methodological problems are associated with this approach, as there is little conclusive evidence that particular personal traits or coping styles consistently attenuate the relationship between stress and well-being (Cohen & Edwards, as cited in Edwards, 1988). Edwards (1988, p. 236) concludes that by characterising coping in terms of a personal trait or style

we fail to predict actual coping behaviours, rarely measure these behaviours and ignore the multidimensional and dynamic nature of actual coping responses.

Edwards' findings are supported by Folkman and Lazarus (1980), who described trait measures as poor predictors of coping processes.

2.2.2.3 *Coping as a sequence of stages*

Stage approaches view coping as a series of discrete responses occurring in a specific sequence. Advantages associated with these approaches include the following (Edwards, 1988):

- Data used to derive them are usually obtained from individuals responding to authentic and sometimes extremely stressful situations.

- They involve multiple assessments of coping efforts over time, hence taking into account the multidimensional and dynamic aspects of coping.
- A number of them address the frequently neglected processes underlying the selection and implementation of coping strategies.

Despite these advantages, evidence suggests that coping behaviours often do not occur in a specific sequence (Silver & Wortman, as cited in Edwards, 1988), and that individuals tend to select from a wide array of coping strategies and implement them in a variety of sequences (Edwards, 1988).

The stage approach to coping is supported by Lazarus and Folkman (1984), who highlight the different modes of coping employed at different stages of the coping process. People tend, for example, to use coping strategies such as distancing themselves psychologically, avoidance, denial, and looking for relevant information whilst awaiting an anticipated threat, and employ alternative strategies at other stages of the coping process.

2.2.2.4 Coping as specific methods or foci

If coping is to be categorised either in terms of specific methods of coping or in terms of specific foci, or targets, of coping efforts, the development of a taxonomy is involved.

The most common distinction made in these categorisation schemes involves the two foci of "problem-focused coping", which aims to reduce or manage stress by directly altering either the situation or the individual's appraisal of the situation, and "emotion-focused coping", which attempts to regulate the emotional responses to a stressful situation (Edwards, 1988).

The advantage of this approach is that it provides a useful taxonomy for describing coping behaviours, investigations based on this approach generally including a fairly comprehensive assessment of actual coping behaviours.

The approach is not without problems, however (Edwards, 1988):

- It is difficult to distinguish between coping methods and foci, and the boundaries within coping methods and coping foci are also unclear. A particular coping attempt may involve a variety of methods or be directed toward multiple foci.
- The approach gives limited attention to the process by which individuals select specific coping methods and/or direct coping efforts towards specific foci.
- Little attention is given to the mechanisms by which coping influences stress and well-being. It is necessary to assess the degree to which coping influences the person factors and situational factors presumed to cause stress, if the process by which coping affects well-being is to be understood.

Edwards (1988) notes that several recent studies of stress and coping have classified coping efforts by method (Menaghan; Newton & Keenan), by focus (Billings & Moos; Lazarus & Folkman; Pearlin & Schooler), or by method and focus (Billings & Moos).

2.2.3 Functions of coping

Billings & Moos (1981) note that coping can be understood to have three functions:

- emotional management, which involves efforts to reduce tension by avoiding dealing with the problem,
- problem reappraisal, which involves efforts to manage the appraisal of the stressfulness of the event
- problem solving, which involves active efforts to confront the problem

Pearlin and Schooler (1978) describe the three functions of coping as being

- to change the stressful situation
- to control the meaning of the stressful situation

- to control emotional distress after it has emerged

2.2.4 Contexts for coping

Coping responses are related to three sets of variables, namely personality traits, work environment characteristics, and situational characteristics. These variables constitute the personal and environmental contexts which impact upon the coping process (Long, 1990).

Coping behaviour is not determined by any single factor in isolation. The way in which the stress is perceived, the nature of the work environment in which it occurs, and personal and situational characteristics are important factors for an individual deciding how he/she will handle stress (Newton & Keenan, 1985).

2.2.4.1 *Personality traits*

Individual differences in personality traits, age, experience, gender, and intellectual style impact upon the stress experience (Reddy & Ramamurti, 1991) by influencing the way in which persons

- respond to stressful work environments
- interpret or appraise the threats and/or opportunities present in the work situation (Payne, 1988)
- reduce the relationship between strain and stress
- blunt the emotional impact of persistent problems (Pearlin & Schooler, 1978)
- cope with or adapt to stress-provoking situations (Cooper, 1981)

A number of personality traits that influence coping behaviour will be elaborated upon below, including the sex-typed traits of instrumentality and expressiveness, hardiness, the Type A personality, and internal versus external locus of control. These traits interact with the severity of a stressor in predicting coping responses, personality differences having more marked effects at more severe levels of stress (Long, 1990).

"Instrumentality" suggests competence, rationality, and assertiveness, while "expressiveness" has connotations of warmth and nurturing, and both personality traits impact upon the coping process (Page, as cited in Long, 1990). Where both expressive and instrumental characteristics are employed, a broader repertoire and greater use of coping strategies are possible (Long, 1990).

The personality characteristics of commitment, control, and challenge (hardiness) result in the individual perceiving demands as less demanding, hence they reduce strain. Although these factors relate primarily to outcomes of stress amongst males, Amatea and Fong (1991) have found that women who experience high levels of personal control report fewer psychological and physical strain symptoms than women with low personal control levels.

Self-confidence is yet another personality trait which has been linked to the stress-coping process, particularly in the case of executive women. According to Nelson and Quick (1985), confident women view the stress experience as an opportunity rather than a threat. Because such women have positive attitudes about themselves and their work environments, and seek positive outcomes from stressful encounters, they are able to deal with stress effectively.

Friedman and Rosenman (as cited in Ivancevich & Matteson, 1988) suggest that the Type A personality has a stronger impact upon the coping process than any other personality characteristic. The Type A behaviour pattern is a

multidimensional phenomenon, including an array of overt behaviours, cognitive styles, behaviours in response to environmental demands and physiological concomitants. (Ivancevich & Matteson, 1988, p. 287).

The Type A personality is associated with (Fletcher, 1988)

- a hard-driving, aggressive behaviour pattern across a wide variety of stressful situations
- a sustained drive toward poorly defined goals
- a preoccupation with deadlines

- competitiveness
- desire for advancement and achievement
- mental and behavioural alertness or aggressiveness
- chronic haste and impatience

Type A coping behaviour is discussed by Friedman and Rosenman (as cited in Long, 1990), Newton and Keenan (1985) and Latack (1986).

Friedman and Rosenman (1974) note that the Type A individual, being something of a "take charge", workaholic person, can be expected to cope with stress by employing proactive control strategies rather than avoidance strategies.

Newton and Keenan (1985), on the other hand, demonstrate that a Type A person is less likely to use potentially helpful coping strategies in response to a work stress incident, but tends instead to show greater helplessness and resentment (Fletcher, 1988).

Latack (1986) notes that because Type A persons are typically workaholics, they may not recognise stress symptoms as reactions to be managed or controlled, and may in fact actually seek high levels of tension, their lifestyles being characterised by incessant activity and long hours of work.

Baron (as cited in Havlovic & Keenan, 1991), in differentiating between coping strategies employed by Type A and Type B individuals, suggests that Type A tend to deny that they are upset by the stress, project their own feelings of tension and anxiety onto others, and employ more active and control-oriented methods, whereas Type B exhibit a different coping style characterised by a relative lack of time urgency, impatience and hostile responses.

Cooper (1981) and Ivancevich and Matteson (1988) argue that the Type A personality has pathogenic significance in the white male population. However, Frankenhaeuser, Hedman and Bergman-Losman (1989) and Davidson and Cooper (1985; 1987) suggest that female managers have somewhat higher Type A scores than males, being as a group highly competitive with a distinctly androgynous gender role profile, experiencing a high degree of job involvement and enjoying their work.

The impact of an internal versus external locus of control on stress and coping is also worth mentioning. Payne (1988) reports Parkes's finding that subjects with an internal locus of control report more adaptive coping responses, particularly in situations appraised as being potentially controllable and important to the subject. This finding has been confirmed by Anderson and Lefcourt (both cited in Payne, 1988). Anderson concludes that whilst internals employ problem-solving methods of coping, externals perceive their circumstances as more stressful and rely more on emotional means of coping, such as denial. Lefcourt notes that externals experience greater strain than internals.

Other personality traits which impact upon the ability to cope with stress include

- self-esteem
- perception of the problem
- basic outlook on life
- self-perception
- tolerance of pressure (Morgan & Baker, 1985)
- higher-order needs
- career orientation (Newton & Keenan, 1985)
- eccentricity
- sophistication
- enthusiasm
- self-sufficiency
- judgement
- higher general ability
- conscientiousness
- maturity
- self-control (Reddy & Ramamurti, 1991)

Personal resources and personal constraints also affect coping. Whilst the personal resources of health and energy, adopting a positive view of oneself and hope, as well as material resources, greatly increase the coping options in most stressful encounters and facilitate coping efforts, certain personal resources, including the belief in fate, can dampen or inhibit coping efforts. Problem-solving skills, which

include the ability to search for information, weigh alternative courses of action and select and implement an appropriate plan of action, also act as important resources for coping, as do the social skills which enable one to communicate and behave with others in socially appropriate and effective ways (Lazarus & Folkman, 1984).

Personal constraints - which include internalised cultural values and beliefs that prohibit certain types of action or feeling, and psychological deficits - restrict the way that an individual deals with the environment (Lazarus & Folkman, 1984).

2.2.4.2 *Work environment characteristics*

Work-environment characteristics that influence coping behaviours include

- environmental constraints, which inhibit the effective use of coping resources (Lazarus & Folkman, 1984)
- environmental resources
- organisational size
- organisational climate
- work area (Billings & Moos, as cited in Long, 1990)

The impact of social resources and organisational size on coping behaviours will now be discussed.

Newton and Keenan (1985) point out that those working in larger organisations are more likely to cope through talking to someone else, but less likely to cope through taking direct action to resolve the stressful problem.

Billings and Moos (1981) suggest that social resources play an important role in the maintenance of adequate functioning, stress being typically experienced where little social support for coping exists (Cox, 1987). The nature of the support available in the work setting and the appraised importance of a situation influence the extent to which active problem solving and avoidance coping are used to reduce distress. Withdrawal and/or avoidance behaviour is more likely where the general level of

support and warmth provided in the working climate is limited (Long, 1990; Newton & Keenan, 1985; Parkes, as cited in Long, 1990; Billings & Moos, 1981; Latack, 1986). Latack (1986) suggests that high levels of social support are more likely to be associated with a control strategy than with an avoidance or symptom-management approach, social support thus implying proactive control of a stressful situation rather than simply emotional comfort. Avoidance strategies and a relative lack of social resources are ultimately detrimental to physical, social, and emotional functioning (Billings & Moos, 1981).

The relationship between work support and coping has also been investigated by Kobasa and Puccetti (as cited in Long, 1990), who found that social support acts as a stress buffer for people with an instrumental personality style. Davidson and Cooper (1984) suggest on the basis of this finding that people high on the instrumentality dimension, enjoying high work support, could therefore be expected to make greater use of problem-solving coping and less of avoidance coping.

The predictive value of social support has been found to be less salient among men than among women (Billings & Moos, 1981).

2.2.4.3 *Situational characteristics*

The nature of a situation is a critical determinant of an individual's perception of and response to that situation, the type of coping strategy employed therefore frequently varying from situation to situation (Deaux, as cited in Miller & Kirsch, 1987).

Parkes (cited in Long, 1990) suggests that the more important an episode or incident to an individual, the greater his/her reliance upon avoidance coping. Hamilton and Fagot (cited in Long, 1990) refer to evidence that impersonal stressors are more amenable to problem-solving coping.

The stress and coping experience is best conceived of as the result of an interplay of factors relating to one's personality, the situation, the organisation (Reddy &

Ramamurti, 1991), the environment and appraisal. Whilst personality, situational, and work-environment characteristics are important in the choice of coping strategy (Ilfeld, 1980), it is essential to take into account the impact of the subjective appraisal of a particular stressor. (Folkman & Lazarus, 1980).

2.2.5 Coping mechanisms employed in stress management

Before discussing specific coping mechanisms employed in the stress management process, this study will address the cognitive and behavioural elements of these strategies and active versus palliative/inactive coping.

Coping mechanisms include cognitive and behavioural attempts to master, reduce or tolerate demands. Cognitive efforts include mental strategies, self-talk, mental planning and other solitary cognitive activity, whilst behavioural actions are more readily observable. Coping strategies frequently include both cognitive and behavioural elements, as is the case with the strategies discussed below (Lazarus & Folkman, 1984).

Coping mechanisms can be differentiated according to whether they involve direct action or are palliative.

Direct action or active coping strategies, which include information-seeking and problem-solving coping mechanisms (Cooper & Marshall, 1980), are attempts to master interaction with external sources of environmental stress, and involve confronting or attempting to change the source of stress oneself (Pines & Kafry, as cited in Etzion & Pines, 1986). The use of these strategies is increased with technical problems, which are more tangible and probably relatively easy to resolve in the short term, and in smaller organisations, where employees possibly enjoy greater decision-making control or personal authority than their counterparts in larger organisations (Newton & Keenan, 1985). The use of active coping strategies reduces the appraisal of the demand and thus lessens strain. Evidence suggests that active coping strategies are positively related to adaptation in adults, whereas avoidance coping is negatively related to psychological adjustment (Amatea & Fong, 1991).

Palliative or inactive devices are attempts to reduce disturbances when one is unable to manage the environment or when action is too costly for the individual (Etzion & Pines, 1986). They include

- intrapsychic processes such as denial, avoidance of the source of the stress by cognitive or physical means (Pines & Kafry, as cited in Etzion & Pines, 1986), detachment and attention deployment
- somatic-oriented or symptom management devices such as drugs, overeating and relaxation training, these devices being aimed at moderating the bodily concomitants of stress (Cooper & Marshall, 1980)

Palliation or indirect coping is applied to emotions (Etzion & Pines, 1986).

Billings and Moos (1981) have found that active and problem-focused coping strategies are more heavily relied upon than inactive, avoidance and emotion-focused strategies, and that males report less frequent use of inactive, avoidance and emotion-focused coping than females. Billings and Moos (1981) go on to note that persons with higher levels of education are more likely to use active and problem-solving coping mechanisms. Newton and Keenan (1985) report that less than 20 percent of people adopt some form of short-term direct action towards resolving a problem, whereas nearly 30 percent remain essentially inactive in response to stress or express negative feelings such as helplessness.

It is of interest to note that whilst the primary categorisation schemata focus on the distinction between behavioural and cognitive elements, and between active and inactive coping, a number of researchers categorise coping mechanisms according to different schemata. For example, Menaghan and Merves (1984) differentiate between coping attempts to alter environmental demands or opportunities, and strategies intended to modify individual capacities or goals.

The six coping strategies measured by way of the Coping Checklist (avoidance, problem-focused, symptom management, social support, blamed-self and wishful thinking) will be discussed below. They have been broadly categorised into the following three categories (Pearlin & Schooler, 1978; Ilfeld, 1980):

- methods aimed at changing the stressful situation
- methods aimed at controlling the meaning of the stressful situation
- methods aimed at controlling emotional distress after it has emerged

In dealing with the six strategies it is important to keep the following three points in mind:

- Many of the responses defined as coping strategies may have other meanings as well. Responses such as watching television and using alcohol can be used to manage stress but might also serve other purposes (Pearlin & Schooler, 1978).
- These strategies are not defined in terms of outcomes. A strategy may, for example, have the function of avoidance, yet fail to result in avoidance.
- Because any thought or act can have multiple coping functions, caution should be exercised in labelling coping strategies/acts as either emotion-focused or problem-focused (Lazarus & Folkman, 1984).

2.2.5.1 Methods for changing the stressful situation

Responses that modify the stressful situation represent the most direct way of coping with life strains, their function being to alter or eliminate the source of strain (Pearlin & Schooler, 1978). These responses employ proactive or control-oriented methods and a take-charge approach, for example making a plan of action and thinking positively about one's capabilities (Latack & Havlovic, 1992).

Responses in this category are not common, owing to several conditions that prevent people from directing their efforts toward the modification of a problematic situation (Pearlin & Schooler, 1978):

- People must recognise the situation as the source of their problem before they can mobilise action toward modifying it.
- People may lack the knowledge or experience necessary to eliminate or modify the sources of stress.

- Certain conditions are impervious to coping interventions.

Problem-focused coping is aimed at changing or modifying the stressful situation. The strategy of problem-focused coping is explained below.

Problem-focused coping

"Problem-focused coping" refers to attempts to modify or eliminate the source of stressors by taking instrumental actions directed at managing or altering the problem (Folkman, 1982; Miller & Kirsch, 1987). This form of coping involves

- planning
- taking direct action
- seeking assistance
- screening out other activities
- forcing oneself to wait before acting (Carver et al, 1989)
- seeking information
- trying to get help
- inhibiting action
- taking direct action (Folkman & Lazarus, 1980)
- defining the problem
- generating alternative solutions, weighing the alternatives in terms of their costs and benefits, choosing among them and acting (Lazarus & Folkman, 1984)

Problem-focused coping includes

- strategies directed at analysing the situation
- strategies involving action (Cox, 1987)
- strategies directed at the environment
- strategies directed at the self (Lazarus & Folkman, 1984)

The problem-solving process consists of six steps. These steps are followed rationally, as one takes account of the expected utility of the available solutions and of the anticipated positive and negative consequences of each. The six steps are as follows (Cox, 1987):

- (1) Recognition that a problem exists
- (2) Diagnosis: analysis of the situation, involving information acquisition, negotiation of an appropriate language for problem definition, and negotiation of a problem description
- (3) Design 1: a statement of implied solutions and the creative generation of a range of other possible solutions
- (4) Design 2: the identification of and agreement on criteria of success and an immediate evaluation of different possible solutions, followed by the integration of the most acceptable ones into a feasible strategy
- (5) Development/implementation 1: implementation, and support for implementation
- (6) Development/implementation 2: monitoring, feedback and learning

The majority of the steps outlined above are essentially cognitive in nature, and are expressed and supported through specific behavioural acts:

- Diagnosis is influenced by search strategies available to the person involved and by processes of selective perception and memory.
- Design encompasses cognitive rehearsal or fantasy and the recall of strategies used in previous and similar problem situations.
- Implementation is often preceded by contingency planning and by rehearsal of coping skills. Rehearsal can be either cognitive (going through the situation in one's mind) or behavioural (actually practising the skills).

The evaluation of the consequences of coping is often influenced by feedback, and faulty evaluation frequently results in incorrect decisions being made in future problem-solving.

Despite the fact that problem-focused coping has been found to be under less situational control than other forms of coping, and to be more useful and flexible than other coping strategies (Bem, as cited in Long, 1990), it may, as Latack (1986) points out, be abandoned in highly stressful situations. The greater the threat, the more individuals resort to primitive, desperate, or regressive emotion-

focused forms of coping, and the more limited the range of problem-focused options (Lazarus & Folkman, 1984).

Problem-reappraisal coping has been found to be related to expressiveness, gender and instrumentality, with greater expressiveness and greater instrumentality both predicting problem-reappraisal coping (Long, 1990).

Problem-focused coping has been found to be negatively related to depression and physical illness and positively related to self-confidence (Billings and Moos, as cited in Nelson et al, 1990).

2.2.5.2 Methods for controlling the meaning of the stressful situation

Coping responses designed to control the meaning of the problem are the most common. Such responses serve as buffers against the stressful impact of a problem, threats being cognitively neutralised via the appraisal process. Examples of this type of coping are positive comparisons and selective ignoring (Pearlin & Schooler, 1978).

According to Barnett et al (1987), the selective ignoring of problems, which tends to exacerbate psychological distress, may be classified as an emotion-focused response.

2.2.5.3 Methods for controlling emotional stress after it has emerged

The third type of response is aimed at controlling emotional distress once it has manifested itself, and at accommodating existing stress without being overwhelmed by it. Examples are

- denial
- passive acceptance
- withdrawal
- an element of magical thinking

- hopelessness bordering on blind faith
- belief that the avoidance of worry and tension is the same as problem solving (Pearlin & Schooler, 1978)
- social versus solitary coping (coping at times utilises methods that involve other people and at times is done alone) (Latack & Havlovic, 1992)
- symptom management strategies

Responses of this kind fit into the broad category of emotion-focused coping, which includes the following subscales:

- wishful thinking
- help seeking/avoidance
- growth
- minimising threat
- emotional support
- blaming self (Kanner et al, 1981)
- cognitive reappraisal (Lazarus & Folkman, 1984)
- trying to see humour in the situation
- detachment
- fatalism (Folkman & Lazarus, 1980)
- symptom management (eg smoking and exercise) (Latack, 1986)

It should be noted that although Latack (1986), amongst others, defines methods other than problem-focused coping as variations of emotion-focused coping, these variations are often sharply divergent (Carver et al, 1989).

Emotion-focused coping includes cognitive strategies, such as looking on the bright side, and behavioural strategies, such as seeking emotional support or having a drink. It is directed towards the emotional regulation of a problem and consists of attempts

- to manage or reduce emotional distress (Folkman, 1982)
- to control stressor-related emotions
- to maintain affective equilibrium (Miller & Kirsch, 1987)

These strategies are employed to change the meaning of a stressful situation, meaning being changed via the maintenance of hope and optimism, denial of both fact and implication, refusal to acknowledge the worst, acting as if what happened did not matter, and so on (Lazarus & Folkman, 1984).

Emotion-focused coping techniques are likely to be used when the individual perceives the stressor to be unchangeable. The task of coping here is therefore defined in terms of the need to accept the situation and adjust to it. While agreeing that emotion-focused coping is an effective way of managing stress when the possibility of changing an event or situation is minimal, Barnett et al (1987) note that the perception of changeability is often a function of both the social consensus of people close to the individual and his/her appraisal of personal resources. There is therefore a degree of variation in the extent to which any given stressful situation is perceived as changeable.

Emotion-focused coping has been associated with depression and dysfunctional physical symptoms (Billings & Moos, as cited in Nelson et al, 1990), and with high levels of somatic complaints (Latack, 1986) and anxiety (Stumpf, Brief, & Hartman, as cited in Nelson et al, 1990); Nelson et al, 1990). Carver et al (1989) raise the possibility that emotion-focused coping may also impede adjustment when emotions such as distress are focused upon for long periods of time, because focusing on distress distracts one from active coping efforts and movement beyond the distress.

The following strategies used to control emotional stress will be elaborated upon: avoidance, symptom management, social support, wishful thinking and blamed self.

(a) *Avoidance*

Avoidance is a natural psychological defence process aimed at managing the anxiety associated with a threat. The problem is denied or ignored, and the threats involved assumed to be "too deep and dangerous" to be confronted directly. Any

attempt to confront them is perceived as likely to result in personal disruption and social chaos (Cooper & Marshall, 1980). The avoidance strategy consists of defensive techniques which help individuals avoid anxiety, guilt, doubt, and uncertainty (Cooper & Marshall, 1980). Cooper and Marshall (1980) suggest that avoidance is the primary coping mechanism at an organisational as well as an individual level.

Avoidance coping is used in the following situations:

- when primary appraisal leads to the perception of threat
- when secondary appraisal leads to the perception of insufficient personal and environmental resources
- when stressful episodes are perceived to have greater importance or to be more threatening
- when little work-related support is available, coping by withdrawal being less likely in a supportive environment

The extent to which avoidance is employed is influenced by a number of factors including

- social resources
- adverse work conditions
- the appraised importance of a situation
- interpersonal conflict
- wasted effort

The probability of avoidance behaviour is also increased by interpersonal conflict and wasted effort (Long, 1990; Billings & Moos, 1981; Newton & Keenan, 1985).

Long (1990) points out that avoidance coping is likely to be employed where people enjoy little instrumentality and where stressful episodes are perceived as important. Work resources and episode importance contribute more than instrumentality to the prediction of avoidance coping. The use of this coping method also increases when either personality traits or work environment characteristics are unfavourable (ie low instrumentality, undifferentiated traits or

low interpersonal support), and this coincides with a marked reduction in the use of problem-reappraisal and problem-solving coping (Long, 1990).

Latack (1986) argues that a proactive control strategy is more likely to produce positive results in the job situation than avoidance. A control strategy is more likely to change the stressful situation, whereas avoidance merely offers acceptance of the circumstances, mental or behavioural escape, or temporary relaxation.

Parkes, as cited in Long (1990), concludes that the interaction between adverse working conditions and low support is linked to greater avoidance coping. Avoidance strategies in the context of limited social resources culminate in a detrimental impact upon physical, social, and emotional functioning (Billings & Moos, 1981).

Avoidance strategies operate very effectively in the short term, in contrast to non-avoidance strategies, which are superior in the long term (Suls & Fletcher, as quoted in Edwards, 1988). Although avoidance strategies generally allow the relief of low anxiety and a more normal state in the short term, they tax energy resources severely over time, causing repression of emotions and leading to secondary stress effects. Defences become less and less effective, and the threat re-emerges. Individuals who use avoidance as their dominant coping technique will therefore persistently experience a degree of anxiety higher than is justified by the objective situation alone (Cooper & Marshall, 1980).

Although these observations may well be justified, periodic escapism is a necessary component of coping. Escape strategies that are cognitive in nature, such as denial processes, constitute a valuable coping mode for people who are not yet ready to deal with the situation actively, or in situations which are not amenable to change (Latack, 1986; Latack & Havlovic, 1992).

The findings of Latack and Havlovic (1992) are supported by Miller and Kirsch (1987), who suggest that blunters (ie those who cognitively avoid and transform threat-relevant cues when threatened with aversive events) often fare better than those employing monitoring (ie being alert and sensitised to threat-relevant information) during uncontrollable stressful events. Individuals often succeed in reducing stress by engaging in distraction and related psychological techniques.

Latack (1986) and Billings and Moos (1981) note that escape/avoidance strategies and symptom-management strategies are positively related to psychosomatic symptoms. A control or problem-solving strategy is more likely to be associated with positive outcomes than an escape or symptom-management strategy, a lower reliance upon the latter being associated with lower stress levels.

(b) *Symptom management*

Symptom management focuses on stress symptoms or psychophysiological states and consists of strategies that manage the symptoms related to job stress in general, diverting energy and resources away from the problem being confronted (Otto, 1980). Symptom management strategies, which encompass activities designed to keep one occupied in a manner which is not focused on the immediate troubles (Otto, 1980), are essentially emotional and physical. Whilst problem-focused and emotion-focused coping are linked to specific work situations, symptom management strategies are brought into play on a more global level to alleviate symptoms of job stress resulting from a variety of work situations (Latack, 1986).

Symptom management includes engagement in activities such as (Underwood, 1992)

- gardening
- sports
- going out
- mental activities
- participation in church and community activities
- socialising with friends
- regular exercise
- meditation
- prayer

These symptom management items can be subdivided into three broad subcategories (Cooper & Marshall, 1980).

The first subcategory encompasses physiological activities, in which respondents engage in some sort of physical work or exercise. Examples are jogging, gardening, engaging in general exercise programmes and strolling in the woods (Cooper & Marshall, 1980).

Exercise has a positive effect on physiological and psychological health and well-being (Nelson et al, 1989; Kirkcaldy & Siefen, 1991; Matteson & Ivancevich, 1987). It is an effective means of reducing tension and irritation (Hunter, Jenkins & Hampton, 1982; Nelson et al, 1989), stimulating mental alertness and participation in athletic activities, and improving the efficiency of the nervous system, which in turn helps eliminate tension (Willes, as cited in Cooper & Marshall, 1980).

Other benefits of regular exercise include the improvement of physical work capacity and cardiovascular and metabolic function, and the reduction of emotional stress, adverse dietary habits and obesity (Ivancevich & Matteson, 1988). Aerobic exercise also releases endorphins in the brain, thus lifting one's spirits (Wallace, 1992), reduces muscle tension more effectively than tranquillising drugs, and serves as a form of relaxation or diversion (Nelson et al, 1989).

In contrast to other researchers, Kirkcaldy and Siefen (1991), have found that regular participation in exercise is not associated with increased job satisfaction or reduced work stress.

Activities in which respondents purposefully attempt to isolate themselves from the work environment represent the second subcategory of symptom management items. Examples include isolating oneself in one's home, travelling and establishing friendships outside the work environment (Cooper & Marshall, 1980).

Freudenberger, as cited in Hunter et al (1982), emphasises the importance and benefits of recreational activities and holidays or weekend trips away in coping with stress. These activities clear the mind of work-related concerns and help keep work and other life events in proper perspective.

The final subcategory of symptom management items comprises physiological activities designed as relaxation mechanisms, examples being yoga and meditation (Tung & Koch, as quoted in Cooper & Marshall, 1980). Relaxation exercises effectively relieve habitual stress by allowing the mind and body to release everyday concerns (Wallace, 1992), reducing the incidence of physical symptoms, decreasing blood pressure and increasing job satisfaction (Hunter et al, 1982). Progressive relaxation is an approach to stress relaxation which combines psychological awareness of sources of stress with physiological treatment. Other approaches include mental relaxation, relaxation of various parts of the body and the number countdown - techniques developed by Dr Cary McCarthy (Cooper, 1981).

Prayer and meditation have been found to achieve the effects of relaxation through a common physiological reaction (Nelson et al, 1989).

Transcendental meditation (TM) has been reported as helping work adjustment by reducing tension. This technique reduces short-term anxiety reactions, immunises people against stress, increases job satisfaction, increases the attention span and improves work performance (Cooper, 1981).

As may be deduced from the symptom management items included in the Coping Checklist, certain symptom management strategies do not fall within the three subcategories addressed above, for example smoking and alcohol abuse.

Smoking behaviour has been associated with work stressors such as

- objective quantitative work load (Cooper, 1981)
- responsibility for the work of others
- responsibility for equipment
- ambiguity about one's future and the futures of others
- role ambiguity
- job complexity
- workload variance (Fletcher, 1988)

Stress may be an important determinant of alcohol abuse, a positive relationship having been reported between psychological stress symptoms and frequent alcohol

use. Alcohol is frequently used for the relief of psychological strain when the use of other coping strategies has failed, and it serves as a convenient "back-up" device to manage existing stress (Violanti, Marshall & Howe, 1985).

Latack (1986) hypothesises that because symptom management strategies manage the symptoms rather than resolve a work situation, people experiencing considerable stress away from work would be more likely to adopt escapist and symptom management strategies than people who do not face so many nonwork stressors.

Symptom management strategies enable people to reduce stress and maintain a balanced lifestyle. Underwood (1992) points out that whilst work provides employees with self-esteem, financial reward, and a sense of accomplishment, employees need to integrate other elements into their lives, such as exercise, if they are maintain a balanced lifestyle and reduce stress.

(c) *Social support*

As a coping mechanism, situational factor or work environment characteristic, social support appears to be critical in understanding the stress process (Latack, 1986). Social support has the potential to moderate or attenuate the adverse impact of organisational stressors (Kirmeyer & Dougherty, 1988; Latack, 1986), and facilitate well-being (Antonovsky, as cited in Etzion, 1984). This is accomplished via emotional comfort and also through the proactive control of a stressful situation (Latack, 1986).

Social support, as defined by Nelson et al (1989), represents an interpersonal transaction involving one or more of the following:

- instrumental reasons (ie seeking advice, assistance, or information)
- emotional reasons (ie getting moral support, comfort, sympathy or understanding) (Carver et al, 1989)
- appraisal reasons (Etzion, 1984)
- attachment and affiliative functions (Lazarus & Folkman, 1984)

- instrumental, material, or integrative functions (Lazarus & Folkman, 1984)

Social support is frequently sought for a number of reasons simultaneously (Carver et al, 1989).

Social support has been identified as one of the most common coping strategies employed in stress management (Newton & Keenan, 1985).

Substantial evidence exists that the work group, social group and family of the individual may provide effective social support. Each serves as both a source of and a buffer against stress, and various patterns of coping can either enhance or diminish social resources (Billings & Moos, 1981).

Technical help, insight, comparison, rewards and escape derived from peers or colleagues either promote enhanced well-being or create additional stress (Maslach, cited in Huebner, 1993). Technical assistance, feedback and support derived from supervisors (Huberty & Huebner, as cited in Kirmeyer & Dougherty, 1988) are either major sources of stress or significant factors in its prevention and management. Supervisor support also encourages the use of problem-focused coping and emotion-focused coping (Kirmeyer & Dougherty, 1988).

Emotional support is obtained from family and friends (Hunter et al, 1982). Pavett (1986) and Davidson and Cooper (1986; 1987) elaborate upon the spouse as a source of social support. Pavett (1986) notes that an understanding, supportive spouse can serve as a buffer against the negative outcomes of stress or as a coping mechanism for the stressed individual, as individuals who discuss their work-related frustrations and problems with their spouses perceive less stress than those who do not take their problems home. Davidson and Cooper (1986) note that married women do not receive the required emotional and domestic support from their partners. Women managers frequently report that, even when both partners are employed, it is usually the woman who takes an interest in the man's career and gives the encouragement and support needed, rather than vice versa.

The various sources of support

- lead persons to believe that they are cared for, esteemed and valued, and belong to a network of communication and mutual obligation (Kirmeyer & Dougherty, 1988)
- help individuals to cope with job-induced pressures (Hunter et al, 1982)
- can offset the effects of stress and CHD (Cooper & Marshall, 1978, as quoted in Cooper, 1981)

Individuals enjoying support experience fewer negative health effects related to stress than do those without it (House, 1980, as quoted in Latack, 1986).

Many studies have found social support to have significant main effects on stress and strain, only a minority reporting moderating or buffering effects on the relationship between stress and strain (Etzion, 1984). In each instance the quality of the interaction determines the role played by social support, and influences the extent to which support from others is an effective mediator of stress reactions. The buffering effects of social support are more likely to occur when a reasonable match exists between coping requirements and available support (Kirmeyer & Dougherty, 1988).

Etzion (1984) notes that whilst work stress may be buffered by social support, life stress generally is not. This is possibly because work stress is appraised as a common experience that can legitimately be shared with others, whereas the intimate and unique stressors of life are not considered appropriate for social exposure. This seems to suggest that the use of social support is limited when the agenda or cause of the stress is hidden.

Etzion's (1984) finding correlates with that of Newton and Keenan (1985), who observe that talking about the stressful incident with someone else at work is one of the most common approaches in coping behaviour. The person most often approached is the immediate superior, someone who is senior in authority and familiar with the work of his/her subordinates.

The use of social support, or talking to others, is related to organisational size, being favoured in larger organisations. It should be noted that this relationship is as

likely to arise from differences in organisational practice and type of personnel as from the fact that in a larger organisation there are more employees whom individuals can - theoretically - talk to. However, environmental factors affect different individuals in different ways (Fletcher, 1988).

Latack (1986) suggests that social support moderates the effects of job stress by interacting with coping strategies in some way. For example, if social support increases overall confidence in a stressful situation, this suggests a correlation with proactive thoughts and take-control actions. Alternatively the emotional comfort offered by social support - and the fact that relaxation activities are commonly pursued with friends, family or co-workers - may imply a closer connection with acceptance or avoidance cognitive reappraisals and actions, and with symptom management strategies.

The deleterious circumstances of life need not be expressed in malfunctioning of the physiologic or psychologic systems if a meaningful social group is available through which the individual can derive emotional support and understanding. (Cooper, 1981, p. 108)

Social relationships are necessary if the individual is to survive and flourish. Improved adaptational outcomes are likely to result when people receive, or believe that they will receive, social support when they need it (Lazarus & Folkman, 1984). Nonparticipation in, or the absence of, support systems at work is one of the most consistent and significant indicators of strain and job-related stress. Nonparticipation is significantly related to (Margolis, as cited in Cooper, 1981)

- overall poor physical health
- escapist drinking
- depressed mood
- low self-esteem
- low life satisfaction
- low job satisfaction
- low motivation to work
- intention to leave job
- absenteeism from work

Although the majority of studies report significant direct relationships between social support and mental health, the evidence on whether inadequate support magnifies the association between stress and poor mental health remains mixed (Phelan et al, 1991; Kirmeyer & Dougherty, 1988). Pavett (1986) and Gore (cited in Latack, 1986) conclude that the role played by social support is not clear, and Carver et al (1989) refer to the finding by Billing and Moos that social support may not always be very adaptive. Kirmeyer and Dougherty (1988), on the other hand, cite the findings of LaRocco, House and French (1980) that social support buffers the effects of perceived role overload and workload dissatisfaction on affective complaints of depression and irritation, and Wells's (1982) conclusion that social support reduces the likelihood of work demands being perceived as overloading.

(d) Wishful thinking

Wishful thinking is more typical of those in high stress situations, in which resources are insufficient to deal with the stressors being experienced (McDonald & Korabrik, 1991).

(e) Blamed self

Blamed self strategies are passive strategies directed inward rather than toward the problem. They have been found to increase emotional distress (Aldwin & Revenson, 1987).

The six strategies elaborated upon above have been broadly classified into (Pearlin & Schooler, 1978; Ilfeld, 1980)

- methods aimed at changing the stressful situation
- methods aimed at controlling the meaning of the stressful situation
- methods aimed at controlling emotional distress after it has emerged

Methods aimed at changing the stressful situation have been defined as referring primarily to problem-focused coping, whilst methods aimed at controlling emotional distress after it has emerged have been defined as referring primarily to emotion-focused coping. Emotion-focused coping, in turn, has been discussed in terms of five subcategories, namely avoidance, symptom management, social support, wishful thinking and blamed-self.

Because the research design of this study entails assessing the use by male and female professionals of the six strategies referred to above according to the Coping Checklist - an adapted version of the Ways of Coping Checklist (Folkman & Lazarus, 1980) - the strategies will be referred to again in chapter 4.

Assuming that problem-focused and emotion-focused coping constitute two major categories of coping responses, the relationship between these two subcategories of coping must be defined and clarified, as must the relative use of each type of coping. One has to bear in mind, however, that the global distinction between problem-focused and emotion-focused coping is insufficiently specific to capture the various subdimensions that have emerged in research (Latack & Havlovic, 1992). Strategies that do not fall within these two categories therefore remain worthy of assessment.

The extent to which problem-focused and emotion-focused coping are employed varies according to

- situational factors
- the age and gender of individuals (Folkman & Lazarus, 1980)
- the manner in which an event is appraised

Problem-solving coping is usually employed

- when an event is appraised as providing opportunity for personal control
- when people perceive that something constructive can be done
- when the sources of stress are external
- where more information is needed

It is more adaptive in changeable and controllable situations than in situations where nothing can be done.

Emotion-focused coping is usually used

- when events are appraised as offering little or no opportunity for change
- in situations in which people have to hold back from acting

It is more adaptive in uncontrollable situations that have to be accepted, as it is successful in lowering distress and somatic disturbance in such circumstances (Folkman, 1982; Folkman & Lazarus, 1980; Lazarus & Folkman, 1984; Huebner, 1993).

The extent to which one category of coping is employed rather than the other is also influenced by the type and level of stressors involved. Work-related stressors are associated with increased problem-solving coping, and health-related stressors with increased emotion-focused coping (Billings & Moos, 1981; Folkman & Lazarus, 1980). Individuals have also been found to abandon problem-focused coping in favour of emotion-focused coping strategies at higher levels of stress (Latack, 1986; Latack & Havlovic, 1992).

Problem-focused and emotion-focused coping are capable of facilitating or impeding each other. For instance, engaging in problem-solving coping first may lead to a transformation or reduction of the emotional response, whilst in other cases minimising the significance of an event (emotion-focused coping) can inhibit problem-focused activity (Folkman, 1982). These two forms of coping can also occur concurrently (Lazarus & Folkman, 1984).

According to Billings and Moos (1981), problem-focused coping, which involves the active confrontation of a problem, is less likely to result in depression than is emotion-focused coping - or rather, the emotional regulation of a problem.

Both problem-focused and emotion-focused coping are used in the majority of stressful encounters, so conceptualising coping in terms of one of these processes is inadequate (Folkman & Lazarus, 1980). The number of problem-focused forms of

coping that are applicable across diverse situations is, however, limited compared with the array of emotion-focused strategies, the use of problem-focused strategies being partially dependent upon the types of problems being dealt with (Lazarus & Folkman, 1984).

2.2.6 Choice of coping mechanism

Edwards (1988) considers the process by which individuals select coping strategies from the wide range available to them. Using a Descriptive Model of the Selection of Coping Strategies, he notes that the individual is likely to consider a very limited number of coping alternatives, as there are several factors which affect the number and type of coping alternatives generated and the effort the individual is willing to apply to their generation. These include (Edwards, 1988)

- the level of stress experienced by the individual
- the amount of importance associated with the desire involved in the stressful situation
- the time available to generate coping alternatives
- previous experience of the same or similar sources of stress
- the availability of information from others who have coped with similar stressful circumstances
- the extent to which the individual considers coping alternatives sequentially rather than simultaneously

Edwards (1988) notes that the individual's choice of coping strategy is also influenced by the manner in which alternatives are evaluated. Coping strategies are evaluated in terms of

- their perceived efficacy
- the level of stress
- the importance associated with the threat
- the amount of time available
- prior experience with coping strategies under consideration
- social information

- the costs of coping
- the level of ambiguity associated with the situation

Individual assessments of the likelihood of success of coping alternatives are generally biased and inaccurate.

In assessing the impact of the individual's choice of coping strategy on the coping process, Edwards (1988) concludes that individuals tend to consider a limited number of coping alternatives, evaluate these in a superficial and erroneous manner, and select one which is suboptimal in terms of well-being. He notes that level of stress, importance, time, experience, social information and ambiguity influence the amount of effort that the individual puts into the generation, evaluation and selection of coping strategies. Because these factors are interrelated, they are likely to have direct, indirect and interactive effects on the amount of effort applied to the selection process.

Choice of coping strategy is also influenced by social experience and learning associated with specific roles and positions in society (Otto, 1980). People at higher socioeconomic levels and occupying positions of higher status are likely to be at an advantage, owing to the following factors:

- The problems that they encounter are more likely to be reversible or capable of resolution than those of people at the bottom of the socioeconomic scale.
- They have greater material resources.
- They can be expected to have developed greater capacities for versatility and self-direction through their socialisation experiences, together with a more confident self-image.
- They have the intelligence to draw on their broader range of experience, greater knowledge of resources and skills, and education.

Otto's (1980) finding is supported by Scott and Spooner (1989), who have found that formal education is related to increased tolerance to stress and to a more positive, active approach in combating it.

Finally, it is important to be aware of the "social desirability" factor when assessing the choice of coping mechanisms employed by managers and professionals in particular. Managers and professionals concerned with presenting a socially desirable image are reluctant to see coping in terms of outside-of-work activities, preferring to regard themselves as problem-solvers who are highly involved in their work, rather than as people who rely on strategies such as symptom management (Latack, 1986). The issue of social desirability does not negate the impact of factors referred to above, but rather serves to remind the researcher that coping strategies chosen and/or reported are not necessarily a function of a thorough process of evaluation, nor of socio-economic status, but may reflect the need to employ and report socially acceptable behaviours.

2.2.7 Coping efficacy

Coping efficacy impacts upon short-term outcomes, which include the extent to which the strategy helps the person manage, minimise or master the demands of the situation and regulate his/her emotions, and long-term outcomes, which include health, morale and behavioural, social and psychological functioning (Folkman, 1982; Latack, 1986). The inability to cope effectively with stress impacts negatively upon (Long, 1988; Cox, 1987)

- energy levels
- behaviour
- performance
- interpersonal relationships
- health

Coping styles, organisational systems, personal systems, cognitive appraisal and arousal interact to influence health status (Zappert & Weinstein, 1985).

Coping efficacy is determined by complexity (ie the range of coping strategies used by the person at any given time and over time in dealing with a stressful situation), and flexibility (ie whether the individual uses the same strategy or set of strategies in different or similar situations, or varies strategies) (Pearlin & Schooler, 1978).

It is common for people, women in particular, to mismanage their stress because they have few effective coping mechanisms available (Chusmir & Franks, 1988). A single coping response, however efficacious, may be less effective than a range of coping responses, the variety of available responses to stress being more important than the nature and content of any single coping element (Pearlin & Schooler, 1978).

Other variables affecting coping efficacy include

- the life-strains people experience
- their psychological resources
- the emotional stresses they feel (Pearlin & Schooler, 1978)
- the magnitude and nature of demands
- individual resources such as ability, energy and time
- various situational factors

The optimistic appraisal of a stressful situation and the personal resources for coping mediate the level of reported stress in both men and women (Amatea & Fong, 1991).

Whilst Folkman (1982) and Lazarus and Folkman (1984) suggest that coping items or dimensions should be evaluated independently of coping effectiveness - coping attempts being viewed as efforts to manage stressful demands, regardless of outcome - the relative efficacy of different coping strategies has been discussed by a number of researchers including Long (1988), Parasuraman and Cleek (1984) and Latack (1986).

Long (1988) differentiates between the relative efficacy of problem-focused coping and acceptance-type coping, suggesting that whilst more effective copers seem to use problem-solving, such as seeking information or advice or taking problem-solving action, less effective copers seem to use strategies such as resigned acceptance. Long (1988) notes that the use of an effective strategy leads to lower degrees of anger and helplessness and to higher degrees of more positive emotions such as success, pleasure, and satisfaction, whilst the use of an ineffective strategy results in the opposite.

Parasuraman and Cleek (1984) also conceptualise problem-solving approaches aimed at dealing directly with the stressful situation as being adaptive, and emotional or defensive/self-protective approaches as being maladaptive. They argue that whereas adaptive coping behaviours do not necessarily reduce the degree of felt stress and increase job satisfaction - the effects of adaptive coping being neutral at best - maladaptive coping behaviours may exacerbate felt stress and have a negative effect on job satisfaction.

Latack (1986) suggests that proactive control strategies are more likely to produce positive results in the work situation and less likely to result in job-related anxiety, job dissatisfaction and labour turnover. These strategies, it is argued, are likely to change the stressful situation, as opposed to merely enabling the individual to accept it, escape from it or relax temporarily, as is the case with escape and symptom management strategies. The latter strategies are likely to result in psychosomatic complaints.

These findings by Long (1988), Parasuraman and Cleek (1984) and Latack (1986) notwithstanding, Menaghan and Merves (1984) suggest that there is little empirical evidence confirming either the superiority of problem-focused coping or the ineffectiveness of emotion-focused coping.

The impact of coping efforts may vary systematically, either at different levels of situational stressfulness or for people in different contexts (Menaghan & Merves, 1984). Coping efforts have been identified as being least effective in areas of life that are impersonally organised and are beyond personal coping controls, for example the occupational and marital areas (Menaghan & Merves, 1984). Occupational problems therefore appear to be relatively resistant to coping interventions (Pearlin & Schooler, 1978). Pearlin and Schooler (1978) note that personality characteristics are more effective than coping responses in sustaining people facing strains over which they have little direct control, although neither personality characteristics nor coping responses are particularly effective as buffers against the stressful effects of job strains.

Although any strategy can produce positive results, depending upon the complex interaction between situational and personality factors (Latack, 1986), no single

stress reduction technique works best for everyone (Wallace, 1992). No coping strategy is inherently better or worse than any other (Folkman, 1982), and judgements on the adaptiveness of a strategy have to be made contextually (Lazarus & Folkman, 1984). This suggests that

universal coping prescriptions which define the best or most effective coping techniques are likely to be of limited value when they do not consider the effects of differences in both the individual and the environment in determining what will be an effective coping option. (Newton & Keenan, 1985, p. 124).

2.3 SUMMARY

This chapter has explored the concepts of stress and coping. A discussion of the definition of stress has highlighted the destructive and constructive aspects of stress, as well as the merits of defining and assessing stress in terms of hassles and uplifts rather than major life events. The review of literature appertaining to sources of professional stress, vulnerability of professionals to stress and the Professional Stress Syndrome has highlighted the impact on stress of the nature of professional work and occupational level.

Coping, a concept defined as, *inter alia*, a personal trait, a sequence of stages, and specific methods, has been described as being influenced by a number of factors including personality traits, work-environment characteristics, situational characteristics, and appraisal factors or cognitive appraisal.

An in-depth discussion of the six coping mechanisms - problem-focused coping, avoidance, symptom management, social support, wishful thinking and blamed self - has illustrated how coping mechanisms vary in use and efficacy. A number of factors influence the employment of methods aimed at changing the stressful situation, methods aimed at controlling the meaning of the stressful situation, and methods aimed at controlling emotional distress after it has emerged. Because the six coping mechanisms referred to represent the strategies assessed via the Coping Checklist, which is used as a measurement of coping in chapter 4 of this study, an understanding of their relative use, efficacy and limitations is essential.

A number of theories and research findings referred to above support the approach adopted in this study, namely that stress can be examined in terms of hassles and uplifts, and that one can assess the choice of coping mechanism by focusing on six particular coping strategies. Controversy in the literature reviewed, however, suggests that further research is necessary before researchers can unanimously agree upon effective means of defining and measuring these multifaceted concepts.

CHAPTER 3

THE IMPACT OF GENDER ON STRESS AND COPING

Women are making significant inroads into the professions. In the past decade, the number of women professionals and managers has increased two and a half times, and there are twice as many women in law, medicine, the sciences, management (Nollen, 1989) pharmacy and veterinary practice (Blau & Ferber, as cited in Nelson et al, 1990).

Because working women are making significant progress in the male-dominated workforce (Nollen, 1989), and in the light of the fact that research on work stress has focused primarily on males, ignoring potential gender differences (Long et al, 1992), a need has arisen for research to be conducted on the impact of gender on many aspects of work-life. One such aspect is stress and coping with it.

3.1 THE IMPACT OF GENDER ON STRESS

Gender affects the stress process in many ways and at many points, influencing both the input and the output side of the process. It impacts upon input in that, as an important personal variable in the prediction of stress levels (Scott & Spooner, 1989), gender determines whether a situation and/or stressors encountered in the workplace will be perceived as stressful. On the output side, gender influences how stress is manifested, the long-term health implications of stress reactions, how stress is coped with, and choices among coping responses (Barnett et al, 1987; Matteson & Ivancevich, 1987; Jick & Mitz, 1985).

This chapter will deal with gender differences in both the input side of the process (ie sources of stress) and the output side (ie symptoms of stress, and the efficacy of coping and choice of coping strategy).

At the outset cognisance must be taken of the impact of "sex role traditionality" on stress and coping. This refers to the extent to which an individual endorses

behaviours or statements that have been viewed as appropriate for one sex (Robinson & Skarie, 1986). Sex role traditionality and the process of socialisation influence perceptions and emotional, cultural, attitudinal and social barriers developed by males and females alike. These variables impact in turn upon role behaviour and attitudes at work (Chusmir & Franks, 1988). The extent to which an individual's socialisation patterns are consistent with traditional gender norms, and the extent to which individuals identify with traditional notions of masculinity and femininity, condition the impact of biological sex. The impact of gender is therefore greater the more traditional one's socialisation experiences, and the more one has internalised traditional gender schemata.

3.1.1 Gender differences in symptoms of stress

Nelson et al (1989) highlight gender differences in the symptoms of stress. These symptoms, which have been described as "the ugly manifestations of excess tension" (Hough, 1990:109), may be physical, psychological, or behavioural (Morgan & Baker, 1985).

3.1.1.1 Physical symptoms

Physical symptoms of prolonged job-related stress include

- coronary heart disease (CHD), which is linked to the amount of stress that an individual endures, as well as to his/her ability to cope with it
- somatic problems including migraines, tension headaches, nausea, muscular discomfort and pain (Di Salvo et al, 1988)
- gastric ulcers
- intestinal illness
- hypertension
- asthma
- urinary frequency
- insomnia
- lethargy

- diarrhoea
- rashes
- increased blood pressure
- increased perspiration and hyperactivity (Gardner & Hall, 1981)

These symptoms have been found to correlate highly with certain psychological symptoms of stress, such as anxiety, depression and anger (Guelzow, Bird & Koball, 1991).

Although career women enjoy lower mortality rates than men and reportedly exhibit significantly fewer stress-related symptoms (Johnson, as cited in Jick & Mitz, 1985), career women are at risk of stress-related illnesses and manifestations (Fransella & Frost, as cited in Cooper & Davidson, 1982). These women attribute such physical and psychological manifestations partially to work-related stress (Cooper & Davidson, 1982).

Stress-related illnesses include

- gender-specific diseases such as the "Female Stress Syndrome" identified by Watkin-Lanoil (as cited in Scott & Spooner, 1989)
- ulcers and cardiac disease (Scott & Spooner, 1989)
- psychological maladies in the form of tiredness, loss of energy, muscle strain, irritation and anxiety

Women are also reported

- to suffer from three times as many migraines and other headaches (Sime, Rossi & Lubbers, 1990)
- to be more susceptible to burnout and distress (Barnett et al, 1987)
- to suffer from more minor physical ailments
- to show higher rates of restricted activity because of minor illnesses than men (Jick & Mitz, 1985)

The susceptibility of career women to stress-related illnesses and manifestations has been linked to the following factors:

- They have less control over their work environments and lives (Barnett et al, 1987).
- They are more likely to deny their own needs and to dismiss anxiety and fatigue as unimportant signs of conflict (Etzion, 1987).
- They are, or feel, expected to play out a masculine role at work (Fransella & Frost, as cited in Cooper & Davidson, 1982).

Men have been found to be physiologically predisposed to CHD - in fact, it is generally twice as prevalent in men - but women are becoming increasingly vulnerable to it. Female managers are most at risk, being Type A individuals who are married with children (Cooper & Davidson, 1982).

The nature of gender differences in the area of physical symptoms remains unclear. Some studies indicate that men report physical symptoms such as hypertension, poor physical fitness, upset stomachs (Nelson et al, 1990) and high blood pressure (Sime et al, 1990) more frequently, while women have been found to report significantly poorer overall health, poorer physical illness, more stomach upsets and more headaches in other studies (Nelson et al, 1989; Jick & Mitz, 1985; Sime et al, 1990). Sime et al (1990) conclude that women report depression, migraine headaches, fibrositis, and irritable bowel syndrome between 1,5 and 3,0 times as often as men.

3.1.1.2 *Psychological symptoms*

Psychological consequences of prolonged job-related stress include (Di Salvo et al, 1988)

- mental illness
- psychosomatic illnesses
- low self-esteem
- anxiety
- tension
- impaired interpersonal relationships

From a psychological perspective, individuals experiencing stress may also feel disoriented and disorganised, angry, frustrated, apathetic, fearful, withdrawn, indecisive or unable to concentrate (Gardner & Hall, 1981).

Nelson and Quick (1985) suggest that the actual psychophysiological stress response is nondiscriminatory in its effects on men and women, as both sexes appear to be equally vulnerable to stress and to the various consequences of distress. However, findings suggest that women report greater levels of psychological distress and experience many more psychosomatic complaints than men (Jick & Mitz, 1985; Davidson & Cooper, 1985; 1986; 1987; Nelson et al, 1990; "Study pinpoints", 1993). Female managers experience 10 psychosomatic symptoms for every 1 experienced by men (Davidson & Cooper, 1984).

These symptoms occur in the following forms:

- anxiety
- a feeling of being overwhelmed
- depression
- nightmares or poor sleep
- tiredness
- difficulty getting up in the morning
- a frequent desire to be left alone

Two to four times as many women as men seek out psychological counselling (Zappert & Weinstein, 1985; Nelson et al, 1990; Davidson & Cooper, 1986). Working women as a group experience more daily stress, marital dissatisfaction and worries about ageing, and are less likely to show overt anger, than either housewives or men, marital adjustment being worse for dual-career wives than for non-working wives (Cooper & Davidson, 1982). Thompson (1991) reports that the suicide rate for professional women is many times greater than that for the general female population.

Chusmir and Franks (1988) note that whilst women may become passive and helpless, lose their self-esteem and feel inadequate and guilty when faced with

stress, men tend to react by becoming aggressive and impulsive and by disregarding social norms and values. This finding suggests that women under severe pressure tend to withdraw and belittle themselves, whereas men are more likely to strike out.

3.1.1.3 Behavioural symptoms

Behavioural symptoms of stress include (Gardner & Hall, 1981)

- a quickness to anger
- frustration responses
- suspicion
- feelings of omnipotence
- departure from the normal routine
- excessive risk-taking
- poorer work performance
- changed sleeping habits
- alcohol, drug and tobacco abuse
- poor interpersonal relationships with work colleagues
- occasional absenteeism

These symptoms affect organisations adversely, as employees under stress (Chusmir & Franks, 1988)

- grow unhappy with their pay, work and co-workers
- have less organisational commitment
- exhibit greater degrees of absenteeism, production inefficiencies and turnover

Job-related tension and home demands result, for example, in females departing from the accounting profession (Collins, 1993).

The area of behavioural symptoms is yet another in which greater clarity is needed regarding gender differences. Davidson and Cooper (1986) and Cooper and

Davidson (1982) have found that female executives smoke more than their male counterparts, women tending to smoke during periods of stress and men being more inclined to smoke as a habit or as a method of relaxing, whereas Defares et al (as cited in Davidson & Cooper, 1985) report no gender differences in smoking behaviour. Davidson and Cooper (1985), amongst others, report that although alcohol abuse is rising among working women, it is more prevalent among men. A comparable number of men and women have been found to take tranquillisers or antidepressants to relieve tension (Cooper & Davidson, 1982; Nelson et al, 1989).

There is disagreement regarding the nature of gender differences in physiological, psychological, and behavioural manifestations of stress.

Whilst Jick and Mitz (1985) suggest that women experience psychological stress in the form of depression, emotional discomfort and minor illnesses more frequently than men, and that men experience severe physiological stress in the form of coronary heart disease more frequently than women, Zappert and Weinstein (1985) and Nelson et al (1989) point out that women report significantly more physical and psychological distress. The latter finding is confirmed by Otto (1980), Frankenhaeuser et al (1989), Davidson and Cooper (1984), Scott and Spooner (1989) and Payne (1988). Nelson et al (1989) suggest that it may be attributable to the fact that women are less defensive than men about reporting their own distress, and to the significantly higher levels of exercise and sports activities reported by men. Exercise, it must be remembered, performs a beneficial role in health maintenance and preventive stress management. Gadzella et al (1990) note that women may report more stress because they undertake responsibilities in caring for the family in addition to their professional careers.

Despite the fact that women experience and report more psychological, physical and behavioural symptoms than do their male colleagues (Nelson et al, 1990; Haw, 1982), and that these symptoms affect their work performance adversely (Davidson & Cooper, 1985), evidence suggests that on average employment does not have detrimental effects on women's health. Employment appears to promote the health of unmarried women, and also that of married women who have favourable attitudes towards employment (Frankenhaeuser et al, 1989; Barnett et al, 1987; Sharma, 1990).

3.1.2 Gender differences in sources of stress

Sources of job stress include (Chusmir & Franks, 1988)

- pressures of responsibility
- accountability to top management
- work overload
- unclear job expectations
- time constraints
- problems with subordinates, co-workers and superiors

Sources of stress considered to be the least stressful are those involving stressors intrinsic to the job or to one's role in the organisation. Men and women perceive certain job responsibilities which are not people-oriented as being less stressful than some which are (Crabbs et al, 1986).

Although these and other occupational stressors in the work environment increase the probability of strain reactions, stressors do not invariably produce strain. Mediators such as individual differences increase the likelihood of a change in the normal stressor-strain relationship (Fletcher, 1988), gender being one such individual difference.

Evidence suggests that gender differences may exist in respect of sources of stress in the workplace. A source of job stress, either alone or in combination with others, can lead to a variety of undesirable psychological and physiological consequences among male and female workers in a number of different occupations (Dharmangadan, 1988). A number of researchers, including Barnett et al (1987) and Matteson and Ivancevich (1987), attribute these gender-related differences to the fact that males and females are not equally represented in all jobs.

3.1.2.1 *Stressors affecting women*

Women report a far greater number of both work and health stressors than their male counterparts (Davidson & Cooper, 1985). Women are confronted by many of the same problems as their male counterparts, these "common stressors" including (Nelson & Quick, 1985)

- role demands
- job demands
- environmental demands
- interpersonal demands
- extraorganisational demands

In addition, however, they face stressors which are unique to them, "unique stressors" including (Nelson & Quick, 1985)

- discrimination
- stereotyping
- conflicting demands of marriage and work life
- social isolation

These added stressors inflict on women a handicap not borne by most men (Chusmir & Franks, 1988; Matteson & Ivancevich, 1987).

The impact on women of both types of stressor is influenced by sex-role stereotyping. Sex-role stereotyping is associated with significantly lower career aspirations, lower SAT verbal scores and lower self-ratings for intelligence, and has far-reaching implications for the professional woman. Women are socialised for intimacy and, unlike their male counterparts, are uncomfortable in situations requiring competition, leadership, and performance evaluations. Society has traditionally regarded the family as the woman's primary concern, as a result of which women are not as likely as their male counterparts to receive approval for aspiring to high-level careers.

(a) *Common stressors*

The six most stressful work-related events for women are, in order of importance (Black, Crabbs & Morton, as cited in Chusmir & Franks, 1988),

- expected promotions not materialising
- a lack of job security
- the requirements of the job exceeding skills or abilities
- a poor relationship with the boss
- changes in standards of acceptable performance
- a lack of support from the boss

For the junior woman manager, major sources of stress are unclear career prospects, office politics and career-related dilemmas concerning whether she should start a family (Nelson et al, 1990).

Research suggests that the following stressors are more significant for women than for men:

- superior-subordinate and co-worker relationship formation (Schein, as cited in Di Salvo et al, 1988)
- career advancement and attainment of mentors (Daniels & Logan, as cited in Di Salvo et al, 1988)
- workload related stress
- power plays (Di Salvo et al, 1988)
- the typical features of the managerial job, for example complexity, demands to prove oneself in competitive situations, and time and decision-making pressures - features which are challenging and satisfying for men whilst being sources of dissatisfaction and burnout for women

Women managers also mention the following sources of stress more often than men (Turnage & Spielberger, 1991):

- lack of communication at work, ie difficulties when trying to communicate opinions to superiors (Frankenhaeuser et al, 1989)

- meeting deadlines
- periods of inactivity
- frequent changes from boring to demanding activities

Richard and Krieshok (1989) have found that whilst strain decreases for men as they move up the ranks, it tends to increase for women in the same situation. This is possibly due to a lack of role models in higher ranks, the fact that there is less socialisation with women of their own rank and prevailing societal expectations of men and women in the workplace.

(b) *Unique stressors*

Women experience some stressors all on their own. Men do not menstruate, become pregnant, give birth, or go through menopause. Men do not typically have to justify their marital status to an employer or their sexual behaviour to their family. Women must deal continually with society's mixed messages; they are most often expected to be sexy, but not sexual; to have a child, but to remain childlike; to be assertive, but not aggressive; to hold a job, but not to neglect their home (Scott & Spooner, 1989, p. 32).

Women are exposed to pressures created by multiple role demands, conflicting expectations (Long, 1988), discrimination, social isolation, stereotyping and work-home conflict (Nelson et al, 1989; 1990; Davidson & Cooper, 1985; McDonald & Korabrik, 1991). Working women bear a dual burden in two full-time jobs - a career and a home (Etzion, 1987) - and have additional family responsibilities at work and at home that their male counterparts do not (Di Salvo et al, 1988; Frankenhaeuser et al, 1989; Davidson & Cooper, 1985).

Women managers report significantly more conflict between the demands of the paid job and other duties than their male colleagues, the strongest being between work and family (Frankenhaeuser et al, 1989). The perception and consequences of any particular work-family combination are different for women, particularly in jobs that are considered to be sex-typed (Etzion, 1987).

Working women feel harassed, conflict-ridden and guilty (Etzion, 1987) about compromising both the quality of their work and their relationships with their families. This poses serious threats to their physical and psychological well-being (Zappert & Weinstein, 1985) and results in

- stress (Poole & Langan-Fox, 1992; Barnett et al, 1987)
- impaired performance at work and at home
- a decrease in job satisfaction (Nollen, 1989)
- insufficient time for rest and recreation (Haw, 1982)
- the temporary lowering of career ambitions

These women believe that their professional involvement has less priority than that of their husbands (Haw, 1982).

Women also frequently worry about home responsibilities while at work and about work responsibilities while at home (Zappert & Weinstein, 1985). Work-domain structures influence behaviours, attitudes and affective states in nonwork situations, and vice versa (Steffy & Ashbaugh, 1986). Although the work and nonwork spheres impact on each other, women frequently behave quite differently when they are at work in order to achieve recognition there, and this causes severe psychological problems.

Verbrugge (cited in Zappert & Weinstein, 1985) argues that the multiple roles of employment, marriage and parenthood have no effect on physical health, the employment role alone impacting on physical health. Crosby (as cited in Amatea & Fong, 1991) has found, however, that in general, the greater the number of roles occupied, the better a woman's reported physical and/or psychological health (Amatea & Fong, 1991; Fong & Amatea, 1992; Haw, 1982; Barnett et al, 1987).

Steffy and Ashbaugh (1986) question whether women do, in fact, experience unique pressures in meeting the simultaneous demands of employee, wife, and mother. They suggest that inter-role conflict caused by work and family pressures does not have a clear affect on either family or job satisfaction. Poole and Langan-Fox (1992) note that within a multiple role context, satisfaction or perceived

reward with the "work-role" is ranked higher than the roles of partner, parent or home-maker, the role of the employee hence appearing to be both the most stressful and the most rewarding for women fulfilling multiple roles.

A second stressor found to be unique to working women is that of discrimination and stereotyping.

Women ... have to cope with the problems of combining a career with home and family responsibilities, as well as with those of prejudice and discrimination at work. This makes their task a great deal more difficult than that of men doing the same job (Davidson & Cooper, 1987, p. 60)

Because men have designed and defined organisational structures, policies, informal networks, cultures and management styles according to their own needs and desires, working women are subject to pressures including (Davidson & Cooper, 1984; 1986; 1987; McDonald & Korabik, 1991)

- the burdens of coping with the role of "token woman"
- the lack of role models
- feelings of isolation
- the strains of coping with prejudice and sex stereotyping
- overt and indirect discrimination from fellow employees and employers
- the organisational structure and climate

Long et al (1992) point out that because of past discrimination in the form of inequities in promotions, hiring practices, performance evaluations and salaries, women tend to perceive most work events as more stressful than do their male counterparts (Crabbs et al, 1986). Discrimination and gender stereotyping are a major obstacle to the advancement of the professional woman and a key source of stress.

Notwithstanding the suggestion by Barnett et al (1987) that nonemployed women experience greater stress than employed women, professional women who compete in a male-dominated environment may be subject to chronically stressful working conditions (Amatea & Fong, 1991). Martocchio and O'Leary (1989), Nelson and

Quick (1985) and Zappert and Weinstein (1985) have found that working women experience greater stress than men and nonemployed women.

Employed women are more likely than men to hold jobs characterised by stressful conditions, and experience more stress and greater manifestations of psychosomatic symptoms of stress than housewives or men (Barnett et al, 1987). These women not only share common demands with their male counterparts but also face demands which men do not have to cope with (Nelson & Quick, 1985; 1990), including higher pressure levels stemming from stressors in the work, home/social and individual arenas. Female managers are subjected to a greater number of work-related pressures than their male counterparts (Davidson & Cooper, 1984; 1985; 1986; 1987).

3.1.2.2 *Stressors affecting men*

Work-related sources of stress affecting men include (Cooper & Davidson, 1982; Di Salvo et al, 1988; Davidson & Cooper, 1986; 1987; Nelson et al, 1989)

- the relationship with one's boss
- the impact of other people's attitudes or behaviour
- frustrated ambition
- rate of pay
- the difficulties of being the boss, managing and supervising people, and disciplining and dismissing subordinates
- work in general
- family problems created by work

Nelson et al (1990) point out that whilst men are subject to pressure stemming from the leadership/authority aspects of management and rate of pay, women are exposed to external discriminatory pressures which are beyond their control.

The six most stressful work-related events for men are, in order of importance (Black, Crabbs and Morton, as cited in Chusmir & Franks, 1988),

- a poor relationship with the boss
- a lack of support from the boss
- a lack of job security
- organisational politics
- expected promotions not materialising
- lack of participation in decision making

Sex-role socialisation and traditional societal expectations allow men to adjust better, both practically and psychologically, to a managerial career. Whilst women need to maintain a balanced, moderate attitude towards personal and career spheres in order to avoid being burned out, the two spheres seem more compatible for men. For men, attaching importance to success in one or both of the spheres is often associated with increased enjoyment, rather than with burnout (Etzion, 1987).

Although one might infer from these findings that men and women differ in their perceptions of and responses to the stressors in their work and home lives, and in the manner in which they manifest psychological and somatic symptoms (Zappert & Weinstein, 1985), the evidence of research concerning gender-related differences is mixed.

Crabbs et al (1986), Richard and Krieshok (1989), Collins (1993) and Martocchio and O'Leary (1987) all fail to identify differences in the manner in which men and women perceive specific stressors and experience stress (ie psychologically as opposed to physiologically).

McDonald and Korabik (1991), Di Salvo et al (1988) Nelson et al (1989; 1990) and Chusmir and Franks (1988) conclude that the degree of stress and perceived importance of different kinds of work-related situations and events vary according to gender. Di Salvo et al (1988) have found that unpleasant internal tasks and other people's attitudes or behaviour create stress more frequently for men, whereas workload and power do so more frequently for women. McDonald and Korabik (1991) recognise the impact on working women of the unique stressors elaborated upon above.

Nelson et al (1989; 1990) conclude that the most significant gender-related difference in the context of sources of stress is in the area of organisational politics. Political exchanges and games in the work environment are more stressful for women, possibly because they are excluded from the political networks. However, there are no significant differences between men and women in the areas of work-home conflicts and career progress (Nelson et al, 1989).

Davidson and Cooper (1987), Gadzella, Ginther, Tomcala and Bryant (1991), Nelson et al (1990), Crabbs et al (1986), McDonald and Korabik (1991) and Chusmir and Franks (1988) suggest that women managers perceive most work events as being more stressful than their male counterparts, and experience more stressors, higher levels of stress, and more symptoms of stress than male managers. Crabbs et al (1986) attribute these differences to the past discriminatory inequities referred to earlier, which obliged women in male-dominated careers to cope with gender-role stereotypes and occupational discrimination (Long et al, 1992). This finding is supported by Ghadially and Kumar (1987), who note that professional women in particular report more stress experiences than men, partly on account of the dual burden which they bear.

Gender differences in occupational stress, strain and coping have also been reported by Richard and Krieshok (1989), who conclude that strain scores are higher for women. Chusmir and Franks (1988) have found that the high levels of stress experienced by working women cause their job outcomes to be poorer than those of their male colleagues, which reinforces their stress.

In contrast to these researchers, Tung (1980) indicates that women experience lower levels of stress than their male counterparts because they are better able to stand up to the pressures, stresses and strains of the job. Menaghan and Merves (1984) have also found that men report more occupational problems than do women.

In conclusion, whilst research findings on the impact of gender on stress remain mixed, it would appear that men and women, even when engaged in similar activities, live in different social contexts and face different dynamics. They experience their jobs differently, with different predictors and symptoms of work

stress, and have different expectations of their work and of each other (Pretty, McCarthy & Catano, 1992; Gadzella et al, 1991; Nelson et al, 1990; Crabbs et al, 1986; Tung, 1980; Richard & Krieschok, 1989).

3.2 THE IMPACT OF GENDER ON COPING

Miller and Kirsch (1987) note that gender plays an important role in an individual's coping style and choice of coping strategy. The physiological, environmental and cultural differences of being male or female influence levels of stress and subsequent adaptation.

Several researchers have investigated the impact of gender in the choice of both physical and psychological coping strategies. Whilst many of their findings overlap, as will be explained below, the precise nature of the relationship between gender and choice of coping strategy is still a matter of controversy.

3.2.1 Gender differences in the choice of specific coping mechanisms

In chapter 2, the six coping strategies measured by way of the Coping Checklist were broadly categorised into three categories of coping methods. Gender differences in the use of these strategies will be discussed in terms of the same categories.

3.2.1.1 *Methods aimed at changing the stressful situation*

These methods include problem-focused coping and active, as opposed to inactive, coping.

(a) *Problem-focused coping*

Men employ problem-focused or active coping strategies more frequently than women (Haw, 1982; Folkman & Lazarus, 1980; Otto, 1980; Miller & Kirsch, 1987). Frank et al indicate that males more often externalise conflict onto other persons or onto the environment, externalising being a form of problem-focused coping (Miller & Kirsch, 1987). Otto (1980) has found that male managers, when faced with stress, tend to confront the problem squarely. They think about and analyse it, or themselves in relation to it, and work towards a solution. These responses are oriented towards resolving and overcoming problems, and thus constitute a form of problem-focused coping. Men are more likely to use this coping approach in the work environment and in situations that are uncontrollable and require more information and acceptance (Miller & Kirsch, 1987; Folkman & Lazarus, 1980).

Folkman and Lazarus (1980) conclude, in spite of these findings, that men and women cope fairly similarly. In their view, the findings reflect gender differences in jobs rather than a general disposition on the part of males, and possibly relate to the fact that women have fewer opportunities to engage in problem-focused coping in the work environment (Jick & Mitz, 1985).

Billings and Moos (1981) indicate that men and women do not differ in their use of problem-focused coping, whilst McDonald and Korabrik (1991) suggest that both cope with stressful work situations by taking direct action. Problem-focused coping is used more often than emotion-focused coping to deal with stressful work situations (Folkman & Lazarus, 1980), and direct action is more characteristic of those in high-level jobs (Menaghan & Merves, 1984).

(b) *Active versus inactive coping*

Etzion and Pines (1986) and Ilfeld (1980) have found that men prefer direct and/or active strategies, in contrast to women, who would rather utilise indirect and/or inactive coping strategies in dealing with stress (McDonald & Korabrik, 1991). Women use the inactive/indirect coping behaviours of "getting sick", "collapsing"

and "talking about the stress" more frequently than men do, whilst men more often use the inactive/direct behaviour of "ignoring". Men tend to cope with stress by using strategies that work directly to alter the stressful environment (Miller & Kirsch, 1987).

These findings by Etzion and Pines (1986) have been contradicted by Long (1988), who draws the following conclusions:

- The vast majority of women adopt a proactive approach to coping and think about solutions to a problem, or actually try to do something to solve it.
- Seventy-five percent of women use a catharsis type of strategy by expressing emotions in response to the problem to reduce tension, anxiety or frustration.
- Twenty percent of women merely accept that a problem has occurred, but decide that nothing can be done about it and seek spiritual comfort.

3.2.1.2 *Methods aimed at controlling the meaning of the stressful situation*

These include appraisal-focused coping or cognitive appraisal.

(a) *Appraisal-focused coping*

Miller and Kirsch (1987) refer to findings by Jemmot, Croyle and Ditto and by Kessler, Brown and Broman that women are more likely than men to appraise psychological distress as an emotional problem requiring special attention. These researchers suggest that men's perceptions are frequently more accurate, while women are guilty of overestimation.

Folkman and Lazarus (1980) and Jick and Mitz (1985) have found no gender differences in the use of appraisal-focused coping.

3.2.1.3 *Methods aimed at controlling emotional distress after it has emerged*

These methods include the emotion-focused strategies of avoidance, symptom management, social support, blamed-self and wishful thinking.

Billings and Moos (1981) and Miller and Kirsch (1987) report that women more often rely on and are more proficient in emotion-focused coping strategies. This correlates with the finding by Frank, McLaughlin and Crusco (as cited in Miller & Kirsch, 1987) that women tend to internalise conflict against the self more often than men, internalising being a form of emotion-focused coping (Miller & Kirsch, 1987). Miller and Kirsch (1987) note that women tend towards using strategies that modify their emotional response, and frequently appraise threatening events as more stressful than men do.

Barnett et al (1987) point out that women more often perceive stressful situations as unchangeable than men. This perception, as well as the relatively low status of women in most occupations and socialisation patterns that have traditionally reinforced lack of assertiveness, results in women resorting to the following emotion-focused strategies to a greater extent than their male counterparts:

- self-consoling behaviours such as smoking, eating, or shopping
- self-changing behaviours such as dieting or exercise
- self-improvement programmes
- social support as an opportunity for emotional expression and self-enhancement

Barnett et al (1987) maintain that women employ these strategies, which leave adaptation as the goal of coping, because they do not perceive themselves as possessing the power to change a given situation.

In contrast to the above findings, Folkman and Lazarus (1980) fail to find significant gender differences in the use of emotion-focused coping strategies (Miller & Kirsch, 1987).

(a) *Avoidance*

Miller and Kirsch (1987) report that women are more likely than men to blunt out stress-relevant information in a variety of situations by engaging in "distraction" and "escape-focused" coping strategies.

It should be noted that although Miller and Kirsch (1987) identified gender differences in the use of avoidance coping, they found significant differences in only 3 of the 15 studies assessed.

Fong and Amatea (1992) note that single women use less flexible, more passive, and avoidant coping strategies. They employ more role-reactive strategies and often view intrapsychic methods as ideal coping approaches.

(b) *Symptom management*

Whilst McDonald and Korabrik (1991) and Matteson and Ivancevich (1987) have found that more men than women report engaging in a nonwork activity, such as exercise, to distract themselves, Scott and Spooner (1989) have found exercise, including walking and jogging, to be a major physical coping strategy for both men and women. Gadzella et al (1991) report that women under stress set time aside to exercise.

Matteson and Ivancevich (1987) indicate that women engross themselves in a hobby as a means of coping with stress more frequently than their male counterparts, whilst according to Scott and Spooner (1989) both males and females enjoy hobbies, friendship-based support groups, spiritual and religious experiences, relaxation/fantasy time and better decision-making skills as coping methods.

Other symptom management strategies reported by females include sleeping, acceptance, time management, gardening, communication and use of alcohol (Scott & Spooner, 1989).

Davidson and Cooper (1984; 1986; 1987) note that both males and females report smoking, drinking alcohol, drinking coffee, and eating too much in order to relax, whilst Otto (1980) has found that women appear to revert to eating as a form of tension-relief more often than men. Professional women have been identified as more frequent eaters than clerical and semi-skilled women. Otto (1980) finds males and females to be very similar in their tendency to smoke as a form of tension release.

Davidson and Cooper (1985; 1986; 1987), Matteson and Ivancevich (1987) and Otto (1980) indicate that male managers drink more alcohol as a source of relief from tension than female managers. The abuse of alcohol by a greater percentage of males than females is changing, however. Cooper (1981) reports findings that stress resulted in a rise in the ratio of female to male alcoholics from 1:5 in 1962 to 1:2 in 1973.

Despite Otto's (1980) suggestion that there are clearly discernible male and female patterns in the use of "oral comforts" - alcohol, food and tobacco - to shield themselves from stress (Otto, 1980), research remains surrounded by controversy.

(c) *Social support* (198)

McDonald and Korabik (1991), Davidson and Cooper (1985), Ilfeld (1980), Pretty et al (1992), Otto (1980), Matteson and Ivancevich (1987), Etzion and Pines (as cited in Jick and Mitz, 1985) and Barnett et al (1987) have found that women attach greater importance to the availability of help and advice than men, and use social networks more effectively when faced with problems, men being less likely to talk to someone they know in order to relax (Davidson & Cooper, 1986; 1987). This is confirmed by Frankenhaeuser et al (1989), who note that women report significantly more social support at work than do their male colleagues, and also by Davidson and Cooper (1984), who have found that women talk problems through more often, whereas men are more likely to switch to an engrossing nonwork activity.

These findings are not supported by Nelson et al (1989), who note that females do not report greater use of social support in preventive stress management.

Otto (1980), Laabs (1992) and Etzion (1984) have found that both men and women derive coping strength from interpersonal relationships with people within and outside the immediate family. Whilst Otto (1980) and Laabs (1992) suggest that both genders most frequently consult family members, Etzion (1984) focuses upon the different sources of social support which men and women employ. In examining the impact of masculine and feminine sex role characteristics on the use of social support, Etzion (1984) notes that the traditional masculine role encourages work orientation, individual success, and self-reliance, whereas the feminine role encourages love, social relatedness, and dependency. Asking for help and support is therefore, from this point of view, more congruent with the traditional feminine sex role.

Whilst men's work stress is moderated by supportive relationships in their work environment, women's stress is moderated by life sources, for example family and friends (Billings & Moos, 1981). This raises the possibility that the development of social support groups in the workplace might be helpful for the majority of men, but not for most women (Etzion, 1984). Etzion's (1984) findings are not supported by Gadzella et al (1991), who report that men under stress seek advice or support from close friends.

Sharma (1990) reports that the more equitable the distribution of men and women in a corporation, the more men support and receive support from women.

Few conclusive findings can be drawn from the mixed results of research referred to above.

McDonald and Korabik (1991) have demonstrated that high-level male and female managers do not differ in the strategies they adopt in dealing with work-related stressors, whilst Miller and Kirsch (1987) suggest that the categories of emotion-focused and problem-focused coping may yield significant sex differences in how people cope with stress. Long (1990) concludes that the overall repertoire of coping strategies used is influenced by gender, expressiveness and episode importance, the latter accounting for the largest proportion of the variance in total

coping scores. Long (1990) associates a larger coping repertoire with being a woman, appraisal of stressor importance, and expressive traits.

Etzion (1987) refers to the possibility that gender-related preferences for coping behaviours are influenced by culturally prescribed gender roles. Social norms pertaining to sex and culture determine the appropriateness of certain patterns of behaviour in stressful situations, and also dictate who can be relieved by using such behaviours. In many societies females are socialised to behave less assertively and actively and more dependently and conformingly than the average male. Women are often expected to be sensitive and open and to confide in their friends, whereas men are expected and encouraged to manage independently (Etzion & Pines, 1986).

3.2.2 Gender differences in efficacy of coping

Research regarding gender differences in coping efficacy has not produced uniform results. Several researchers have failed to confirm the existence of gender differences (Havlovic & Keenan, 1991; Nelson et al, 1990), while some have shown males to be more effective copers (Pearlin & Schooler, 1978) and many have referred to the superior coping abilities of women (McDonald & Korabrik, 1991; Sharma, 1990). These contradictory findings will now be addressed.

Pearlin and Schooler (1978) report a pronounced imbalance between the sexes in terms of their possession and use of effective coping mechanisms, but other researchers, including Havlovic and Keenan (1991), Nelson et al (1990) and Long (1990), conclude that there is no relationship between gender and coping activities. According to Long (1990), there appear to be no differences in the potential adaptation of males and females to demanding work situations, although women are more likely than men to have a greater coping repertoire, particularly in the forms of avoidance (Ilfeld, 1980) and reappraisal coping. Long's finding is supported by Scott and Spooner (1989), who attribute the fact that women employ a greater number of coping strategies than men to the fact that they report greater levels and more sources of stress.

Pearlin and Schooler (1978) emphasise the superior coping abilities of males when they observe that men more often employ more effective response repertoires for controlling stress, whereas women are socialised in a way that less adequately equips them for effective coping. Pearlin and Schooler (1978) have found that men more often possess psychological attributes or employ responses that inhibit stressful outcomes of problems, whereas women employ responses likely to result in more rather than in less stress. Men's personality characteristics and response repertoires are shown to have some potency in controlling stress. Jick and Mitz (1985) note that men cope more effectively only in the short term, possibly owing to the fact that women use more social support networks and make more frequent use of most types of health care service, these being more effective long-term strategies.

Etzion and Pines (1986) note that direct or active strategies are generally more effective than indirect or inactive strategies. Seen in the context of the findings by Etzion and Pines (1986) and Ilfeld (1980) that males show a preference for direct or active strategies - in contrast to females, who prefer to utilise indirect or inactive coping strategies in dealing with stress (McDonald & Korabik, 1991) - this observation adds validity to the Pearlin and Schooler's (1978) argument that men are more effective copers than are women.

The latter argument is contradicted by McDonald and Korabik (1991), who have found that although women are subject to more work-related stress than men in comparable positions, they are often better able to cope with job stress. Their superior coping ability possibly alleviates the stress that they experience and limits gender differences in general job stress. This finding is confirmed by Parasuraman and Cleek (1984), who note that women tend to engage in more adaptive coping behaviours when faced with job stress than men, and by Sharma (1990).

Sharma (1990) suggests that female managers possessing certain distinct feminine talents and characteristics may be better prepared to cope than many traditional male managers, and attributes the superior coping ability of females to the psychological characteristics unique to the feminine management style. These characteristics include

- a strong desire to succeed in the "men's domain"
- endurance for stress
- the ability to manage diversity
- unique organisational abilities
- the use of intuition in problem-solving
- the tendency to pitch in at times of office emergencies
- a healthy disposition
- intrepidity.

Wood, Tung and Ramey (all as cited in Sharma, 1990) indicate that women's endurance for stress is a function of the following:

- more built-in hormonal protection that allows them to withstand chronic stress with fewer negative physiological consequences
- their tendency to vent their emotions, unlike males, who have been socialised to repress their feelings of extreme stress and persevere
- their ability to remain calm in coping with the pressures of short, transient crisis situations

As shown above, findings regarding gender differences in choice of coping strategy and coping efficacy vary considerably. The available literature fails to present unanimous findings on the impact of gender on coping.

3.3 SUMMARY

The overall objective of this chapter has been to provide an understanding of gender differences in the symptoms and sources of stress, in the choice of specific coping mechanisms, and in the efficacy of coping.

A thorough examination of the literature has served to clarify the nature and direction of gender differences in coping behaviour. There has been a discussion of male and female tendencies

- to experience specific stressors as being stressful

- to respond to these stressors in behavioural, physical and psychological ways
- to employ methods aimed at: changing the stressful situation, controlling the meaning of the stressful situation, and controlling emotional distress after it has emerged

Barnett et al (1987, p. 7) describe the impact of gender as follows:

Not only one's biological sex but the psychological and social meaning and consequences of being male or female ... affect each element in the stress process: the potentially stressful situations or conditions one encounters, the likelihood of perceiving these as stressful, the choice of coping responses, and the long-term physical and mental health effects of the experience of stress.

Matteson and Ivancevich (1987, p. 82) question the origin of gender differences in patterns of stressors, responses to stress, and patterns of coping with stress:

Are these differences true sex differences, or are they differences in the socialisation process and in perceived sex roles?

Whilst Matteson and Ivancevich (1987) recognise the impact of genetic differences on the stress process, they suggest that differences in traditional sex roles rather than gender per se explain differences in the manner in which stress is experienced. They hypothesise that as differences between the roles adopted by men and women in contemporary societies continue to diminish, gender differences in stress may diminish as well.

The challenge for future researchers focusing on the relationship between gender, stress, and coping therefore lies not only in addressing and ameliorating the assumptions, contradictions, biases, gaps and myths surrounding available research (Barnett et al, 1987), or in conducting in-depth comparative research on the male versus female experience of stress, but in proving the male versus female differences identified by Barnett et al (1987) to be true sex differences, rather than differences in traditional sex roles.

CHAPTER 4

RESEARCH DESIGN

4.1 INTRODUCTION

The aim of this study is to establish differences in the manner in which male and female professionals cope with stress.

To achieve this aim, it must be shown that specific gender differences exist in the way in which men and women employ different coping mechanisms in managing work-related stress.

4.2 RESEARCH HYPOTHESES

The research is based on the following problem statement:

"Do male and female professionals differ in terms of the coping mechanisms employed in the management of stress?"

In investigating this question, the following research hypotheses will be tested:

Null hypotheses

Male and female professionals do not differ in terms of the frequency and intensity with which they experience stress.

The frequency and intensity of hassles and uplifts experienced by male and female professionals does not impact upon the coping strategies that they employ in managing work-related stress.

Male and female professionals do not differ in terms of the coping mechanisms that they employ in managing work-related stress.

Alternate hypotheses

Male and female professionals differ in terms of the frequency and intensity with which they experience stress.

The frequency and intensity of hassles and uplifts experienced by male and female professionals impact upon the coping strategies that they employ in managing work-related stress.

Male and female professionals differ in terms of the coping mechanisms that they employ in managing work-related stress.

The writer will attempt to disprove the null hypotheses, and to prove or accept the alternate hypotheses. Should the null hypotheses be rejected, it is proposed that:

- Gender differences exist in terms of the way in which males and females experience stress.
- The frequency and intensity of hassles and uplifts impacts upon coping strategies employed.
- Gender differences exist in terms of the manner in which men and women cope with and manage work-related stress.

4.3 SAMPLE SIZE AND COMPOSITION

The study sample comprised 71 professional subjects purposively selected from the general population of Cape Town. They were classified as professional subjects on the basis of post-secondary education obtained, entry into typical professional occupations and employment as professionals.

Table 4.1: Professional status of subjects

Professional status	N
Accountant	12
Actuary	5
Doctor	10
Dentist	4
Dietitian	2
Quantity surveyor	1
Teacher	4
Occupational therapist	4
Speech therapist	4
Physiotherapist	4
Attorney	6
Pharmacist	9
Psychologist	1
Engineer	1
Architect	2
Social worker	2

Table 4.2: Professional status of subjects by gender

Professional status	Male	Female
Accountant	9	3
Actuary	5	-
Doctor	9	1
Dentist	3	1
Dietitian	-	2
Quantity surveyor	1	-
Teacher	2	2
Occupational therapist	-	4
Speech therapist	-	4
Physiotherapist	-	4
Attorney	3	3
Pharmacist	2	7
Psychologist	-	1
Engineer	1	-
Architect	2	-
Social worker	-	2
TOTAL	37	34

The average age of male subjects in this sample was 40 years, ranging from 23 to 64. The average age of the female sample was 31 years, ranging from 22 to 54. The mean ages were as follows: male sample 40,5, female sample 31,3.

Table 4.3: Educational levels and employment status of subjects

EDUCATIONAL LEVEL/ EMPLOYMENT STATUS	MALE	FEMALE	TOTAL
EDUCATIONAL LEVEL			
BA degree	6	13	19
Honours degree	25	18	43
Masters degree	4	3	7
Doctoral degree	2	0	2
MANAGERIAL STATUS			
Manager	29	14	43
Nonmanager	8	20	28
SALARIED STATUS			
Salaried	17	26	43
Self-employed	20	8	28

Table 4.3 indicates that more male than female subjects were employed in managerial positions (29:14), and were self-employed as opposed to salaried (20:8). Cognisance has been taken of the possible influence of the average ages of the male (40 years) and female (31 years) sample groups on the employment history and status of the subjects.

It should be noted that only 69 of the 71 subjects who responded returned all questionnaires fully completed.

4.4 DESCRIPTION OF THE VARIABLES

4.4.1 Independent variable

As the main purpose of this investigation is to investigate gender differences in the manner in which men and women cope with stress, gender will be considered the independent variable.

4.4.2 Dependent variables

Two dependent variables form part of this investigation, namely "stress" and "coping".

"Stress" refers to the level and intensity with which hassles and uplifts are experienced by subjects on a daily basis, whilst "coping" refers to specific coping strategies employed by subjects in responding to work-related stress.

These variables have been defined and discussed in chapters 2 and 3.

4.5 DESCRIPTION OF THE ASSESSMENT BATTERY

The subjects participating in this investigation completed a brief demographic questionnaire (Biographical Checklist: appendix 2, p. 163), and also the Coping Checklist (appendix 3, p. 164), the Hassles Scale (appendix 4, p. 170) and the Daily Uplifts Scale (Appendix 5, p. 177).

These questionnaires were chosen not only for their applicability, but also because of their reported reliability and validity. The study took the psychometric properties of the measurements used into account. Quantitative rather than qualitative research methods or instruments were employed because of the obvious advantage that such methods overcome the potentially imprecise interpretations of qualitative reviews (Martocchio & O'Leary, 1989).

The four measures employed, which can all be completed within approximately 60 minutes, are elaborated upon below.

4.5.1 Biographical checklist (Appendix 2, p. 163)

This elicited information pertaining to the age, sex, work activities, educational qualifications and professional status of subjects.

4.5.2 Coping checklist (Appendix 3, p. 164)

Coping was measured using an adapted version of the Ways of Coping Checklist (Folkman & Lazarus, 1980) and the revised Ways of Coping Checklist (Aldwin, Folkman, Shaefer, Coyne & Lazarus, 1980).

The Ways of Coping Checklist is derived from Lazarus's transactional model of stress, according to which an event is only considered to be stressful when it is appraised as being potentially dangerous to one's psychological well-being. Appraisals are influenced by a person's beliefs or personality and generate cognitive expectancies which affect both emotion and behaviour (Vitaliano, Russo, Carr, Maiuro and Becker, 1985).

The adapted version of the checklist was compiled by Mr Ziel Bergh, an industrial psychologist employed to lecture and supervise students at the University of South Africa.

4.5.2.1 Description

The 67 items on this checklist describe a broad range of behavioural and cognitive strategies an individual may use in a specific stressful episode. The strategies are derived from the framework suggested by Lazarus and his colleagues (1966, 1978), and from suggestions offered in the coping literature. They include items from the domains of defensive coping (eg avoidance), problem-solving, wishful thinking (Folkman, 1982) and symptom management.

The items on the checklist are classified into six categories, namely problem-focused coping, symptom management, wishful thinking, avoidance, social support and blamed self.

(a) *Problem-focused coping*

Problem-focused coping refers to attempts to modify or eliminate the source of stressors by managing or altering the problem (Folkman, 1982; Miller & Kirsch,

1987). Problem-focused coping includes taking direct action, seeking assistance, forcing oneself to wait before acting (Carver et al, 1989), seeking information, taking direct action (Folkman & Lazarus, 1980), defining the problem and generating alternative solutions (Lazarus & Folkman, 1984).

This category includes 15 items that describe cognitive problem-solving efforts and behavioural strategies for altering or managing the source of stress, for example:

- "Bargained or compromised to get something positive from the situation"
- "Made a plan of action and followed it"
- "Stood your ground and fought for what you wanted"

(b) *Avoidance*

Avoidance consists of defensive techniques which help individuals avoid the experience of anxiety, guilt, doubt and uncertainty (Cooper & Marshall, 1980). These techniques are aimed at managing the anxiety associated with a threat, threats being perceived as leading to personal disruption and social chaos (Cooper & Marshall, 1980).

Examples of the 10 items in this category are:

- "Went on as if nothing had happened"
- "Kept my feelings to myself"
- "Avoided being with people in general"

(c) *Symptom management*

Symptom management focuses on stress symptoms or psychophysiological states, and aims at diverting energy and resources away from the confronting problem (Otto, 1980). Symptom management strategies encompass activities designed to keep one occupied in a manner which is not focused on the immediate troubles (Otto, 1980). Examples of these activities are gardening, sports, participation in

church and community activities, socialising with friends, regular exercise, and meditation and prayer (Underwood, 1992).

This category consists of 25 items including the following:

- "Did physical exercise (jogging, cycling), dancing, or other participative sports"
- "Watched more television"
- "Pursued hobbies or leisure activities"

(d) *Social support*

"Social support" represents an interpersonal transaction (Nelson et al, 1989) which involves seeking advice, assistance or information, and getting moral support, comfort, sympathy or understanding (Carver et al, 1989).

This category includes six items, for example:

- "Talked to someone to find out about the situation"
- "Accepted sympathy and understanding from someone"
- "Asked someone I respected for advice and followed it"

(e) *Wishful thinking*

This category includes eight items, for example:

- "Hoped a miracle would happen"
- "Wished I could change what had happened"
- "Had fantasies or wishes about how things might turn out"

(f) *Blamed self*

These are passive and intropunitive strategies directed inward rather than toward the problem (Aldwin & Revenson, 1987).

There are 3 items in this category:

- "Blamed myself"
- "Criticised or lectured myself"
- "Realised I brought the problem on myself"

An in-depth discussion on the use, relative efficacy, limitations and so on of these six strategies is included in chapter 2.

4.5.2.2 *Administration*

The checklist asked respondents to recall the single event in their work life during the past year that had been most stressful and had most seriously impacted upon their lives. Respondents were then asked to read and respond to the 67 coping-related statements or questions with this particular stressful incident in mind.

Each of the items was responded to according to the following four-point scale, which reflected the extent to which a particular coping strategy had been employed in managing the specific event:

- 1: No, never do this.
- 2: Hardly ever do this.
- 3: Often do this.
- 4: Yes, always do this.

Total scores were arrived at by adding up the points selected for each of the six coping strategies. Each respondent thus obtained six scores, one for each of the strategies measured. This procedure provided figures reflecting the extent to which particular strategies had been employed by each respondent, a high score suggesting extensive use of or reliance upon a given strategy, and a low score suggesting minimal use of that strategy.

4.5.2.3 *Technical data*

Alpha-Cronbach reliability scores were computed for each of the six coping strategies measured:

- problem-focused coping : 0,75
- social support : 0,76
- blamed self : 0,69
- wishful thinking : 0,68
- avoidance : 0,49
- symptom management : 0,74

These reliability scores suggest that whilst satisfactory internal consistency reliabilities were reported for problem-focused coping, social support, blamed self, wishful thinking and symptom management, low reliability was reported for avoidance coping.

Item-total correlations computed for each of the 67 items suggest that certain items could have been removed from each of the six categories of coping strategies or subscales. Item-total correlation was very low for the following items:

(a) *Problem-focused coping*

- Item 28: "Just took things one step at a time"
- Item 36: "Accepted my strong feelings, but did not let them interfere with other things too much"

(b) *Avoidance*

- Item 23: "Got mad at the people or things that caused the problem"

(c) *Symptom management*

- Item 46: "Did physical exercise (jogging, cycling), dancing or other participative sports"

- Item 47: "Practised some form of meditation"
- Item 48: "Took 'bets' or did risky things unlike what I am used to"
- Item 62: "Took a trip, eg to another city, overseas"
- Item 67: "Smoked cigarettes, cigars, or pipe, more than usual"

Item correlation analysis was performed on symptom management items, the "poor" items as referred to above (ie 46, 47, 48, 62 and 67) having been deleted. Whilst the deletion of these five items resulted in the alpha-Cronbach reliability score for problem-focused coping improving from 0,75 to 0,77, discriminant analysis indicated that three of the "poor" items deleted in fact represented good predictors of the male/female classification of coping. There was therefore no valid reason for eliminating these items from the symptom management category.

Other symptom management items shown through discriminant analysis to be good predictors of male/female differences include the following:

- Item 43 : "Got extra sleep/rest"
- Item 44 : "Drank heavily or more than a moderate amount (ie two drinks) of liquor, beer or wine"
- Item 47 : "Practised some form of meditation"
- Item 48 : "Took bets or did risky things unlike what I am used to"
- Item 50 : "Sought company of friends"
- Item 51 : "Sought company of family"
- Item 52 : "Ate more food and snacks than usual"
- Item 53 : "Watched more television"
- Item 58 : "Pursued hobbies or leisure activities"
- Item 59 : "Bought something, spent money"
- Item 61 : "Changed my physical state in a manner not covered above"
- Item 67 : "Smoked cigarettes, cigars, or pipe more than usual"

Although the writer was unable to obtain previously documented references to reliability and validity scores for this Coping Checklist, this being the first time it has been used to measure coping, brief reference will be made to the comments of Vitaliano et al (1985) pertaining to the revised form of the Ways of Coping Checklist.

In discussing the revised Ways of Coping Checklist, Vitaliano et al (1985) note that although the original scales have respectable reliability coefficients, the revised scales have alphas that are higher, share substantially less variance and approximate independent dimensions. Vitaliano et al (1985) conclude that the revised version of the Ways of Coping Checklist should be a valuable measure of coping in response to environmental stressors, as the revised scales have respectable internal consistency reliabilities and construct and criterion-related validity, and are generally not confounded by demographic differences.

Whilst these comments cannot be applied without qualification to the Coping Checklist, one can infer from the alpha-Cronbach reliability scores and item-total correlations obtained that this instrument has respectable internal consistency reliabilities. The Coping Checklist therefore appears to be, like the revised Ways of Coping Checklist, a valuable measure of coping in response to environmental stressors.

4.5.2.4 *Rationale*

The Coping Checklist was selected as a measure of coping for a number of reasons.

Firstly, it measures the relative use of six different coping strategies, unlike the Ways of Coping Checklist (Folkman & Lazarus, 1980), which measures only the use of problem-focused and emotion-focused coping, and the revised form of the Ways of Coping Checklist (Aldwin, Folkman, Shaefer, Coyne & Lazarus, 1980), which measures virtually the same measures as the Coping Checklist, the exception being symptom management. Folkman (1982) emphasises that a comprehensive assessment of coping must include at least the functions of problem-focused and emotion-focused coping, given that data offers strong support for the involvement of both in most stressful encounters. The Coping Checklist complies with this requirement, dealing with social support, blamed self, wishful-thinking, symptom management and avoidance as subcategories of emotion-focused coping.

Secondly, the Coping Checklist invites the participant to respond on a four-point scale including "infrequent" and "often", rather than requiring an absolute "yes" or "no" as is the case with a number of coping instruments. This provides the researcher with a deeper insight into the extent to which each strategy is employed.

Thirdly, this checklist asks subjects to respond with a specific stressful encounter in mind. Latack and Havlovic (1992) observe that this is more effective in assessing coping behaviours than, for example, asking an individual to adopt a more global perspective about what he/she does to counteract the effects of occupational stress. Such a perspective is more likely to tap habitual use of various coping resources. Underlining this point, Folkman and Lazarus (1980) note that the most effective way of learning about how people cope with the demands of situations is by observing how they actually react in specific stressful encounters.

Additional reasons are presented by Folkman (1982). Describing the Ways of Coping Checklist, Folkman notes that it represents a process-oriented cognitive-phenomenological approach to the assessment of coping. Advantages of this approach are the following:

- It allows the person to characterise complex coping thoughts and actions.
- The description of the coping process is not based upon outcome information.
- Items are worded so that they can be applied to a large variety of specific situations, thus facilitating cross-situational comparisons of coping.
- The measure can be used for both ipsative and normative designs.

The writer is of the opinion that these advantages are equally applicable to the Coping Checklist.

Stress levels, or rather the individuals' experience of stress, was measured by way of the Hassles Scale and the Daily Uplifts Scale.

4.5.3 The Hassles Scale (Appendix 4, p. 170)

4.5.3.1 Description

The Hassles Scale consists of a list of 117 hassles, or events that can make a person feel irritated, pressurised or annoyed. Such events relate to work, health, family, friends, the environment, practical considerations and chance occurrences. Examples of hassles are (Kanner et al, 1981)

- misplacing or losing things
- concerns about owing money
- having too many responsibilities
- problems getting along with fellow workers
- having trouble making decisions
- being laid off or out of work
- physical illness

4.5.3.2 Administration

Subjects were required to indicate which of the 117 hassles they had been exposed to in the month preceding testing.

The motivation for focusing upon hassles and uplifts that had occurred in that period lay in the assumption that people experience roughly the same number of hassles and uplifts from month to month, while the amount of distress or pleasure associated with hassles and uplifts is relatively variable (Kanner et al, 1981).

After selecting particular hassles they had been exposed to, subjects were required to rate these hassles for severity on a three-point subscale (Kanner et al, 1981):

- 1: somewhat severe
- 2: moderately severe
- 3: extremely severe

The Hassles Scale is usually analysed in terms of two summary scores. Frequency scores entail a simple count of the number of items marked. Intensity scores are calculated by dividing the cumulated severity scores (ie the sum of the three-point severity ratings) by the frequency. Intensity scores are thus an index of how strongly or intensely the average hassle is experienced, regardless of the number (frequency) of hassles marked (Kanner et al, 1981).

4.5.4 The Uplifts Scale (Appendix 5, p. 177)

4.5.4.1 Description

The uplifts scale consists of 135 uplifts, or events that make a person feel good, satisfied, or peaceful. These uplifts are generated using the content areas of the hassles scale as guidelines.

Examples of uplifts are (Kanner et al, 1981)

- getting enough sleep
- liking fellow workers
- being efficient
- daydreaming
- life being meaningful
- using skills at work

4.5.4.2 Administration

Subjects were required to indicate which of the 135 uplifts they had been exposed to in the month preceding testing.

The uplifts selected were then rated on a three-point subscale according to how frequently they had occurred over the month period (Kanner et al, 1981):

- 1: somewhat often

- 2: moderately often
- 3: extremely often

As with hassles, these scores were analysed in terms of frequency and intensity.

4.5.4.3 *Rationale*

The decision to incorporate an assessment of hassles and daily uplifts, rather than of major life events, into this study was based upon a number of arguments, as cited below.

Whilst the tendency of many researchers has been to define and measure the impact of stress in terms of dramatic events, severely taxing situations and major life events, Folkman and Lazarus (1980) recognise the adaptational significance for health outcomes of the relatively minor stresses (hassles) and pleasures (uplifts) that characterise everyday life. McLean (as cited in Kanner et al, 1981) emphasises the cumulative value of these microstressors as potent sources of stress.

This study's support for the view argued by Folkman and Lazarus (1980) is also based on the belief that whilst many individuals are fortunate enough not to be confronted with major life stresses - such as divorce, retrenchment or a bereavement in the immediate family during the earlier stages of their lives - everyone is subject to hassles and uplifts, if not on a daily basis, then at least fairly often. An assessment of the frequency and intensity with which hassles and uplifts are experienced therefore makes for a more comprehensive understanding of the extent to which the vast majority of the population are regularly exposed to stressors.

The decision to use the hassles scale and the uplifts scale in combination is justified by Kanner et al (1981), who point out that measuring of hassles in isolation without due regard to the impact of uplifts could produce a distorted conception of the postulated relationship between stress and illness, because hassles and uplifts are positively related to each other. People who suffer many hassles also tend to enjoy many uplifts, and those who experience or judge their hassles as intense tend to see their uplifts in the same light.

Other researchers argue for the measurement of both hassles and uplifts, and of both positive and negative emotions. These include Kanner et al (1981), who also cite Lowenthal and Chiriboga, Bradburn, and Epstein.

4.6 TEST PROCEDURE

The Biographical Checklist (appendix 2, p. 163), Coping Checklist (appendix 3, p. 164), Hassles Scale (appendix 4, p. 170) and Uplifts Scale (appendix 5, p. 177), together with an explanatory letter and stamped, self-addressed envelope, were posted to approximately 200 professionals who had been located by word of mouth and in membership lists of professional bodies. Seventy-one returned completed questionnaires.

Instructions were provided in the explanatory letter (appendix 1, p. 161) and on the covering page of each questionnaire. The letter referred to the general aim of this study and to the voluntary nature of participation. It also assured participants that data would be treated in the strictest confidence and thanked them for their cooperation and willingness to participate.

The completed questionnaires were classified into male and female sample groups. Raw scores were calculated for all subjects according to the six coping strategies measured on the Coping Checklist, and for the frequency with which hassles and uplifts had been experienced.

4.7 STATISTICAL TECHNIQUES

Statistical techniques to be used in testing the research hypotheses include discriminant analysis, stepwise discriminant analysis and T-Tests.

Discriminant analysis will be employed

- to establish the direction of male/female differences and similarities
- to predict group membership.

Stepwise discriminant analysis will be used

- to test gender differences in the frequency and intensity with which hassles and uplifts are experienced
- to select coping strategies accounting for gender differences
- to assess the impact of age-related differences between males and females on coping behaviour
- to test for differences in coping strategies utilised across professional groups.

Gender differences in coping repertoire will be assessed by means of T-Tests.

A correlation matrix using Pearson Correlation Coefficients will be prepared for the total sample, the male sample, and the female sample with the aim of investigating the nature of correlations between

- the frequency and intensity of hassles
- the frequency and intensity of uplifts
- the six coping strategies measured via the Coping Checklist

Gender differences in the level of stress experienced and in coping strategies employed will be the focus of these investigations.

CHAPTER 5

ANALYSIS OF RESEARCH

5.1 INTRODUCTION

The alternate hypotheses state that

- male and female professionals differ in terms of the frequency and intensity with which they experience stress
- the frequency and intensity of hassles and uplifts experienced by male and female professionals impact upon the coping strategies that they employ in managing work-related stress
- male and female professionals differ in terms of the coping mechanisms that they employ in managing work-related stress.

The testing of these hypotheses necessitates

- a comparison of male and female stress levels
- and assessment of the impact of stress upon the employment of coping strategies
- a comparison of the coping mechanisms employed by men with those employed by women

The testing process involved the distribution of the assessment battery (appendices 1-5, p. 160), as set out in chapter 4. Responses to completed questionnaires were then scored according to specified instructions. Scoring of all responses was performed by the writer.

All test scores were analysed statistically, and the results are presented and discussed below.

5.2 MEANS AND STANDARD DEVIATIONS

Means and standard deviations of test results were calculated for the total sample, and for both male and female sample groups, in order to test the alternate hypotheses. The results are presented in Table 5.1 below.

Means and standard deviations were computed in terms of the following variables (the abbreviation used is given in parantheses):

- the age of subjects (Age)
- the average number/frequency of hassles exposed to (H Freq)
- the intensity with which hassles are experienced (H Int)
- the average number/frequency of uplifts exposed to (U Freq)
- the intensity with which uplifts are experienced (U Int)
- the extent to which problem-focused coping is employed (Prob)
- the extent to which social support is employed (Soc)
- the extent to which blamed self is employed (Self)
- the extent to which wishful thinking is employed (Wish)
- the extent to which avoidance is employed (Avoid)
- the extent to which symptom management is employed (Sympt)

It should be noted that of the 71 subjects who responded, only 69 returned all questionnaires fully completed. Occasionally, therefore, calculations of means and standard deviations and statistical analyses are based on only 69 cases.

Table 5.1: Means and standard deviations - breakdown per gender

	Malesample		Female sample		Total sample	
N	N = 37		N = 34		N = 71	
Mean/Std Dev	Mean	S D	Mean	S D	Mean	S D
Age	40.5	11.4	31.3	7.8	36.1	10.8
H Freq	25	13.9	25.8	10	25.4	12.1
H Int	1.6	0.4	1.7	0.4	1.7	0.4
U Freq	53.9	25.5	44.5	16.2	49.5	21.9
U Int	1.8	0.4	1.9	0.3	1.9	0.3
Prob	42.9	6.3	42.9	6.8	42.9	6.5
Soc	16.7	3.6	18.3	3.9	17.5	3.8
Self	6.4	2.4	6.5	2.2	6.4	2.3
Wish	17.6	4.2	19.1	4.9	18.3	4.6
Avoid	19.3	3.9	20.1	3.7	19.7	3.8
Symp	43.3	10.4	47.9	10.1	45.5	10.4

Although variances in means and standard deviations between the male and female sample groups suggest that men and women differ in, for example, the frequency with which uplifts are experienced and the extent to which social support and symptom management are employed, the significance of these relationships is questionable. Hence the need for statistical analysis examining the impact of gender on stress and on coping.

5.3 THE IMPACT OF GENDER ON STRESS

In comparing the level of stress experienced by men with that experienced by women, the following relationships were statistically analysed using the specific techniques referred to below:

- the relationship between hassles and uplifts
- gender differences in hassles and uplifts
- the relationship between hassles and coping
- the relationship between uplifts and coping

5.3.1 The relationship between hassles and uplifts

Correlation matrices using Pearson Correlation Coefficients were prepared for the total sample (table 5.9), for the male sample (table 5.10) and for the female sample (table 5.11). These matrices were used to assess the nature of correlations between:

- the frequency and intensity of hassles
- the frequency and intensity of uplifts
- the six coping strategies measured via the Coping Checklist

Men and women were compared in terms of their response to and experience of these variables.

Cognisance was taken of the fact that a number of the correlations and conclusions identified via these matrices should be interpreted with caution, as Type I errors can arise when many comparisons are done.

The matrix compiled for the total sample (table 5.9) indicates that the frequency of hassles and the frequency of uplifts do not correlate ($r = 0.14$, $p = 0.24$), whereas the intensity of hassles and that of uplifts correlate significantly ($r = 0.34$, $p = 0.004$).

5.3.1.1 Discussion of the findings

These findings suggest that although people will not necessarily experience a similar number of uplifts to hassles, the intensity with which uplifts and hassles are experienced will probably be quite significantly related. This partially contradicts

the findings of Kanner et al (1981), who argue that hassles and uplifts are positively related to each other, in that people experiencing many hassles also tend to experience many uplifts, and people judging their hassles as intense also tend to view their uplifts as intense.

5.3.2 Gender differences in hassles and uplifts

Null hypothesis: Male and female professionals do not differ in terms of the frequency and intensity with which they experience stress.

Alternate hypothesis: Male and female professionals differ in terms of the frequency and intensity with which they experience stress.

Stepwise discriminant analysis was used to test gender differences in exposure to and experience of hassles and uplifts. The results of this analysis are presented in table 5.2 below.

Table 5.2: Stepwise discriminant analysis to assess gender differences in stress (hassles and uplifts)

Variable	R * * 2	F	Prob > F	Tolerance
H Freq	0.0016	0.109	0.7418	1.0000
H Int	0.0355	2.504	0.1182	1.0000
U Freq	0.0467	3.329	0.0725	1.0000
U Int	0.0120	0.828	0.3662	1.0000

Level of significance: $\alpha = 0.10$

Degrees of freedom: DF = 1,68

Significant gender differences (level of significance: 0.10) were only identified in the frequency with which uplifts were experienced ($F = 3.33$, $p = 0.07$), women tending to experience fewer uplifts than men.

5.3.3. The relationship between hassles and coping

Null hypothesis: The frequency and intensity of hassles and uplifts experienced by male and female professionals does not impact upon the coping strategies that they employ in managing work-related stress.

Alternate hypothesis: The frequency and intensity of hassles and uplifts experienced by male and female professionals impact upon the coping strategies that they employ in managing work-related stress.

The correlation matrix for all subjects (table 5.9), as referred to above, indicates a correlation of the frequency with which hassles are experienced with the total number of coping strategies employed ($r = 0.24$, $p = 0.046$) and with the use of symptom management strategies ($r = 0.28$, $p = 0.019$). The matrix also reveals that blamed self and the intensity with which hassles are experienced correlate ($r = 0.30$, $p = 0.010$). This suggests that those who experience hassles fairly strongly tend to blame themselves as a means of coping with intense stress.

The correlation matrix for male subjects (table 5.10) shows a marginal correlation between the total number of coping strategies employed by males and the frequency of hassles ($r = 0.30$, $p = 0.08$), and a correlation of wishful thinking with the intensity of hassles ($r = 0.38$, $p = 0.02$).

A number of significant correlations are also evident in the matrix for female subjects (table 5.11). The total number of coping strategies employed by women did not show a correlation with the frequency of hassles ($r = 0.22$, $p = 0.21$). Blamed self and the intensity of hassles were found to correlate ($r = 0.45$; $p = 0.009$).

5.3.3.1 Discussion of the findings

The correlation matrix for all subjects suggests that people experiencing many hassles employ a wider repertoire of coping strategies.

The relationship between frequency of hassles (level of stress) and coping repertoire is commented upon by Edwards (1988) and Lazarus and Folkman (1984). Edwards (1988) observes that the level of stress experienced by an individual affects the number and type of coping alternatives generated, whilst Lazarus and Folkman (1984) note that a high number of hassles reflects coping ineptitudes to a certain extent. These views suggest either that the sample group at hand tended to employ a wide repertoire of coping strategies to cope with the number of hassles faced on a regular basis, or that the lack of effectiveness of the coping strategies that they were employing led them to experience a higher level of hassles.

Symptom management strategies in particular are identified as being favoured by those experiencing a higher than average number of hassles.

Latack (1986) notes that symptom management strategies are used to alleviate symptoms of stress in general rather than those resulting from a particular situation, and hypothesises that people who experience considerable stress away from work are more likely to adopt escapist and symptom management strategies than those who do not. Had the subjects not been asked to base their responses on the most stressful work-related event in the preceding year, one might have inferred from Latack's (1986) hypothesis that their tendency to employ symptom management strategies when faced with an above average number of hassles stemmed from factors in the nonwork sphere. It would appear, however, in view of the focus of the Coping Checklist (appendix 3, p. 164) on work-related behaviour, that the respondents employ symptom management strategies to cope with work-related stress and symptoms of stress in general.

Latack (1986) further suggests that professionals in particular are highly concerned to present a desirable image, and as a result are reluctant to cast their coping activities in terms of outside-of-work symptom management activities. The selection of symptom management items by this group suggests that they were not overly concerned about presenting a socially desirable image.

The correlation matrix for males (table 5.10) implies that men experiencing many hassles utilise a number of different coping strategies to manage this stress, and

that men who experience hassles fairly intensely tend to employ wishful thinking as a means of escaping from the severe level of stress experienced. The latter tendency has been recognised by McDonald and Korabrik (1991), who point out that wishful thinking is more typical of those under high stress than of those under low stress, as resources are insufficient to deal with the stressors experienced in high stress situations.

The correlation matrix for females (table 5.11) suggests that the number of coping strategies employed by women is independent of the average number of stressors that they are exposed to daily. The intensity with which women experience hassles shows a correlation with the use of the blamed self strategy, an indication that females experiencing intense levels of stress tend to blame themselves for the occurrence of hassles.

As may be deduced from these findings, men and women differ in the manner in which they cope with stress, as defined in terms of hassles. The correlations noted raise the possibility that men do not cope effectively with stress, and that this is not the case for women. Although men tend to have a wide coping repertoire and to employ many different coping strategies, they remain subject to a large number of hassles or stressors. Women also employ a wide repertoire of coping strategies, but the number of hassles which they experience is not correlated with the number of coping strategies employed.

These findings are supported by Parasuraman and Cleek (1984), McDonald and Korabrik (1991) and Sharma (1990), who have found women to have superior coping abilities. The findings are, however, contradicted by Pearlin and Schooler (1978), who argue that men are more effective copers, and by Havlovic and Keenan (1991) and Nelson et al (1990), who fail to establish the existence of gender differences in coping efficacy. Jick and Mitz (1985) note that men cope more effectively only in the short term and that women employ strategies, for example social support, that are more effective in the long term.

A second gender difference identified by means of the matrix relates to the manner in which severe stress is coped with. Men tend to employ wishful thinking as a means of coping with severe stress, whilst females respond to severe stress by

blaming themselves, both wishful thinking and blamed self representing forms of emotion-focused coping. It has been observed (Latack, 1986; Latack & Havlovic, 1992) that individuals abandon problem-focused coping in favour of emotion-focused coping strategies at higher levels of stress. This appears to be true of the male and female sample groups, who respond to severe stress by wishful thinking and blaming themselves respectively.

5.3.4 The relationship between uplifts and coping

Null hypothesis: The frequency and intensity of hassles and uplifts experienced by male and female professionals does not impact upon the coping strategies that they employ in managing work-related stress.

Alternate hypothesis: The frequency and intensity of hassles and uplifts experienced by male and female professionals impact upon the coping strategies that they employ in managing work-related stress.

Analysis of the total sample (table 5.9) indicates a significant correlation of the age of subjects with the frequency of uplifts ($r = 0.29$, $p = 0.015$) and with wishful thinking ($r = -0.29$, $p = 0.016$). Avoidance and the frequency with which uplifts are experienced were found to correlate negatively ($r = -0.27$, $p = 0.03$).

The correlation matrix compiled for male subjects (table 5.10) suggests that avoidance and the frequency of uplifts are negatively correlated ($r = -0.36$, $p = 0.03$).

The matrix for the female sample (table 5.11) indicates a marginal correlation of problem-focused coping and the frequency of uplifts ($r = 0.32$, $p = 0.07$). Women experiencing a large number of uplifts are therefore more likely to employ problem-focused coping in managing stress.

5.3.4.1 Discussion of the findings

Correlations derived from the matrix for the total sample, and from the male matrix, suggest that avoidance correlates negatively with the frequency of uplifts.

Both men and women experiencing many uplifts are therefore less likely to use avoidance as a means of coping with stress.

In the female sample problem-focused coping and the frequency of uplifts correlate marginally. Women experiencing a high number of uplifts are therefore more likely to employ problem-focused coping in managing stress.

5.3.5 The relationship between the age of subjects, uplifts and coping

The correlation between the age of subjects, the frequency of uplifts and wishful thinking suggests that older people experience more uplifts and are less likely to use wishful thinking as a means of coping than younger people. This finding concurs with that of Turnage and Spielberger (1991), who observe that job stress decreases over life-span career development as older workers learn to use coping resources more effectively.

5.4 THE IMPACT OF GENDER ON COPING

In comparing the coping mechanisms employed by men with those employed by women, the following were assessed:

- gender differences in coping strategies employed
- gender differences in coping repertoire
- the relationship between coping mechanisms

5.4.1 Gender differences in coping strategies employed

Null hypothesis: Male and female professionals do not differ in terms of the coping mechanisms that they employ in managing work-related stress.

Alternate hypothesis: Male and female professionals differ in terms of the coping mechanisms that they employ in managing work-related stress.

Stepwise discriminant analysis was used to select coping strategies accounting for gender differences. Men and women were compared according to the extent to which they employed the six coping strategies measured via the Coping Checklist (ie problem-focused coping, avoidance, wishful thinking, symptom management, blamed self and social support). F-ratios were used in comparing male and female use of each coping strategy (table 5.3).

Table 5.3: Stepwise discriminant analysis to select coping strategies accounting for gender differences (step 1)

Variable	R * * 2	F	Prob > F	Tolerance
Prob	0.0051	0.345	0.5589	1.0000
Soc	0.0777	5.646	0.0204	1.0000
Self	0.0007	0.050	0.8245	1.0000
Wish	0.0258	1.777	0.1870	1.0000
Avoid	0.0125	0.849	0.3602	1.0000
Sympt	0.0805	5.863	0.0182	1.0000

Level of significance: $\alpha = 0.05$

Degrees of freedom: DF = 1,67

This analysis suggests that men and women differ significantly in only two of the six coping strategies measured via the Coping Checklist, namely social support and symptom management.

SOC (social support) : F (1,67) = 5.65, p = 0.02

SYMPT (symptom management) : F (1,67) = 5.86, p = 0.02

Two discriminant functions, one for each gender group, further show that social support is used more frequently by women (0.96) than by men (0.79), as is symptom management (women 0.37, men 0.30). The results also suggest that problem-focused coping is used more frequently by men (0.98) than by women (0.95).

Multivariate techniques (canonical discriminant analysis) were used in assessing the correlation between social support and symptom management. The results suggest that where the correlation between these two strategies is taken into consideration, the significant differences between male and female remain.

Because subjects participating in the study varied considerably in age, the average age of the male sample being 40 years and that of the female sample being 31 years [$F(1,67) = 13.2, p = 0.0005$], stepwise discriminant analysis was used to control for age-related differences between men and women and to test whether significant gender differences remain despite the existence of age-related differences. The results of this analysis can be seen in table 5.4 below.

Table 5.4: Stepwise discriminant analysis to assess significance of gender differences in coping post age being controlled for

Variable	Partial R * * 2	F	Prob > F	Tolerance
Prob	0.0003	0.021	0.8863	0.9813
Soc	0.0498	3.459	0.0674	0.9624
Self	0.0022	0.146	0.7039	0.9708
Wish	0.0025	0.163	0.6879	0.9165
Avoid	0.0029	0.191	0.6639	0.9756
Sympt	0.0328	2.239	0.1394	0.9032

Level of significance: $\alpha = 0.15$

Degrees of freedom: DF = (1,66)

This analysis shows that even after age has been taken into account, men and women differ significantly only in terms of social support [$F(1,66) = 3.45, p = 0.067$], differences in terms of symptom management no longer being significant [$F(1,66) = 2.23, p = 0.139$].

5.4.1.1 Discussion of the findings

Women were found to employ social support and symptom management to a greater extent than men.

This finding, as far as social support is concerned, is supported by Otto (1980), McDonald and Korabrik (1991), Davidson and Cooper (1985), Ilfeld (1980) and Pretty et al (1992), amongst others. Nelson et al (1989), however, conclude that social support is not used more by women than by men.

Scott and Spooner (1989) point out that symptom management strategies - particularly exercise, hobbies, spiritual/religious experiences and relaxation/fantasy time - are major coping strategies for both men and women. This finding therefore does not support those of this study.

Although gender differences in the use of specific symptom management strategies have been identified - for example smoking, alcohol abuse (Davidson & Cooper, 1985; 1986; 1987), hobbies (Matteson & Ivancevich, 1987) and exercise (McDonald & Korabrik, 1991) - findings regarding the precise nature of gender differences remain mixed. Many researchers argue that both men and women employ symptom management strategies (Scott & Spooner, 1989; Otto, 1980; Davidson and Cooper, 1984; 1986; 1987).

The results of the stepwise discriminant analysis also suggest that problem-focused coping is used more frequently by men than by women, but gender differences here are minor. Folkman and Lazarus (1980), Haw (1982), Miller and Kirsch (1987) and Otto (1980) confirm that this form of coping is used more frequently by men. Billings and Moos (1981), however, fail to find any gender differences in the

use of problem-focused coping, whilst McDonald and Korabik (1991) suggest that both men and women use it to cope with stressful work situations.

Men and women were not found to differ significantly in the employment of blamed-self, wishful thinking or avoidance, and were more alike than different in terms of these three strategies. Wishful thinking and avoidance were found to be the poorest predictors of male-female differences in the use of coping strategies.

This notwithstanding, Watkins et al, Viney and Westbrook, and Stone and Neal (as cited in Miller & Kirsch, 1987) report that women are more likely than men to blunt out stress-relevant information by engaging in avoidance. However, significant gender differences were identified in only 3 of the 15 studies assessed by Miller and Kirsch (1987). Long (1990) has found women to use greater avoidance coping than their male counterparts.

The stepwise discriminant analysis used to assess the impact of age on coping behaviour shows that with age taken into account, men and women differ significantly only in terms of social support, and that differences in terms of symptom management are no longer significant.

The impact of age on coping is discussed by Lazarus and Folkman (1984) and Green and Reed (1989). Whilst Green and Reed (1989) conclude that age is not associated in any consistent manner with variations in perceived levels of stress, Lazarus and Folkman (1984) argue that coping behaviour may change in response to the changes in sources of stress that follow from stage of life changes. Life changes and the ageing process may lead to deteriorating environmental conditions and impaired physical and mental resources, which in turn frequently result in a regression to more dependent, helpless behaviour (Lazarus & Folkman, 1984).

Whilst neither social support nor the other forms of coping necessarily represent "dependent, helpless behaviour", the possibility exists that life changes associated with the ageing process do result in a modification of the coping strategies commonly relied upon, and do account for a preference for strategies other than symptom management strategies.

As may be deduced from these comments, findings suggest moderate gender differences in relation to methods aimed at changing the stressful situation (ie problem-focused coping), whilst there are significant gender differences in methods aimed at controlling emotional distress after it has emerged (ie emotion-focused coping).

The findings of this study are supported by Stone and Neal (as cited in Miller & Kirsch, 1987), by Billings and Moos (1981), who report that women more often rely upon and are more proficient in emotion-focused coping strategies, and by Miller and Kirsch (1987), who suggest that significant gender differences exist in relation to emotion- and problem-focused coping. However, the observations of a number of researchers, including McDonald and Korabik (1991) and Folkman and Lazarus (1980), contradict these findings. McDonald and Korabik (1991) demonstrate that male and female managers do not differ in the strategies they adopt to deal with work-related stress, whilst Folkman and Lazarus (1980) fail to find significant gender differences in the use of emotion-focused coping strategies.

5.4.2 Gender differences in coping repertoire

Null hypothesis: Male and female professionals do not differ in terms of the coping mechanisms that they employ in managing work-related stress.

Alternate hypothesis: Male and female professionals differ in terms of the coping mechanisms that they employ in managing work-related stress.

The assessment of male-female differences in coping repertoire involved the completion of T-tests, as illustrated in table 5.5 below. Coping repertoire was calculated by adding total scores for each coping strategy per person.

Table 5.5: T-test procedure to compare males and females on coping repertoire

Gender	N	Mean	Std Dev	Std Error
Male	36	147,25000000	16,58463144	2.76410524
Female	34	153,38235294	27,32521835	4.68623629

Within-group variances are not equal ($F = 2.7$, $P = .004$)

T-test used for unequal variances

Gender	Variances	T	DF	Prob $> T $
Male	Unequal	-1.1271	53.8	0.2647
Female	Equal	-1.1423	68.0	0.2573

These results suggest that men and women do not differ significantly in terms of the total number of coping strategies employed to manage stress (ie in terms of coping repertoire). Results derived from the T-test were confirmed via canonical discriminant analysis, which is a form of multivariate analysis.

5.4.2.1 Discussion of the findings

Whilst this study failed to identify gender differences in coping repertoire, Long (1990) and Scott and Spooner (1989) have found that women are likely to have a greater coping repertoire than men.

5.4.3 The relationship between coping mechanisms

As mentioned in chapter 4, correlation analyses (item-total correlations) were performed to assess the internal consistency reliability of items belonging to each of the six coping subscales.

The correlation matrix for the entire sample (table 5.9) does not show a high correlation between the use of problem-focused coping and blamed self ($r = 0.04$, $p = 0.75$), wishful thinking ($r = 0.08$, $p = 0.49$) or avoidance ($r = 0.09$, $p = 0.41$).

A fairly high correlation was found between symptom management and the use of problem-focused coping ($r = 0.41$, $p = 0.00$), social support ($r = 0.34$, $p = 0.00$), blamed self ($r = 0.34$, $p = 0.00$), wishful thinking ($r = 0.41$, $p = 0.00$) and avoidance ($r = 0.43$, $p = 0.00$). This suggests that symptom management strategies are frequently used in conjunction with one or more other coping strategies.

5.5 CLASSIFICATION OF SUBJECTS BY GENDER

Null hypothesis: Male and female professionals do not differ in terms of the coping mechanisms that they employ in managing work-related stress.

Alternate hypothesis: Male and female professionals differ in terms of the coping mechanisms that they employ in managing work-related stress.

Discriminant analysis is a regression equation used to discriminate among the members of groups on the basis of sets of measures, and to assign individuals to groups and/or predict to which group they belong on the basis of test scores. The technique therefore addresses the question: "How can individuals best be assigned to groups on the basis of several variables?"

Discriminant analysis (linear discriminant function) was used to establish the direction of male-female differences and similarities and to predict group membership (table 5.6) by addressing the questions:

- How well can we separate men from women in terms of coping strategies employed?
- Can the strategies be differentiated on the basis of "male" and "female"?

Table 5.6: Discriminant analysis to predict group membership

Coping strategy	Female	Male
Constant	-50.08674	-44.99583
Prob	0.95226	0.98814
Soc	0.96553	0.79441
Self	-0.16071	-0.06021
Wish	0.10993	0.10957
Avoid	1.04386	0.99555
Sympt	0.37795	0.30716

This analysis shows that whilst the use of social support, blamed self, avoidance, and symptom management strategies are likely to move people closer to the female group, the use of problem-focused coping is likely to move people closer to the male group. These findings confirm conclusions drawn from the descriptive statistics.

Although discriminant analysis indicates that men and women can be differentiated in terms of their use of all six coping strategies, the performance of such analysis with social support and symptom management alone suggests that men and women resemble each other more than they differ in terms of blamed self, wishful thinking, problem-focused coping and avoidance. This confirms results derived from stepwise discriminant analysis (table 5.3).

Discriminant analysis, as presented in tables 5.7 (a) and (b) below, was also performed to assess the extent to which the 37 male and 34 female subjects responded in a manner typical of men and women, and to assess the percentage of subjects correctly classified by gender.

Table 5.7(a): Discriminant analysis to assess percentage of subjects correctly classified by gender

Gender	Female	Male	Total
Female	22 66.67	11 33.33	33 100.00
Male	16 44.44	20 55.56	36 100.00
Total percent	38 55.07	31 44.93	69 100.00
Priors	0.5000	0.5000	

Table 5.7(b): Error count estimates for sex

	Female	Male	Total
Rate	0.3333	0.4444	0.3889
Priors	0.5000	0.5000	

Results shown in tables 5.7(a) and 5.7(b) suggest that whilst 55.6% of the male sample and 66.7% of the female sample responded in a manner typical of males and females respectively, and are correctly classified, the remaining 38.9% of the male and female sample are incorrectly classified. This suggests that 38.9% of the sample seem to employ coping strategies and experience hassles and uplifts in a manner typical of the opposite sex.

5.5.1 Discussion of the findings

Results of the discriminant analysis set out in tables 5.6, 5.7(a) and 5.7(b) above raise two interesting points relating to the manner in which coping strategies are described as being "male" or "female" strategies, and to the assumption that men and women typically employ certain coping mechanisms. The results of the discriminant analysis illustrated in table 5.6 suggest greater similarity than difference between men and women in terms of blamed self, wishful thinking, problem-focused coping and avoidance, and the results of the discriminant analysis illustrated in tables 5.7(a) and (b) suggest that 38.9% of the sample employ coping strategies and experience hassles and uplifts in a manner typical of the opposite sex.

These findings raise the possibility that the gender differences identified are a function of individual differences, situational variables, work-environment characteristics and so on, gender per se not necessarily influencing stress and coping as originally hypothesised.

A related possibility is explored by Jick and Mitz (1985), who argue that research in general makes the underlying assumption that sex and sex-role identity are equivalent, whereas masculinity and femininity represent complementary, rather than opposite, ranges of characteristics and behaviour, with individuals of either sex exhibiting both masculine and feminine sex-role identity and behaviour. They ask why researchers continue to base research on gender differences or "sex" when it appears to be sex-role identity, rather than gender, that heightens the degree to which certain behaviours are exhibited.

Jick and Mitz's (1985) argument resembles that of Matteson and Ivancevich (1987), who ask whether gender differences in coping, patterns of stressors and responses to stress are true gender differences, or represent differences in the socialisation process and in perceived sex roles.

Whilst the somewhat disturbing results generated via the discriminant analysis referred to in tables 5.6 and 5.7(a) and (b) above, together with arguments raised by Jick and Mitz (1985) and Matteson and Ivancevich (1987), are not reason

enough to accept the null hypothesis that male and female professionals do not differ in terms of coping mechanisms employed in the management of work-related stress, or to invalidate gender differences and similarities identified and referred to above, they pose implications for future research. The findings and arguments raised point to a need to define and assess gender in terms of sex-role identity rather than gender per se.

5.6 PROFESSIONAL DIFFERENCES IN COPING

Stepwise discriminant analysis was performed in testing for differences in the employment of coping strategies across professional groups, as it was necessary to rule out any possible confounding effect of professional status. The subjects were divided into the following four groups of professions for the purpose of this analysis:

- 1: engineer, architects, quantity surveyor, accountants (N = 16)
- 2: actuaries, attorneys (N = 11)
- 3: doctors, dentists, psychologist (N = 15)
- 4: teachers, dietitians, therapists, social workers (N = 20)

Although the professional groups were grouped fairly arbitrarily in order to obtain roughly equal numbers, no differences were found in the use of coping strategies across professional groups. We can therefore conclude that professional status had no confounding effect.

It should be noted that the analysis of means and standard deviations as shown in table 5.8 below indicates that variances across professional groups do exist in terms of, for example, the frequency of uplifts, the use of problem-focused coping and the use of avoidance coping. Although these variances in means may suggest correlations across professional groups, the employment of statistical methods of analysis to assess the significance of these correlations is prohibited by the limited scope of this dissertation, the inadequate number of subjects from certain professional groups and the standard deviations reported. Variances in means and standard deviations cannot be assumed to be significant without such analysis.

Table 5.8: Means and standard deviations - breakdown per profession

	Account		Actuary		Doctor		Dentist		Dietitian		Quant S		Teacher		Occ Th		Speech Th		Physioth		Attorney		Pharmac		Psychol		Engineer		Architect		Soc Work	
N	12		5		10		4		2		1		4		4		4		4		6		9		1		1		2		2	
Mean/ /Std Dev	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Age	39	11.6	34.6	7.5	44.4	7.7	44.3	16.5	29.5	2.1	64	--	26.8	4.1	26.3	2.8	29.3	4.9	30.5	8.3	30.8	5.4	38.4	10.6	38	--	24	--	39.5	10.6	27	7
H Freq	23.7	10.9	22.2	9.5	23.4	14.3	27.8	10.2	28.5	2.1	10	--	23	18.9	23.5	5.9	26.5	5.8	21	6.9	41.8	12.6	23.8	11.3	18	--	23	--	42	14.1	14.5	4.9
H Int	1.5	0.4	1.3	0.2	1.6	0.3	1.9	0.6	1.7	0.1	1.4	--	1.9	0.4	1.8	0.4	1.8	0.2	1.6	0.5	1.5	0.3	1.9	0.3	1	--	2	--	1.7	0.2	2.1	0.2
U Freq	51.3	22	64	25.5	50.6	22	59.3	35.8	66	26.9	99	--	36.8	1.3	32	13.9	40.5	9.6	34.8	14.8	56.8	20	48	18.9	--	--	20	--	56.5	13.4	37	25.5
U Int	1.6	0.3	1.7	0.3	1.9	0.4	2.1	0.2	1.6	0.2	2.3	--	2.1	0.2	1.9	0.2	2.1	0.3	1.8	0.2	1.8	0.2	2	0.3	--	--	1.7	--	1.8	0.6	1.8	0.4
Prob	43.6	4.3	45.8	1.9	43.8	7	37	5.2	46.5	0.7	28	--	38.8	4.9	39.3	15.8	43.5	5.4	42	4.8	41.7	2.8	42.3	5	46	--	49	--	49	11.3	50	8.5
Soc	18.8	3.9	16	4.2	15.9	4.3	15	4.4	18.5	3.5	13	--	16.5	6.4	14.8	6.3	19.8	1.7	18.8	1.7	17.7	1.9	17.2	2.3	20	--	19	--	18	2.8	23.5	0.7
Self	6.8	2.3	5.2	3	5.6	1.6	10	1	7	0	3	--	6.5	3.1	7.3	1.2	6.3	2.4	7.5	3.3	6.8	1.7	5.7	1.2	3	--	11	--	5	2.8	6.5	0.7
Wish	18.4	3.7	16	5.1	17.6	5.6	22	3.6	16.5	6.4	11	--	16.5	4.7	18.7	5	17.3	3.7	21.5	5.4	19.8	3.9	17.6	4.1	11	--	21	--	20.5	4.9	25	1.4
Avoid	19.2	2.9	18.6	4.6	20.1	4.8	23	2	18	1.4	17	--	17	3.4	19	5.6	17	4.2	23	2.2	20.7	1.9	20.4	4.5	15	--	26	--	18.5	0.7	20.5	2.1
Sympt	43.7	9.6	45.4	4.6	43.4	6.1	39.5	27	50	4.2	30	--	44.5	11.2	40.8	20.1	47.3	10.5	51.3	3.7	50.3	5.9	46.8	8.8	43	--	55	--	51	2.8	49	11.3

Correlation matrices for the total sample, the male sample and the female sample, as referred to in sections 5.3 and 5.4, are presented below.

Table 5.9: Correlation matrix - total sample

	Age	HFreq	HInt	UFreq	UInt	Prob	Soc	Self	Wish	Avoid	Sympt	Total
Age	1.00000 0.0 71	0.01641 0.8919 71	-0.06125 0.6119 71	0.28918 0.0152 70	0.11449 0.3453 70	-0.05522 0.6498 70	-0.13442 0.2673 70	-0.17095 0.1602 69	-0.28894 0.0160 69	-0.15615 0.2001 69	-0.21604 0.0725 70	-0.19709 0.1020 70
HFreq	0.01641 0.8919 71	1.00000 0.0 71	0.12991 0.2803 71	0.14086 0.2448 70	-0.17103 0.1569 70	0.09755 0.4217 70	0.12458 0.3042 70	0.22313 0.0653 69	0.15019 0.2180 69	0.01205 0.9217 69	0.27911 0.0193 70	0.23962 0.0457 70
HInt	-0.06125 0.6119 71	0.12991 0.2803 71	1.00000 0.0 71	-0.39273 0.0008 70	0.34362 0.0036 70	-0.16502 0.1722 70	-0.05570 0.6470 70	0.30484 0.0109 69	0.21502 0.0760 69	0.11210 0.3591 69	0.10951 0.3668 70	0.06406 0.5983 70
UFreq	0.28918 0.0152 70	0.14086 0.2448 70	-0.39273 0.0008 70	1.00000 0.0 70	0.00061 0.9960 70	0.10847 0.3750 69	-0.00008 0.9995 69	-0.10384 0.3994 68	-0.13151 0.2851 68	-0.27019 0.0259 68	0.00743 0.9517 69	-0.01109 0.9280 69
UInt	0.11449 0.3453 70	-0.17103 0.1569 70	0.34362 0.0036 70	0.00061 0.9960 70	1.00000 0.0 70	0.09850 0.4207 69	-0.00404 0.9737 69	0.02382 0.8471 68	0.03835 0.7562 68	0.11408 0.3543 68	0.05330 0.6636 69	0.09361 0.4443 69
Prob	-0.05522 0.6498 70	0.09755 0.4217 70	-0.16502 0.1722 70	0.10847 0.3750 69	0.09850 0.4207 69	1.00000 0.0 70	0.47332 0.0001 70	0.03838 0.7542 69	0.08386 0.4933 69	0.09952 0.4159 69	0.41395 0.0004 70	0.68496 0.0001 70
Soc	-0.13442 0.2673 70	0.12458 0.3042 70	-0.05570 0.6470 70	-0.00008 0.9995 69	-0.00404 0.9737 69	0.47332 0.0001 70	1.00000 0.0 70	0.04966 0.6853 69	0.25441 0.0349 69	-0.08620 0.4813 69	0.34669 0.0035 70	0.56945 0.0001 70
Self	-0.17095 0.1602 69	0.22313 0.0653 69	0.30484 0.0109 69	-0.10384 0.3994 68	0.02382 0.8471 68	0.03838 0.7542 69	0.04966 0.6853 69	1.00000 0.0 69	0.33922 0.0044 69	0.41664 0.0004 69	0.34113 0.0041 69	0.48463 0.0001 69
Wish	-0.28894 0.0160 69	0.15019 0.2180 69	0.21502 0.0760 69	-0.13151 0.2851 68	0.03835 0.7562 68	0.08386 0.4933 69	0.25441 0.0349 69	0.33922 0.0044 69	1.00000 0.0 69	0.38575 0.0011 69	0.41398 0.0004 69	0.65490 0.0001 69
Avoid	-0.15615 0.2001 69	0.01205 0.9217 69	0.11210 0.3591 69	-0.27019 0.0259 68	0.11408 0.3543 68	0.09952 0.4159 69	-0.08620 0.4813 69	0.41664 0.0004 69	0.38575 0.0011 69	1.00000 0.0 69	0.42785 0.0002 69	0.57749 0.0001 69
Sympt	-0.21604 0.0725 70	0.27911 0.0193 70	0.10951 0.3668 70	0.00743 0.9517 69	0.05330 0.6636 69	0.41395 0.0004 70	0.34469 0.0035 70	0.34113 0.0041 69	0.41398 0.0004 69	0.42785 0.0002 69	1.00000 0.0 70	0.85396 0.0001 70
Total	-0.19709 0.1020 70	0.23962 0.0457 70	0.06406 0.5983 70	-0.01109 0.9280 69	0.09361 0.4443 69	0.68496 0.0001 70	0.56945 0.0001 70	0.48463 0.0001 69	0.65490 0.0001 69	0.57749 0.0001 69	0.85396 0.0001 70	1.00000 0.0 70

Table 5.10: Correlation matrix - male sample

	Age	HFreq	HInt	UFreq	UInt	Prob	Soc	Self	Wish	Avoid	Sympt	Total
Age	1.00000 0.0 37	-0.03931 0.8173 37	0.09970 0.5571 37	0.21125 0.2095 37	0.28552 0.0867 37	-0.16490 0.3365 36	-0.19336 0.2585 36	-0.09159 0.5952 36	-0.28786 0.0887 36	-0.02709 0.8754 36	-0.17993 0.2937 36	-0.27882 0.0996 36
HFreq	-0.03931 0.8173 37	1.00000 0.0 37	0.10918 0.5201 37	0.09220 0.5873 37	-0.33989 0.0396 37	0.16297 0.3423 36	0.13623 0.4282 36	0.24018 0.1582 36	0.26697 0.1155 36	-0.05302 0.7588 36	0.26160 0.1233 36	0.30033 0.0751 36
HInt	0.09970 0.5571 37	0.10918 0.5201 37	1.00000 0.0 37	-0.40917 0.0119 37	0.29286 0.0786 37	-0.19611 0.2517 36	-0.10175 0.5548 36	0.17322 0.3124 36	0.37790 0.0231 36	0.10097 0.5579 36	0.18896 0.2697 36	0.13401 0.4359 36
UFreq	0.21125 0.2095 37	0.09220 0.5873 37	-0.40917 0.0119 37	1.00000 0.0 37	0.09390 0.5804 37	-0.02867 0.8682 36	0.00140 0.9936 36	-0.08759 0.6115 36	-0.08597 0.6181 36	-0.36041 0.0308 36	-0.05514 0.7494 36	-0.15419 0.3692 36
UInt	0.28552 0.0867 37	-0.33989 0.0396 37	0.29286 0.0786 37	0.09390 0.5804 37	1.00000 0.0 37	0.12660 0.4619 36	-0.18200 0.2881 36	-0.06484 0.7071 36	-0.12608 0.4637 36	0.06213 0.7189 36	0.00750 0.9654 36	-0.01565 0.9278 36
Prob	-0.16490 0.3365 36	0.16297 0.3423 36	-0.19611 0.2517 36	-0.02867 0.8682 36	0.12660 0.4619 36	1.00000 0.0 36	0.22790 0.1813 36	0.00898 0.9586 36	-0.07880 0.6478 36	0.14540 0.3975 36	0.34657 0.0384 36	0.59952 0.0001 36
Soc	-0.19336 0.2585 36	0.13623 0.4282 36	-0.10175 0.5548 36	0.00140 0.9936 36	-0.18200 0.2881 36	0.22790 0.1813 36	1.00000 0.0 36	0.01077 0.9503 36	-0.02367 0.8910 36	-0.22965 0.1779 36	0.21339 0.2114 36	0.34310 0.0405 36
Self	-0.09159 0.5952 36	0.24018 0.1582 36	0.17322 0.3124 36	-0.08759 0.6115 36	-0.06484 0.7071 36	0.00898 0.9586 36	0.01077 0.9503 36	1.00000 0.0 36	0.35282 0.0348 36	0.42827 0.0092 36	0.20319 0.2346 36	0.43412 0.0082 36
Wish	-0.28786 0.0887 36	0.26697 0.1155 36	0.37790 0.0231 36	-0.08597 0.6181 36	-0.12608 0.4637 36	-0.07880 0.6478 36	-0.02367 0.8910 36	0.35282 0.0348 36	1.00000 0.0 36	0.30117 0.0743 36	0.46394 0.0044 36	0.55084 0.0005 36
Avoid	-0.02709 0.8754 36	-0.05302 0.7588 36	0.10097 0.5579 36	-0.36041 0.0308 36	0.06213 0.7189 36	0.14540 0.3975 36	-0.22965 0.1779 36	0.42827 0.0092 36	0.30117 0.0743 36	1.00000 0.0 36	0.26485 0.1185 36	0.49703 0.0020 36
Sympt	-0.17993 0.2937 36	0.26160 0.1233 36	0.18896 0.2697 36	-0.05514 0.7494 36	0.00750 0.9654 36	0.34657 0.0384 36	0.21339 0.2114 36	0.20319 0.2346 36	0.46394 0.0044 36	0.26485 0.1185 36	1.00000 0.0 36	0.83864 0.0001 36
Total	-0.27882 0.0996 36	0.30033 0.0751 36	0.13401 0.4359 36	-0.15419 0.3692 36	-0.01565 0.9278 36	0.59952 0.0001 36	0.34310 0.0405 36	0.43412 0.0082 36	0.55084 0.0005 36	0.49703 0.0020 36	0.83864 0.0001 36	1.00000 0.0 36

Table 5.11: Correlation matrix - female sample

	Age	HFreq	HInt	UFreq	UInt	Prob	Soc	Self	Wish	Avoid	Sympt	Total
Age	1.00000 0.0 34	0.19182 0.2771 34	-0.11882 0.5033 34	0.25051 0.1597 33	-0.03990 0.8255 33	0.07866 0.6583 34	0.14063 0.4276 34	-0.32287 0.0669 33	-0.21447 0.2307 33	-0.27658 0.1192 33	-0.13890 0.4334 34	-0.07019 0.6932 34
HFreq	0.19182 0.2771 34	1.00000 0.0 34	0.15829 0.3713 34	0.30398 0.0855 33	0.15473 0.3899 33	0.01279 0.9428 34	0.10700 0.5470 34	0.19430 0.2786 33	-0.00268 0.9882 33	0.10484 0.5615 33	0.32866 0.0577 34	0.22237 0.2062 34
HInt	-0.11882 0.5033 34	0.15829 0.3713 34	1.00000 0.0 34	-0.33951 0.0532 33	0.39418 0.0232 33	-0.14248 0.4215 34	-0.08065 0.6502 34	0.44790 0.0090 33	0.05587 0.7575 33	0.09607 0.5949 33	0.01293 0.9421 34	-0.00349 0.9844 34
UFreq	0.25051 0.1597 33	0.30398 0.0855 33	-0.33951 0.0532 33	1.00000 0.0 33	-0.13343 0.4592 33	0.32432 0.0656 33	0.10400 0.5647 33	-0.11649 0.5255 32	-0.13406 0.4645 32	-0.06767 0.7129 32	0.17933 0.3180 33	0.19234 0.2836 33
UInt	-0.03990 0.8255 33	0.15473 0.3899 33	0.39418 0.0232 33	-0.13343 0.4592 33	1.00000 0.0 33	0.06933 0.7014 33	0.17118 0.3408 33	0.15964 0.3828 32	0.19677 0.2804 32	0.15806 0.3876 32	0.05897 0.7444 33	0.17045 0.3429 33
Prob	0.07866 0.6583 34	0.01279 0.9428 34	-0.14248 0.5215 34	0.32432 0.0656 33	0.06933 0.7014 33	1.00000 0.0 34	0.71465 0.0001 34	0.07970 0.6593 33	0.25376 0.1542 33	0.01742 0.9233 33	0.48054 0.0040 34	0.76829 0.0001 34
Soc	0.14063 0.4276 34	0.10700 0.5470 34	-0.08065 0.6502 34	0.10400 0.5647 33	0.17118 0.3408 33	0.71465 0.0001 34	1.00000 0.0 34	0.08835 0.6249 33	0.46983 0.0058 33	0.00837 0.9631 33	0.39475 0.0209 34	0.70346 0.0001 34
Self	-0.32287 0.0669 33	0.19430 0.2786 33	0.44790 0.0090 33	-0.11649 0.5255 32	0.15964 0.3828 32	0.07970 0.6593 33	0.08835 0.6249 33	1.00000 0.0 33	0.33288 0.0584 33	0.40193 0.0204 33	0.52001 0.0019 33	0.57455 0.0005 33
Wish	-0.21447 0.2307 33	-0.00268 0.9882 33	0.05587 0.7575 33	-0.13406 0.4645 32	0.19677 0.2804 32	0.25376 0.1542 33	0.46983 0.0058 33	0.33288 0.0584 33	1.00000 0.0 33	0.44967 0.0087 33	0.32530 0.0647 33	0.72590 0.0001 33
Avoid	-0.27658 0.1192 33	0.10484 0.5615 33	0.09607 0.5949 33	-0.06767 0.7129 32	0.15806 0.3876 32	0.01742 0.9233 33	0.00837 0.9631 33	0.40193 0.0204 33	0.44967 0.0087 33	1.00000 0.0 33	0.57818 0.0004 33	0.65434 0.0001 33
Sympt	-0.13890 0.4344 34	0.32866 0.0577 34	0.01293 0.9421 34	0.17933 0.3180 33	0.05897 0.7444 33	0.48054 0.0040 34	0.39475 0.0209 34	0.52001 0.0019 33	0.32530 0.0647 33	0.57818 0.0004 33	1.00000 0.0 34	0.86312 0.0001 34
Total	-0.07019 0.6932 34	0.22237 0.2062 34	-0.00349 0.9844 34	0.19234 0.2836 33	0.17045 0.3429 33	0.76829 0.0001 34	0.70346 0.0001 34	0.57455 0.0005 33	0.72590 0.0001 33	0.65434 0.0001 33	0.86312 0.0001 34	1.00000 0.0 34

5.7 SUMMARY AND CONCLUSIONS

This study has succeeded in rejecting the null hypotheses referred to in chapter 4:

- Male and female professionals do not differ in terms of the frequency and intensity with which they experience stress.
- The frequency and intensity of hassles and uplifts experienced by male and female professionals does not impact upon upon the coping strategies that they employ in managing work-related stress.
- Male and female professionals do not differ in terms of the coping mechanisms that they employ in managing work-related stress.

The results of the research support the three alternate hypotheses:

- Male and female professionals differ in terms of the frequency and intensity with which they experience stress.
- The frequency and intensity of hassles and uplifts experienced by male and female professionals impact upon the coping strategies that they employ in managing work-related stress.
- Male and female professionals differ in terms of the coping mechanisms that they employ in managing work-related stress.

The results of this study indicate that gender differences exist in the manner in which male and female professionals cope with work-related stress. The following specific gender differences were identified:

- Whilst there is a correlation between the total number of coping strategies employed by men and the frequency with which they are exposed to hassles, this is not the case among women. In other words, although men employ a wide repertoire of coping strategies, the frequency of exposure to hassles remains high for them. The same does not apply to women, for whom the coping repertoire and the frequency of hassles are not correlated.

- Men tend to employ wishful thinking to manage severe stress, whereas women tend to employ the blamed self strategy for this purpose.
- Men employ moderately more problem-focused coping than women in managing work-related stress. In contrast, women employ significantly more social support and symptom management than men in these circumstances. However, gender differences in symptom management disappear when age is controlled for.

No major gender differences were identified in the use of avoidance, blamed-self or wishful thinking. Avoidance and wishful thinking were shown to be the poorest predictors of gender differences in coping.

Whilst these findings are supported by the findings and arguments of a number of researchers, several are contradicted by other researchers in certain respects. Such contradictions in findings lead one to suggest, once again, that further research is needed.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 SUMMARY OF INVESTIGATION

This study consists of six chapters. The focus of chapters 1 to 5 and the conclusions drawn from each are as follows:

Chapter 1: Introduction and motivation

The introductory chapter of this study focused upon the background or motivation, aim, objectives and theoretical basis of the research.

In discussing motivations for researching the problem statement "Do male and female professionals differ in terms of the coping mechanisms employed in the management of stress?" reference was made to

- contradictory evidence and findings surrounding the impact of gender on the way in which stress is experienced, manifested and coped with
- the greater number of women entering the workplace
- the impact of coping on the quality of life
- the lack of studies into the manner in which male and female professionals experience and cope with stress

The primary objective of the study was stated as being to determine whether male and female professionals differ in terms of the coping mechanisms that they employ in managing work-related stress. A number of secondary objectives were also referred to.

The concepts of gender, stress and coping were defined in chapter 1. The definitions of "stress" and "coping" were based upon Lazarus and Folkman's (1984) theory on stress.

Chapter 2: The nature of stress and coping

The concepts of stress and coping were explored in this chapter.

A discussion of the definition of "stress" highlighted the fact that little agreement exists as to precisely what "stress" means, and that internal and external conditioning contribute to substantial variability in the individual's response to and experience of stress.

The merits of defining and assessing stress in terms of hassles and uplifts, as opposed to major life events, was referred to, as were sources of professional stress, vulnerability of professionals to stress, and the Professional Stress Syndrome. Mention was made of the adverse impact of work-related stress on the individual and the organisation, as well as of the personal, structural organisational, procedural organisational, and role-related causes of work-related stress.

Coping, a concept defined *inter alia* as a personal trait, as a sequence of stages, and as specific methods, was described as being influenced by a number of factors including personality traits, work-environment characteristics, situational characteristics, and appraisal factors / cognitive appraisal. The use and efficacy of the six coping mechanisms - problem-focused coping, avoidance, wishful thinking, social support, blamed self and symptom management - were discussed. Factors influencing the choice of coping strategies were considered, as was the influence of the social desirability factor in choice of coping strategy. The impact of coping efficacy on short-term and long-term outcomes was referred to.

Chapter 3: The impact of gender on stress and coping

The third chapter of this study examined gender differences in the physical, psychological and behavioural symptoms of stress, and in the sources of work-related stress. The "unique" stressors affecting working women in particular were focused upon, for example discrimination, work/home conflict and stereotyping.

Gender differences in the choice of specific coping mechanisms and in the efficacy of coping were discussed. The contradictory nature of research findings suggests that few conclusions can be drawn regarding gender differences in the employment of specific coping strategies, and regarding the superior or inferior coping abilities of men and women.

Chapter 4: Research design

In setting out the design of this research, reference was made to three main hypotheses. The study sample was analysed in terms of the professional status, average age, educational level, managerial or non-managerial and salaried or self-employed status of male and female professional subjects. This analysis suggested that a greater percentage of male than female subjects were employed in managerial positions and were self-employed, and this was attributed to the higher average age of male subjects.

The independent and dependent variables of the study were indicated and the assessment battery described. Administrative, technical and general aspects of the Biographical Checklist, Coping Checklist, Hassles Scale and Uplifts Scale were discussed, as was the rationale for incorporating each assessment instrument. Examples were given of items from each instrument. The test procedure, and also the statistical techniques to be used in assessing the nature and direction of male/female differences in stress and coping, were explained.

Chapter 5: Analysis of research

Chapter 5 focused upon the techniques and procedures used to analyse the results of the research. These results were discussed from the following perspectives:

- the impact of gender on stress
- the frequency and intensity with which males and females experience hassles and uplifts

- the relationship between hassles and uplifts
- the relationship between stress (hassles and uplifts) and coping
- gender differences in the employment of coping strategies and coping repertoire

The results are summarised in section 6.2 below.

6.2 SUMMARY OF RESULTS

The problem statement behind this study is the question: "Do male and female professionals differ in terms of the coping mechanisms employed in the management of stress?" The aim and primary objective of the study was therefore to establish whether men and women in professional occupations differ in terms of the coping mechanisms that they employ in seeking to minimise the impact of work-related stress.

The results suggest that men and women differ significantly in only two of the six strategies measured, namely social support and symptom management. Both of these strategies have been shown to be used more frequently by women than by men. The results also suggest that problem-focused coping is used more frequently by men than by women, but this finding is not significant.

Men and women were not found to differ significantly - displaying, in fact, more similarities than differences - in the employment of blamed self, wishful thinking or avoidance,. Of these three strategies, wishful thinking and avoidance were found to be the poorest predictors of male-female differences in the use of coping strategies.

The secondary objective of the study was to investigate the nature of gender-related differences in the coping repertoire available to men and women, and in the frequency and intensity with which daily hassles and uplifts are experienced by males and females.

Results in this regard suggest that men and women do not differ significantly in terms of the total number of coping strategies employed to manage stress (ie coping repertoire).

A number of conclusions were drawn regarding gender-related differences in the frequency and intensity with which uplifts and hassles are experienced. Results indicate that men experiencing many hassles utilise a considerable number of different coping strategies to manage this stress, while the number of coping strategies employed by women is independent of the average number of stressors that they are exposed to daily. The number of coping strategies employed by women and the frequency with which they experience hassles have therefore been found not to correlate. This suggests that women cope with stress more effectively than their male counterparts. Females experiencing stress/hassles intensely showed a tendency to blame themselves, whilst men in a similar position tended to employ wishful thinking as a means of coping.

These results have implications for future research, and also for professionals and organisations. These implications are discussed below. Because men and women have been found to be more similar than different in the manner in which they cope with work-related stress, while women have been identified as more effective copers, the recommendations for professionals discussed below are equally applicable to both male and female professionals. By the same token, the recommendations for organisations can fruitfully be applied to facilitating stress management and reduction for both male and female employees.

6.3 RECOMMENDATIONS

6.3.1 Limitations of this research and recommendations for future research

This study is not without limitations. These will be discussed, and suggestions put forward on how they can be overcome in future research.

Firstly, the study population was not representative of the South African population as a whole, the majority of participants being White and residing in Cape Town. This places limits on the generalisability of these findings.

Secondly, although the professional circumstances of participants - managerial or non-managerial and salaried or self-employed, as well as length of service - were noted in all completed biographical checklists (appendix 2, p. 163) and summarised in section 4.2, these factors have not been analysed as part of this study. Because they may affect the frequency and intensity of hassles and uplifts experienced and the choice of coping strategy, they should either be analysed as part of future research or controlled as extraneous variables that may directly or indirectly influence findings. Cross-sectional studies matching men and women in terms of length of service, occupational level and scope of authority within the organisation are recommended for future research.

Thirdly, because participants were required to provide their names on the biographical checklists for feedback purposes, one has to assume that the "social desirability" factor may have influenced the way in which questionnaires were completed. A handful of participants did use their initiative and complete the questionnaires anonymously. Future instruments, particularly if distributed by mail, should allow for anonymous participation, or should, as suggested by Latack (1986), uncorrelate coping scales and social desirability.

Latack (1986) emphasises that self-report data on stress and coping may reflect socially desirable rather than honest responses about coping behaviours as respondents seek to enhance their self-image. Latack (1986) goes on to suggest that because confidence in coping measures would be enhanced if coping were distinguished from social desirability effects, attempts should be made to uncorrelate coping scales and social desirability.

Fourthly, although numerous attempts were made to enlarge the size of the total sample, the final number of participants was 71. A larger N (ie sample size) would have increased the representativeness of the findings, and hence their external validity.

Fifthly, the constructs of "coping" and "stress" were measured only via three self-report measures, namely the Coping Checklist (appendix 3, p. 164), Hassles Scale (appendix 4, p. 170) and Uplifts Scale (appendix 5, p. 177). The inclusion in the assessment battery of additional instruments, and of observation and inferential techniques, might have served to validate findings (Folkman & Lazarus, 1980). It should also be noted that because existing instruments designed to measure strategies for coping with stressful life events may not be appropriate for researching coping in the work environment, traditional measures of coping such as the Coping Checklist need to be re-examined (Nelson et al, 1990).

As Aldwin and Revenson (1987) observe, future research on coping should also seek to identify and assess the use of more adaptive coping strategies, for instance the development of a sense of humour, and delineate their contextual appropriateness.

Sixthly, although using a situation-specific measure such as the Coping Checklist has a number of advantages, Latack and Havlovic (1992) point out that complex models of coping should account for both what individuals do on a regular basis - that is, for general coping resources - and for how they cope in specific situations. One cannot so readily generalise on the basis of measures that are too situationally specific.

If future research on coping is to assess the extent to which coping dimensions are stable over time, and also the variance of coping strategies as a function of changes in stressor situations and stress symptoms, research should encompass test-retest reliability and longitudinal data.

Finally, reliance upon self-report data has a number of disadvantages, including the problems of memory, the desire of subjects to present themselves in a positive light, language ambiguity, the use of verbal reports as an ego defence and the subjectivity of data. Despite these limitations, self-assessments allow researchers to learn more about stress and emotion, and about coping and its adaptational outcomes, than any other single source. Such assessments are also at least as predictive as other measurements of stress, coping and so on. Lazarus and Folkman (1984) suggest that these limitations can be overcome by initially using

self-report data to generate stable findings leading to empirically based principles, and then employing other methods such as physiological and behavioural observations to confirm, validate and amplify these findings and principles.

It is evident from the limitations discussed above, and from the ambiguities and inconsistencies in the research available on the impact of gender on coping, that future empirical investigations are needed.

Apart from the recommendations referred to above, future research should define more clearly the distinction between sex and sex-role identity by investigating the degree of adherence by working men and women to traditional sex-role stereotypes. Such a distinction might help clarify many of the inconsistencies in the existing research on sex differences in work stress (Jick & Mitz, 1985). Longitudinal designs aimed at isolating work stress symptoms from symptoms influenced by dispositions or personal life stressors should also be employed in future research (Nelson et al, 1990).

6.3.2 Recommendations for professionals

The paucity of research available in the field of stress and coping suggests that no single intervention or strategy is an effective means of coping for all professionals in every situation. The employment of multiple strategies, ranging from exercise to hobbies to the cultivation of family relationships (ie a broad band of interventions), is more likely to result in successful adaptation to job stresses (Hamberger & Stone, 1983).

Numerous programmes have been developed to intervene in and reverse maladaptive stress responses among professionals, for example (Hamberger & Stone, 1983)

- the modification of bureaucratic structures and management philosophies
- direct rehabilitative efforts
- unstructured group experiences that allow for cathartic release and peer support

- leisure therapy
- behavioural and attitudinal change achieved by means of relaxation training, values clarification and interpersonal relations

Other strategies include

- engaging in outside recreation or hobbies to escape the pressures of work
- collaborating with peers
- modifying the role, functions, work activities and work setting where feasible.

Morgan and Baker (1985) mention a number of specific practical strategies which can easily be followed to manage job stress, including

- talking it out
- working off anger or frustration by performing sport or other physical activities
- developing healthy low-cholesterol eating habits
- maintaining a sense of humour
- avoiding overindulgence in drugs, alcohol, caffeine and nicotine
- escaping temporarily by taking a mental journey
- breathing deeply
- avoiding negative coping behaviour by accepting personal responsibility for one's own predicament and working towards a solution
- developing an optimistic and positive attitude to life

The strategies and programmes referred to above are beneficial, in that they enable professionals faced with stress to develop systematic, individualised stress management intervention plans based upon assessments of individual, interpersonal and organisational stressors in a particular situation (Huebner, 1993). However, the majority are reactive rather than proactive. Hamberger and Stone (1983) emphasise the advantage of more preventive approaches to stress management, pointing out that preventive efforts at stress inoculation produce the greatest benefits at the lowest cost, particularly where such efforts are systematic and structured.

Preventive and proactive approaches to stress and burnout are based upon a number of assumptions. They assume that although the individual may be coping adequately at present, he/she should continue to refine and develop existing and new coping repertoires, thus acquiring increasingly effective and efficient skills for meeting the demands of daily working life.

Chronic inability to manage stress effectively is believed to be preventable. Identifiable skills in direct coping and the emotional regulation of stress exist and are taught, and these skills help professionals manage stress in their careers. Because an holistic approach is more likely to enable individuals to cope with stress effectively, skills should be provided in a number of dimensions including

- physiological functioning/health
- relaxation exercise
- nutrition
- cognitive modification
- value clarification
- time management
- interpersonal conflict resolution.

If stress is to be managed effectively, professionals must be provided with both a well-grounded intellectual knowledge base for understanding stress and coping, and a thorough repertoire of effective coping skills. Meaningful change is most likely to occur with a high degree of consistency if the person is allowed to understand the context and rationale of a proposed new strategy (Hamberger & Stone, 1983).

Professionals can be their own worst enemies. Trained to be independent, creative, assertive, competitive, and hard driving, they do not readily acknowledge that they are in trouble or need assistance. More often, their combination of socialization and personality characteristics leads them to struggle on with a problem long after many other people would have at least sought consultation from family members or friends. Solitary battles are most destructive for anyone because of the ease with which one loses perspective (Kilburg, 1986, p. 25).

In seeking to improve the efficacy with which they cope with and adapt to stress, professionals need to become aware of themselves and of how the stress in their lives is impacting upon them, their colleagues and their families, and should develop meaningful relationships with individuals in a peer group, the family or a reference group who are likely to understand their feelings and reactions to stress (Gardner & Hall, 1981).

Furthermore, professionals would be well advised to (Starr, 1990)

- differentiate between stressors which are avoidable and those which are beyond control
- recognise the real causes of their stress
- be assertive in expressing their desires and opinions
- have confidence in their ability to work through the stressful situation
- practise an activity which helps reduce the psychological and physiological consequences of stress

An awareness of one's stress tolerance and the strategies available to cope with stress will enable professionals to perform better and help ensure that stress is kept at an acceptable level (Morgan & Baker, 1985).

6.3.3 Recommendations for organisations

Organisations have an essential role to play in minimising the stress levels of their managerial and professional employees. As Glovinkowski and Cooper (1986) observe, it is only when organisations accept their responsibility to help employees manage their stress that we will begin to deal effectively with managerial and professional stress. Personnel policies designed to support, encourage and develop professionals in industry are urgently required. Corporate personnel policies must begin to change by acknowledging the "dual career family". Managerial selection should be more comprehensive, with thorough assessment centres, psychometrics and family circumstances being taken into account. Stress counselling and stress management programmes should be a high priority for organisations (Glovinkowski & Cooper, 1986).

There are numerous programmes and strategies that organisations can undertake as part of a stress management programme (Gardner & Hall, 1981). These strategies involve the identification of stressors followed by planned changes in organisational structure or function. The objective of such planned changes is to increase worker control via participation in decision making (Jackson, as cited in Murphy, 1988), provision of child-care facilities at the workplace, pre-retirement seminars and so on (Murphy, 1988). Strategies include (Maslach, as cited in Huebner, 1993)

- changing organisational procedures
- redesigning jobs
- devising formal feedback systems
- establishing flexible leave policies
- improving staff development and supervisory programmes

These programmes and strategies are generally offered in a preventive context, with the objective of improving worker awareness and recognition of stress. The individual worker, rather than aspects of the work environment, is focused upon as the target for change (Murphy, 1988).

Stress management techniques should

- stimulate individuals to appraise situations and cope with their demands in new ways
- foster awareness and recognition of stressors and attendant health effects
- teach stress reduction skills

Stress reduction skills are taught through training in progressive muscle relaxation, biofeedback, meditation, breathing exercises and assorted cognition-focused techniques (Murphy, 1988).

With an increasing number of female professionals entering organisations, these organisations also need to identify factors especially stressful to women (Chusmir & Franks, 1988). They should recognise the importance of developing corporate

policies that minimise the stresses and strains which are particularly pertinent to working women and take cognisance of the fact that men and women at different job levels experience special concerns and vulnerabilities.

Assuming unisex effects of work environments and behavioural processes may be misguided. Ineffective stress reduction programmes which increase corporate costs without benefitting workers may result (Pretty et al, 1992, p. 710).

Organisations should also acknowledge the reality of dual-career couples and families and accommodate them by (Davidson & Cooper, 1984; Chusmir & Franks, 1988)

- promoting and instituting flexible working arrangements and reasonable maternity and paternity leave
- retraining women re-entering the workplace
- providing adequate day nursery facilities
- changing relocation policies
- introducing affirmative action activities in the form of career planning and counselling and support networks for women
- creating training programmes for women in the sources and uses of power

These changes would help reduce anxiety and sex-role conflict among working women, thus allowing organisations to use a major segment of the workforce more efficiently (Chusmir & Franks, 1988).

Evidently, then, organisations have a significant role to play in helping to reduce stress and its costs. Training focused on adaptive coping techniques or methods, selection and placement procedures, and career counselling, as well as the numerous strategies set out above, can all help to reduce or eliminate the strain caused by stress (Havlovic & Keenan, 1991). The challenge, however, is to ensure that the cost of any technique or procedure implemented is effective in terms of the benefits achieved, and it is therefore essential to specify clearly the tangible and intangible benefits of particular programmes (Ivancevich & Matteson, 1988).

Whilst organisational stress management programmes do contribute to the reduction of stress among employees, they should at times be employed with caution. Personal characteristics often predispose individuals to distress symptoms which remain resistant to environmental interventions aimed at symptom reduction (Nelson et al, 1990). Because programmes are usually created for groups of people and are therefore generic, targeting neither specific work stressors nor specific stress symptoms (Murphy, 1988), their effectiveness is limited for people whose troubles stem from individual conflicts or personal agendas (Lazarus & Folkman, 1984). Organisational change interventions designed to prevent or reduce stress should therefore complement the worker-oriented approach, as interventions that are comprehensive and address individual worker and organisational factors hold the greatest promise for the effective reduction and prevention of stress at work (Murphy, 1988).

6.4 CONCLUSION

Stress is recognised as an inevitable aspect of life, differences in human functioning being determined by how people cope with it (Lazarus & Folkman, 1984). As Paul Rosch, President of the American Institute of Stress in 1990, put it:

People can learn to control stress. It doesn't have to be self-destructive. Rather, it can be used to advantage, ultimately enhancing a person's productivity (Starr, 1990).

The extent to which stress is controlled, prevented and managed depends upon the manner in which professionals employ a broad band of coping strategies, and upon the way in which organisations attain a better balance between narrowly defined economic interests and a broader humanistic concern for the mental and emotional needs of professional employees and their families (Phelan et al, 1991).

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APPENDICES

ASSESSMENT INSTRUMENTS

APPENDIX 1 - COVERING LETTER

2A Avenue Disandt
FRESNAYE
CAPE PROVINCE
8001

8 March 1995

Dear Sir / Madam

PARTICIPATION IN STRESS -RELATED RESEARCH

In completing a dissertation towards a Masters Degree in Industrial Psychology, I have chosen to assess the coping mechanisms employed by both male and female professionals at work. The word "professional" refers to fully qualified and registered attorneys, medical practitioners, teachers, and so on. As a professional employed on a full-time basis, you represent an ideal candidate for my research, hence my having contacted you in this regard.

Although participation in this study is completely voluntary, it would be **greatly appreciated** if you would be so kind as to participate by completing the attached 3 questionnaires and returning them to me. The three questionnaires enclosed, relate to your reactions to work-related stress. They should take a maximum of 60 - 90 minutes to complete in total. By completing them, you will be making a significant contribution towards an enhanced understanding of work-related stress as experienced and managed by South African professionals. Because conclusive research available in this area is limited, your contribution will be a valuable one indeed.

All data obtained via the enclosed questionnaires will be treated in the strictest confidence. The names of subjects will not be referred to at any stage during my research.

Explanations for the completion of each questionnaire are provided and can be found on the introductory page thereof. Kindly complete the questionnaires as honestly as

possible, in order that they may be of maximum usage.

Once you have completed these questionnaires as well as the Biographical Checklist, kindly return them to me in the self-addressed and stamped envelope enclosed. It would be greatly appreciated if you could complete and return them to me by not later than **Friday, 31 March 1995**.

Should you have any queries related to the completion of these questionnaires and/or regarding the research in general, kindly do not hesitate to contact me at the following telephone numbers :

- * **439-1288 / 434-4445 (After Hours)**
- * **23-0710 (Office Hours)**

Individuals interested in receiving feedback on the results of the study may also feel free to contact me at the above-mentioned telephone numbers. Because the emphasis of the study is however on general profiles and not on the individuals who participate in the study per se, the feedback provided will be of a similar general nature.

A sincere thank you to you for your willingness and cooperation in participating in this research.

Yours sincerely


.....
Carol Mallach

APPENDIX 2

BIOGRAPHICAL CHECKLIST			
NAME	:	
DATE OF BIRTH	:	
AGE	:	
SEX	:	MALE	<input type="checkbox"/>
		FEMALE	<input type="checkbox"/>
HOME LANGUAGE	:	ENGLISH	<input type="checkbox"/>
		AFRIKAANS	<input type="checkbox"/>
		OTHER	<input type="checkbox"/>
EDUCATION	:	MATRIC	<input type="checkbox"/>
		BACHELORS DEGREE	<input type="checkbox"/>
		HONOURS DEGREE	<input type="checkbox"/>
		MASTERS DEGREE	<input type="checkbox"/>
		DOCTORATE DEGREE	<input type="checkbox"/>
		OTHER (PLEASE SPECIFY):
PROFESSIONAL STATUS	:(Eg. DOCTOR)	
MEMBERSHIP TO OR OF PROFESSIONAL BOARD(S):			
.....			
.....			
CURRENT AND PREVIOUS WORK EXPERIENCE :			
JOB TITLE	LENGTH OF SERVICE	MANAGERIAL / NON-MANAGERIAL	SALARIED / SELF-EMPLOYED

APPENDIX 3 - COPING CHECKLIST

QUESTIONNAIRE 1

NAME : _____

INSTRUCTIONS

The following statements describe ways in which you may handle serious stressful work-related events. Select your answer on every statement by the following procedure :-

1. In the space provided below, write down the single most stressful event (situation) that happened in your work life and most seriously influenced your life during the past year (1-12 months).

EVENT : The most stressful event in my work life during the last year (1-12 months) was / is :

.....

.....

.....

2. By reading every statement in respect of the above-mentioned most serious work event, decide how often you will react in a certain way to the event by using the given scale for column A which is as follows :

SCALE FOR COLUMN A:

1	=	No, never do this.
2	=	Hardly ever do this.
3	=	Often do this.
4	=	Yes, always do this.

In column A, indicate your answer to every statement by making a cross (X) in the appropriate block next to each statement.

3. Please indicate with respect to each statement whether you feel that your selected reaction in Column A is typical of you in all serious stressful work events. These responses must be marked in Column B by using the following rating scale :

SCALE FOR COLUMN B :

Y	=	Yes
N	=	No
U	=	Uncertain

STATEMENTS	COLUMN A				COLUMN B		
	1	2	3	4	Y	N	U
1. Bargained or compromised to get something positive from the situation.							
2. Went on as if nothing had happened.							
3. Talked to someone to find out about the situation.							
4. Blamed myself.							
5. Hoped a miracle would happen.							
6. Concentrated on something good that could come out of the whole thing.							
7. Changed something about myself so I could deal with the situation better.							
8. Tried not to act too hastily or follow my own hunch.							
9. Felt bad that I could not avoid the problem.							
10. Accepted sympathy and understanding from someone.							
11. Wished I was a stronger person - more optimistic and forceful.							
12. Criticised or lectured myself.							
13. Tried not to burn my bridges behind me, but left things somewhat open.							
14. Kept my feelings to myself.							

STATEMENTS	COLUMN A				COLUMN B		
	1	2	3	4	Y	N	U
15. Got professional help and did what they recommended.							
16. Wished that I could change what had happened.							
17. Changed or grew as a person in a good way.							
18. Slept more than usual.							
19. Talked to someone who could do something about the problem.							
20. Realised I brought the problem on myself.							
21. Wished I could change the way that I felt.							
22. Made a plan of action and followed it.							
23. Got mad at the people or things that caused the problem.							
24. Changed something so things would turn out all right.							
25. Daydreamed or imagined a better time or place than the one I was in.							
26. Tried to forget the whole thing.							
27. Asked someone I respected for advice and followed it.							
28. Just took things one step at a time.							

STATEMENTS	COLUMN A				COLUMN B		
	1	2	3	4	Y	N	U
29. Tried to make myself feel better by eating, drinking, smoking, taking medication.							
30. I knew what had to be done, so I doubled my efforts and tried harder to make things work.							
31. Talked to someone about how I was feeling.							
32. Had fantasies or wishes about how things might turn out.							
33. Avoided being with people in general.							
34. Came up with a couple of different solutions to the problem.							
35. Kept others from knowing how bad things were.							
36. Accepted my strong feelings, but did not let them interfere with other things too much.							
37. Thought about fantastic or unreal things (like perfect revenge or finding a million rand) that made me feel better.							
38. Accepted the next best thing to what I wanted.							
39. Wished the situation would go away or somehow be finished.							

STATEMENTS	COLUMN A				COLUMN B		
	1	2	3	4	Y	N	U
40. Stood my ground and fought for what I wanted.							
41. Refused to believe it had happened.							
42. Came out of the experience better than when I went in.							
43. Got extra sleep / rest.							
44. Drank heavily or more than a moderate amount (i.e., two drinks) of liquor, beer or wine.							
45. Took pills, tranquilizers, sedatives or other drugs.							
46. Did physical exercise (jogging, cycling), dancing, or other participative sports.							
47. Practised some form of meditation.							
48. Took "bets" or did risky things unlike what I am used to.							
49. Used some form of relaxation training.							
50. Sought company of friends.							
51. Sought company of family.							
52. Ate more food and snacks than usual.							
53. Watched more television.							
54. Attended sporting, cultural or community events.							
55. Worked more.							

STATEMENTS	COLUMN A				COLUMN B		
	1	2	3	4	Y	N	U
56. Took it out on family and/or friends.							
57. Studied more.							
58. Pursued hobbies or leisure activities (not covered above).							
59. Bought something, spent money.							
60. Took time off from work.							
61. Changed my physical state in a manner not covered above (eg., hair done, massage, sauna).							
62. Took trip, eg., to another city, overseas.							
63. Daydreamed.							
64. Sought professional help or counselling.							
65. Turned to prayer or other spiritual thoughts.							
66. Complained to others.							
67. Smoked cigarettes, cigars, or pipe, more than usual.							

APPENDIX 4 - THE HASSLES SCALE

QUESTIONNAIRE 2**NAME :****INSTRUCTIONS**

Listed in the centre of the following pages are a number of events which can make a person feel irritated, pressurized, or annoyed.

To complete the questionnaire, first decide which of these events have happened to you **in the past month**. If it has occurred in the past month, circle the item in the left hand column as follows :

① Misplacing or losing things.

Do **not** circle those events which have not occurred in the past month.

Then, look at the numbers on the right of the items you have circled. Indicate how severe each of the **circled events** has been for you in the past month by circling a:

- 1 (somewhat severe), or
- 2 (moderately severe), or
- 3 (extremely severe).

This can be completed as follows :

① Misplacing or losing things 1 ② 3

REMEMBER :

Only circle those events which have occurred in the past month, i.e., ①

1: Somewhat severe
2: Moderately severe
3: Extremely severe

1	Misplacing or losing things.	1	2	3
2	Troublesome neighbours.	1	2	3
3	Social obligations.	1	2	3
4	Inconsiderate smokers.	1	2	3
5	Troubling thoughts about your future.	1	2	3
6	Thoughts about death.	1	2	3
7	Health of a family member.	1	2	3
8	Not enough money for clothing.	1	2	3
9	Not enough money for housing.	1	2	3
10	Concerns about owing money.	1	2	3
11	Concerns about getting credit.	1	2	3
12	Concerns about money for emergencies.	1	2	3
13	Someone owes you money.	1	2	3
14	Financial responsibility for someone who doesn't live with you.	1	2	3
15	Cutting down of electricity, water, etc.	1	2	3
16	Smoking too much.	1	2	3
17	Use of alcohol.	1	2	3
18	Personal use of drugs.	1	2	3
19	Too many responsibilities.	1	2	3
20	Decisions about having children.	1	2	3
21	Non-family members living in your house.	1	2	3
22	Care for pet.	1	2	3
23	Planning meals	1	2	3

REMEMBER : Only circle those events which have occurred in the past month, i.e., ①		1:	2:	3:
		Somewhat severe	Moderately severe	Extremely severe
24	Concerned about the meaning of life.	1	2	3
25	Trouble relaxing.	1	2	3
26	Trouble making decisions.	1	2	3
27	Problems getting along with fellow workers.	1	2	3
28	Customers or clients give you a hard time.	1	2	3
29	Home maintenance (inside).	1	2	3
30	Concerns about job security.	1	2	3
31	Concerns about retirement.	1	2	3
32	Laid-off or out of work.	1	2	3
33	Don't like current work duties.	1	2	3
34	Don't like fellow workers.	1	2	3
35	Not enough money for basic necessities.	1	2	3
36	Not enough money for food.	1	2	3
37	Too many interruptions.	1	2	3
38	Unexpected company.	1	2	3
39	Too much time on hands.	1	2	3
40	Having to wait.	1	2	3
41	Concerns about accidents.	1	2	3
42	Being lonely.	1	2	3
43	Not enough money for health care.	1	2	3
44	Fear of confrontation.	1	2	3
45	Financial security.	1	2	3
46	Silly practical mistakes.	1	2	3

REMEMBER : Only circle those events which have occurred in the past month, i.e., ①		1:	2:	3:
		Somewhat severe	Moderately severe	Extremely severe
47	Inability to express yourself	1	2	3
48	Physical illness.	1	2	3
49	Side effects of medication.	1	2	3
50	Concerns about medical treatment.	1	2	3
51	Physical appearance.	1	2	3
52	Fear of rejection.	1	2	3
53	Difficulties with falling pregnant.	1	2	3
54	Sexual problems that result from physical problems.	1	2	3
55	Sexual problems other than those resulting from physical problems.	1	2	3
56	Concerns about health in general.	1	2	3
57	Not seeing enough people.	1	2	3
58	Friends or relatives too far away.	1	2	3
59	Preparing meals.	1	2	3
60	Wasting time.	1	2	3
61	Auto maintenance.	1	2	3
62	Filling out forms.	1	2	3
63	Neighbourhood deterioration.	1	2	3
64	Financing children's education.	1	2	3
65	Problems with employees.	1	2	3
66	Problems on job due to being a woman or man.	1	2	3
67	Declining physical abilities.	1	2	3
68	Being exploited.	1	2	3
69	Concerns about bodily functions.	1	2	3

REMEMBER :

Only circle those events which have occurred in the past month, i.e.,

- 1: Somewhat severe
 2: Moderately severe
 3: Extremely severe

70	Rising prices of common goods.	1	2	3
71	Not getting enough rest.	1	2	3
72	Not getting enough sleep.	1	2	3
73	Problems with aging parents.	1	2	3
74	Problems with your children.	1	2	3
75	Problems with persons younger than yourself.	1	2	3
76	Problems with your lover.	1	2	3
77	Difficulties seeing or hearing.	1	2	3
78	Overloaded with family responsibilities.	1	2	3
79	Too many things to do.	1	2	3
80	Unchallenging work.	1	2	3
81	Concerns about meeting high standards.	1	2	3
82	Financial dealings with friends or acquaintances.	1	2	3
83	Job dissatisfaction.	1	2	3
84	Worries about decisions to change jobs.	1	2	3
85	Trouble with reading, writing, or spelling abilities.	1	2	3
86	Too many meetings.	1	2	3
87	Problems with divorce or separation.	1	2	3
88	Trouble with arithmetic skills.	1	2	3
89	Gossip.	1	2	3
90	Legal problems.	1	2	3
91	Concerns about weight.	1	2	3
92	Not enough time to do the things you need to do.	1	2	3

REMEMBER : Only circle those events which have occurred in the past month, i.e., ①		1: Somewhat severe	2: Moderately severe	3: Extremely severe
93	Television.	1	2	3
94	Not enough personal energy.	1	2	3
95	Concerns about inner conflicts.	1	2	3
96	Feel conflicted over what to do.	1	2	3
97	Regrets over past decisions.	1	2	3
98	Menstrual (period) problems.	1	2	3
99	The weather.	1	2	3
100	Nightmares.	1	2	3
101	Concerns about getting ahead.	1	2	3
102	Hassles from boss or supervisor.	1	2	3
103	Difficulties with friends.	1	2	3
104	Not enough time for family.	1	2	3
105	Transportation problems.	1	2	3
106	Not enough money for transportation.	1	2	3
107	Not enough money for entertainment and recreation.	1	2	3
108	Shopping.	1	2	3
109	Prejudice and discrimination from others.	1	2	3
110	Property, investments or taxes.	1	2	3
111	Not enough time for entertainment and recreation.	1	2	3
112	Yardwork or outside home maintenance.	1	2	3
113	Concerns about news events.	1	2	3
114	Noise.	1	2	3
115	Crime.	1	2	3

<p>REMEMBER : Only circle those events which have occurred in the past month, i.e., ①</p>		<p>1: Somewhat severe 2: Moderately severe 3: Extremely severe</p>		
116	Traffic.	1	2	3
117	Pollution.	1	2	3
118	Have I missed any of your important events ? If so, write them in below.	1	2	3
119	One more thing: Has there been a change in your life that affected how you answered this scale ? If so, tell me what it was :	1	2	3

APPENDIX 5 - THE UPLIFTS SCALE

QUESTIONNAIRE 3**NAME :****INSTRUCTIONS**

Listed in the centre of the following pages are a number of events which can make a person feel good, satisfied or peaceful.

To complete the questionnaire, first decide which of these events have happened to you **in the past month**. If it has occurred in the past month, circle the item in the left hand column as follows :

① Getting enough sleep.

Do **not** circle those events which have not occurred in the past month.

Then, look at the numbers on the right of the items you have circled. Indicate how often each of the **circled events** has occurred in the past month by circling a:

- 1 (somewhat often), or
- 2 (moderately often), or
- 3 (extremely often).

This can be completed as follows :

① Getting enough sleep 1 ② 3

REMEMBER : Only circle those events which have occurred in the past month, i.e., ①		1:	2:	3:
		Somewhat often	Moderately often	Extremely often
1	Getting enough sleep.	1	2	3
2	Practising your hobby.	1	2	3
3	Being lucky.	1	2	3
4	Saving money.	1	2	3
5	Nature.	1	2	3
6	Liking fellow workers.	1	2	3
7	Not working (on vacation, laid-off, etc.).	1	2	3
8	Gossiping: "shooting the bull."	1	2	3
9	Successful financial dealings.	1	2	3
10	Being rested.	1	2	3
11	Feeling healthy.	1	2	3
12	Finding something presumed lost.	1	2	3
13	Recovering from illness.	1	2	3
14	Staying or getting in good physical shape.	1	2	3
15	Being with children.	1	2	3
16	"Pulling something off": getting away with something.	1	2	3
17	Visiting, phoning, or writing someone.	1	2	3
18	Relating well with your spouse or lover.	1	2	3
19	Completing a task.	1	2	3
20	Giving a compliment.	1	2	3
21	Meeting family responsibilities.	1	2	3
22	Relating well with friends.	1	2	3
23	Being efficient.	1	2	3

REMEMBER : Only circle those events which have occurred in the past month, i.e., ①		1:	2:	3:
		Somewhat often	Moderately often	Extremely often
24	Meeting your responsibilities.	1	2	3
25	Quitting or cutting down on alcohol.	1	2	3
26	Quitting or cutting down on smoking.	1	2	3
27	Solving an ongoing practical problem.	1	2	3
28	Daydreaming.	1	2	3
29	Weight.	1	2	3
30	Financially supporting someone who does not live with you.	1	2	3
31	Sex.	1	2	3
32	Friendly neighbours.	1	2	3
33	Having enough time to do what you want.	1	2	3
34	Divorce or separation.	1	2	3
35	Eating out.	1	2	3
36	Having enough (personal) energy.	1	2	3
37	Resolving inner conflicts.	1	2	3
38	Being with older people.	1	2	3
39	Finding no prejudice or discrimination when you expect it.	1	2	3
40	Cooking.	1	2	3
41	Capitalizing on an unexpected opportunity.	1	2	3
42	Using drugs or alcohol.	1	2	3
43	Life being meaningful.	1	2	3
44	Being well-prepared.	1	2	3
45	Eating.	1	2	3
46	Relaxing.	1	2	3

REMEMBER : Only circle those events which have occurred in the past month, i.e., ①		1: Somewhat often	2: Moderately often	3: Extremely often
47	Having the "right" amount of things to do.	1	2	3
48	Being visited, phoned, or sent a letter.	1	2	3
49	The weather.	1	2	3
50	Thinking about the future.	1	2	3
51	Spending time with family.	1	2	3
52	Home (inside) pleasing to you.	1	2	3
53	Being with other people.	1	2	3
54	Buying things for the house.	1	2	3
55	Reading.	1	2	3
56	Shopping.	1	2	3
57	Smoking.	1	2	3
58	Buying clothes.	1	2	3
59	Giving a present.	1	2	3
60	Getting a present.	1	2	3
61	Becoming pregnant or contributing thereto.	1	2	3
62	Having enough money for health care.	1	2	3
63	Travelling or commuting.	1	2	3
64	Doing yard work or outside housework.	1	2	3
65	Having enough money for transportation.	1	2	3
66	Health of a family member improving.	1	2	3
67	Resolving conflicts over what to do.	1	2	3
68	Thinking about health.	1	2	3
69	Being a "good" listener.	1	2	3

REMEMBER : Only circle those events which have occurred in the past month, i.e., ①		1: Somewhat often	2: Moderately often	3: Extremely often
70	Socializing (parties, being with friends, etc.).	1	2	3
71	Making a friend.	1	2	3
72	Sharing something.	1	2	3
73	Having someone listen to you.	1	2	3
74	Your yard or outside of house is pleasing.	1	2	3
75	Looking forward to retirement.	1	2	3
76	Having enough money for entertainment and recreation.	1	2	3
77	Entertainment (movies, concerts, TV, etc).	1	2	3
78	Good news on local or world level.	1	2	3
79	Getting good advice.	1	2	3
80	Recreation (sport, games, hiking, etc.).	1	2	3
81	Paying off debts.	1	2	3
82	Using skills well at work.	1	2	3
83	Past decisions "panning out".	1	2	3
84	Growing as a person.	1	2	3
85	Being complimented.	1	2	3
86	Having good ideas at work.	1	2	3
87	Improving or gaining new skills.	1	2	3
88	Job satisfying despite discrimination due to your sex.	1	2	3
89	Free time.	1	2	3
90	Expressing yourself well.	1	2	3
91	Laughing.	1	2	3
92	Vacationing without spouse or children.	1	2	3

REMEMBER : Only circle those events which have occurred in the past month, i.e., ①		1:	Somewhat often	
		2:	Moderately often	
		3:	Extremely often	
93	Liking work duties.	1	2	3
94	Having good credit.	1	2	3
95	Music.	1	2	3
96	Getting unexpected money.	1	2	3
97	Changing jobs.	1	2	3
98	Dreaming.	1	2	3
99	Having fun.	1	2	3
100	Going some-place that's different.	1	2	3
101	Deciding to have children.	1	2	3
102	Enjoying non-family members living in your house.	1	2	3
103	Pets.	1	2	3
104	Car working / running well.	1	2	3
105	Neighbourhood improving.	1	2	3
106	Children's accomplishments.	1	2	3
107	Things going well with employee(s).	1	2	3
108	Pleasant smells.	1	2	3
109	Getting love.	1	2	3
110	Successfully avoiding or dealing with bureaucracy or institutions.	1	2	3
111	Making decisions.	1	2	3
112	Thinking about the past.	1	2	3
113	Giving good advice.	1	2	3
114	Praying.	1	2	3
115	Meditating.	1	2	3

REMEMBER : Only circle those events which have occurred in the past month, i.e., ①		1:	2:	3:
		Somewhat often	Moderately often	Extremely often
116	Fresh air.	1	2	3
117	Confronting someone or something.	1	2	3
118	Being accepted.	1	2	3
119	Giving love.	1	2	3
120	Boss pleased with your work.	1	2	3
121	Being alone.	1	2	3
122	Feeling safe.	1	2	3
123	Working well with fellow workers.	1	2	3
124	Knowing your job is secure.	1	2	3
125	Feeling safe in your neighbourhood.	1	2	3
126	Doing volunteer work.	1	2	3
127	Contributing to charity.	1	2	3
128	Learning something.	1	2	3
129	Being "one" with the world.	1	2	3
130	Fixing / repairing something (besides at your job).	1	2	3
131	Making something (besides at your job).	1	2	3
132	Exercising.	1	2	3
133	Meeting a challenge.	1	2	3
134	Hugging and / or kissing.	1	2	3
135	Flirting.	1	2	3

<p>REMEMBER : Only circle those events which have occurred in the past month, i.e., ①</p>		<p>1: Somewhat often 2: Moderately often 3: Extremely often</p>		
136	<p>Have I missed any of your important events ? If so, write them in below.</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	1	2	3
137	<p>One more thing: Has there been a change in your life that affected how you answered this scale ? If so, tell me what it was :</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	1	2	3