

STRESS, DEPRESSION AND WORK/HOME ROLE CONFLICT IN WORKING MOTHERS

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ABSTRACT

Stress and clinical depression are two problems that affect organisations as they impair work performance and cost organisations and economies millions. One stressor that may lead to stress or depression is work/home role conflict. It is considered relevant for working mothers, since they tend to carry greater domestic responsibility.

A questionnaire was utilised to explore stress, depression and work/home role conflict in 59 working mothers in this study. Number and ages of children, relationship status, support, coping and workload, work clarity, control and satisfaction were included. Six subjects at management level were also interviewed to gauge their understanding and management of these issues.

Results revealed that work/home role conflict was not significant for this sample, but half appeared clinically depressed. Stress and depression were positively correlated, while support and coping were negatively correlated to stress and depression. Stress and depression were also negatively correlated to workload, clarity and satisfaction.

DECLARATION

I declare that this research report is my own, unaided work. It is submitted in partial fulfilment of the requirements of the degree of Master of Management in Human Resources in the University of Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

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1 INTRODUCTION

1.1 RELEVANCE OF RESEARCH ON STRESS AND DEPRESSION

Clinical depression is ranked as one of the most costly illnesses of the world, together with heart disease, cancer and AIDS, and it may be even more widespread. According to the United States (US) National Institute of Mental Health, clinical depression affects more than 17,5 million adults each year and it costs society billions annually (Johnson & Indvik, 1997). The World Health Organisation (WHO) predicts that depression will be one of the disabling illnesses of the future, and it should be a concern for employers for several reasons.

The health status of the workforce in every country has an immediate and direct impact on national and world economies. Total economic losses due to occupational illness and injury are high (WHO, 1999a). A share of these costs is borne by employers, including the cost of depression. Depression costs the US economy approximately \$43 billion each year in absenteeism from work, lost productivity and direct treatment costs. It equals the cost of heart disease and, according to leading author Ron Goetzel (1998), it has greater impact on health costs than smoking, obesity or high blood pressure. The cost of depression to employers is up to \$3 000 for each affected employee, two-thirds of which is related to absenteeism and lost productivity. If left untreated, depression is even more expensive (Johnson & Indvik, 1997). It is not only an American

problem. Depression and stress are becoming two of the greatest occupational health problems in other countries (Imray, 1998).

Although depression is an illness that affects individuals, it is also a workplace problem. This is because the workplace is the setting in which most people spend the largest proportion of their time outside of the home environment (Baron & Byrne, 1991), and problems either originate in that setting or are brought to it. Furthermore, the quality and nature of individuals' experiences in their workplace have implications for their mental and physical health (Grobler & Hiemstra, 1998). Depression is ranked among the worst three workplace problems, following only family crisis and stress (Grobler & Hiemstra, 1998).

Depression appears to occur more commonly in people between the ages of 24 and 44. These are the prime working years, when individuals should be at their most productive and functional (Johnson & Indvik, 1997). The problem has physical, psychological, emotional and behavioural consequences that diminish the affected individual's ability to cope and perform (American Psychiatric Association, 1994). It can be debilitating and even fatal. Suicides due to depression cost the US economy approximately \$7 billion annually (Johnson & Indvik, 1997).

The relationship between stress and depression further compounds the problem. Stress and depression have many similar symptoms and

causes, and research indicates that there is a direct relationship between inordinate degrees of stress and psychological disorders, such as depression (Csosz, 1996). Furthermore, the experience of stress in the workplace and in general living appears to be increasing. This is especially relevant in South Africa, which is regarded as one of the most highly stressed societies in the world, with many social problems that can lead to both high stress and depression levels (PSYSSA, 1997).

1.2 RELEVANCE TO MANAGEMENT IN SOUTH AFRICA

In order for a country to achieve economic growth, its population has to be productive. With the impact of globalisation, organisations are under pressure to maximise their productivity and diminish their costs. The problem, however, is that in a stressful society such as South Africa, this stress can impact negatively on the performance of employees. This is compounded by an illness such as depression, that can remain undetected and untreated for months or years, but has a negative impact on employees' functioning, which affects the South African economy negatively. According to the National Council for Mental Health, it is estimated that stress costs SA over R500 million annually in lost productivity, absenteeism, loss of purchasing power, alcoholism and treatment of emotional problems (Csosz, 1996). The cost of depression is similar. If organisations wish to maximise employee performance, they need to be aware of the levels of stress and depression in the country and in their organisation, so as to manage them appropriately.

1.3 REASONS FOR SELECTING THE CURRENT RESEARCH

There has been extensive research into organisational stress, especially since the 1980s, since for most working individuals stress can be work-related. This is often referred to as work pressure. Low morale and absenteeism are clear indicators of stress in the workplace, and some of the more common sources of stress experienced at work are associated with the occupation itself, the employee's role in the organisation, career development, relationships at work, and the organisational structure and climate. Management styles and management systems can also affect the incidence of work stress (Schlebusch, 1999).

Home variables may also contribute to the experience of stress, and the combination of these factors, as well as the conflict between the demands of work and home have been acknowledged as potentially stress-inducing. This is especially relevant to working mothers who still have internal and external conflicts regarding their caregiver and work roles. In addition, women tend to bear the greater burden of home and childcare demands, which may lead to greater work/home role conflict. Such role conflict can lead to both stress and/or depression and women are more vulnerable to depression than men. Hence, it is important to explore these interrelationships between work/home role conflict, stress and depression since they influence the performance of vulnerable individuals. Both stress and depression impact negatively on individuals' performances, and some of their symptoms may be misinterpreted as lack

of motivation or commitment or as an attitude problem. From a management perspective, a lack of understanding regarding stress and depression can result in ineffective or inappropriate ways in which such individuals are managed.

1.4 RESEARCH OBJECTIVES

The aim of the study was therefore to explore the levels of stress and depression in a sample of the working population. The main objective was to explore the levels of, and the interrelationships between stress, depression and work/home role conflict in working mothers. Other variables known to contribute towards, exacerbate or mediate these relationships were also explored. These variables included certain occupational factors, such as work demand, work clarity, work control, work satisfaction. They also included the presence of social support and use of coping strategies. The study was different in regard to its exploration of both stress and depression. Little research literature is available on the experience of depression in working mothers, and on the specific relationship between work/home role conflict and depression. Most studies to date have focused on the experience of stress alone. As there is a complex relationship between stress and depression, it was not possible to exclude the effect of stress in the relationship. Thus, exploring the influence of these stressors as both stress- and depression-inducing was an important part of this study.

A second objective of the study was to explore some management perspectives on stress, depression and work/home role conflict. In order for management to be effective, they need to understand what impact work/home role conflict, stress and depression have on the behaviour, personality and performance of individuals. This part of the study explored the understanding and perspectives of managers within the sample, and how they managed or would manage these eventualities.

2 LITERATURE REVIEW

2.1 DEPRESSION

2.1.1 CLINICAL DESCRIPTION OF DEPRESSION

It is normal for every individual to experience feelings of sadness or helplessness over the inconveniences of daily living. Almost everyone has or will, at some time or another, experience 'the blues' – a low, sad feeling or mood that goes away after a short time (Johnson & Indvik, 1997). Clinical depression, however, is different from 'the blues'. It is enduring and is more intense. It is characterised by a persistent mood of sadness or emptiness. There are both psychological and physical symptoms (Johnson & Indvik, 1997).

The physical symptoms include changes in sleeping and eating patterns and loss of energy or fatigue, as well as persistent physical symptoms, such as headaches, chronic back pain or digestive disorders, that do not respond to medical treatment (Johnson & Indvik, 1997; Sumner, 1998). The psychological symptoms are more numerous and include loss of interest and pleasure in activities previously enjoyed, difficulty in concentrating or making decisions, difficulty in expressing feelings, excessive worrying and pessimism, and feelings of guilt, hopelessness and worthlessness. These are usually accompanied by withdrawal from social interaction, apathy, restlessness and irritability, frequent crying

spells, generalised feelings of dissatisfaction and thoughts of suicide or death (Johnson & Indvik, 1997; Sumner, 1998).

Depression is a “whole-body illness” that is distinguished by its severity, intensity and duration (Johnson, & Indvik, 1997, p.360). It negatively affects how the body feels, and determines the mood of the depressed individual, what the depressed individual thinks, and how he/she acts (Johnson & Indvik, 1997). It has been defined as the persistent and sustained feeling that the self is worthless, the world meaningless and the future hopeless (West, 1992). Depression is recognised as a real, diagnosable illness (Sumner, 1998) and is classified as a mental illness in the Diagnostic and Statistical Manual for Mental Disorders (DSM 4) (APA, 1994) and the International Classification of Diseases (ICD9) published by WHO (Sartorius, 1991).

According to the DSM 4 (APA, 1994), the essential feature of depression is a period of at least two weeks during which there is either depressed mood or the loss of interest or pleasure in nearly all activities. This loss of interest or pleasure is nearly always present to some degree. Depressed individuals feel as if “they do not care anymore” (APA, 1994, p.321). They do not enjoy activities they enjoyed previously and they often withdraw socially. In order to be classified as depression, these symptoms need to be accompanied by at least four additional symptoms which include the following:

- Changes in appetite or weight, sleep and psychomotor activity

The most common sleep disturbance is insomnia, and psychomotor retardation must be severe enough to be noticed by others.

- Decreased energy

Tiredness and fatigue are common and the smallest tasks require effort. As a result of this, efficiency may be compromised.

- Feelings of worthlessness or guilt

Unrealistic, negative, and distorted evaluations of personal worth are experienced, and guilty preoccupation with minor mistakes or failings. Misinterpretation of events as personal defects or personal attacks by others is common.

- Difficulty thinking, concentrating or making decisions

There are measurable impairments in cognitive abilities, with diminished attention, concentration, memory and judgement.

- Recurrent thoughts of death or suicide, possibly with plans and/or attempts

There is often a belief that the death of the self would be a relief for the self and others. Depression is a risk factor for suicide, with mortality as high as 15% of depressed individuals.

To be considered as symptoms of depression, these must persist for most of the day, nearly every day for at least two consecutive weeks. They must be accompanied by clinically significant distress and/or an interference in functioning. There may be diminished functioning

regarding all aspects of life: occupational, academic, marital and social. The degree of impairment varies. In milder episodes, functioning may appear normal, but for the depressed individual, functioning requires much more effort than previously. Some individuals may experience difficulty in intimate relationships, less satisfaction in social interactions, or difficulty in sexual relationships (West, 1992; APA, 1994).

In addition, depressed individuals frequently present with tearfulness, irritability in the form of persistent anger, angry outbursts, blaming of others or an exaggerated sense of frustration over minor matters, as well as anxiety, brooding, excessive worry over physical health and complaints of pain or somatic complaints. Depressed individuals have more health complaints than non-depressed individuals and receive more medical attention (APA, 1994). In medical settings, such individuals complain of more pain and physical illness. Depression lowers the tolerance threshold for the perception of pain, and powerfully influences the way in which it is evaluated (Baumann, 1994). Depression is often a consequence of chronic medical conditions, such as diabetes and cancer (APA, 1994).

The ICD9 describes the illness similarly. According to the ICD9, depressive disorders are characterised by depressed mood, loss of interest and enjoyment and reduction of energy, leading to increased fatigue and diminished activity. Marked tiredness after slight effort is

common. Other symptoms are reduced concentration and attention, reduced self-esteem and self-confidence, ideas of guilt and unworthiness, bleak and pessimistic views of the future, ideas or acts of self-harm or suicide, disturbed sleep and diminished appetite. The lowered mood varies little from day to day and is often unresponsive to circumstances but may show a characteristic diurnal variation as the day progresses (Sartorius, 1991). In some cases anxiety, distress and motor agitation may be more prominent and there may be added features such as irritability, excessive consumption of alcohol, histrionic behaviour, worsening of pre-existing fears, obsessions or health preoccupations (Sartorius, 1991). Somatic symptoms may also be present and include waking in the morning two hours or more before the usual time, worse depression in the mornings, objective evidence of psychomotor retardation or agitation, marked loss of appetite, weight loss and marked loss of libido (Sartorius, 1991). Loss of interest or pleasure in activities which are normally pleasant and lack of emotional reactivity to pleasurable surroundings and events is also characteristic, and these symptoms all concur with Johnson & Indvik (1997), Sumner (1998) and the DSM 4 (APA, 1994).

Although depression is regarded as a mental illness, it is also a physical illness. Since the 1970s, numerous biological investigations indicated that depression is associated with definite biological changes. These include sleep parameters, neuroendocrine function, circadian rhythms, regional

cerebral blood flow, brain glucose metabolism, water and electrolyte balance and immune system parameters (Boyer & Feighner, 1991). The major implication of these findings was that depression is now regarded as a systemic medical illness with widespread primary and secondary manifestations throughout the body. A further implication was that depression could be caused by multiple biological pathways (Boyer & Feighner, 1991).

There are numerous physical illnesses that may be associated with the disorder in a 'causative' role, as well as effects of certain medications. The illnesses include circulatory, endocrine, gastrointestinal, haematological, infectious, malignant, neurological and other illnesses. Some examples are thyroid dysfunction, diabetes, viral infections, hepatitis, encephalitis, carcinomas, Parkinson's, cerebral vascular accidents and systemic lupus, to mention but a few. There is an even longer list of medications, including analgesics, anticonvulsants, antibiotics, antihypertensives, antihistamines, antivirals and antineoplastics (Boyer & Feighner, 1991).

In terms of the contribution of family variables in depression, both genetics and environmental aspects have been researched. Studies showed a strong genetic contribution to all mood disorders, but as yet it is not known what factors determined whether or not an illness occurred. Family environmental variables are harder to study but it has been

suggested that variables such as early parental loss or rejection are of relevance (Boyer & Feighner, 1991).

Thus, according to both the DSM and ICD, depression is recognised as a diagnosable illness with a specified course, symptomatology and treatment. The causes of depression appear to be many and are seldom traceable to a single factor. The condition is often a combination of an individual's biological predisposition, psychological attributes such as a tendency towards pessimism and low self-esteem and environmental factors such as the experience of trauma or loss, or exposure to long-term stress (Johnson & Indvik, 1997). Loss, including bereavement, as well as indirect losses, such as loss of status or self-esteem, has often been associated with the onset of depressive episodes (West, 1992). Work situations are also stressful and may lead to depression (Johnson & Indvik, 1997).

2.1.2 CULTURAL AND SOCIAL DIFFERENCES IN DEPRESSION

Culture can influence the experience and communication of symptoms. Firstly, in some languages there is no word for depression and in the past the illness was claimed to barely exist in some parts of the world, including Africa and China. Since the 1990s, however, depression has been widely recognised throughout the world. It is the presentation and manifestation that differs between cultures. In some cultures, the illness may be more likely to be experienced in somatic terms, rather than as

sadness. According to Montgomery (1991), Eastern and African cultures report more somatic symptoms, whereas Western cultures report more dysphoria and guilt. Lopez-Ibor (1991) concurs with this and maintains that in Western countries, the mood alteration is more common, while in other countries, disorders of circadian and other rhythms, as well as somatic symptoms are more relevant. This seems to be the case in South African cultures where depressed individuals of African heritage present more often with somatic complaints than sadness. For example, depressed individuals complain of 'nerves', headaches, weakness, tiredness, and feeling 'heartbroken' or 'heartsore'. Culture also influences the perceptions and interpretation of symptoms. For example, in some cultures, irritability may be of greater concern than sadness (APA, 1994).

Other social variables that have been correlated with depression are socioeconomic status (SES), education and marital status. One of the largest studies done in the US, the Epidemiological Catchment Area (ECA) study, revealed that current rates of depression were higher for lower SES classes, while lifetime rates were higher among upper classes. Although SES did not have an effect on depression per se, rates of depression were lower among employed and/or financially independent individuals, while the unemployed or those dependent on public assistance had a threefold increased risk for major depression. The causal direction was not clear since individuals with depression are less likely to be able to obtain or maintain employment, while being

unemployed brings its own psychological stress which increases the risk of precipitating or perpetuating depression (Smith & Weissman, 1991). Higher education is also associated with fewer depressive symptoms and lower education with depression. This is based on the assumption that lower education is associated with deficient coping skills, whereas higher education provides an increase in knowledge and skills that can enhance individuals' coping potential as well as their sense of competence, mastery and life control (Rapmund, 1995).

The ECA study also revealed that married (and never divorced) persons had the lowest prevalence of depression, while divorced and cohabitating people had the highest. Separated or divorced individuals had a risk two to three times greater for depression than those with any other status (Smith & Weissman, 1991). This confirmed previous studies that consistently suggested that subjective reports of happiness and/or well-being were correlated with marital status (Carson & Butcher, 1992). In terms of the risk for women, a study by Brown & Harris (Smith & Weissman, 1991) reported that women with close, confiding, reciprocal relationships with their partner were four times less likely to develop depression under stress.

2.1.3 GENDER DIFFERENCES IN DEPRESSION

Women are more at risk for depression than men (APA, 1994). Studies consistently indicate that depression occurs twice as frequently in women

than men and that this ratio is remarkably consistent across cultures (Smith & Weissman, 1991). Studies reviewed by Weissman & Klerman (Smith & Weissman, 1991) indicated that this 'gender gap' was not simply due to women's greater help-seeking behaviour.

There are various hypotheses regarding this difference. Some maintain it is biological because of the hormonal differences between men and women, which may be supported by the fact that symptoms are often worse a few days before menstruation. Other writers believe that there is a social basis. They believe that women, more than men, are socialised in such a way that may predispose them to depression (Carson & Butcher, 1992).

In terms of biological factors, certain physiological and biological changes are associated with the female reproductive system that predispose women to depression and help to maintain it (Rapmund, 1995). These include pregnancy, the postpartum period and menopause. During pregnancy, it is estimated that 10 to 12% of mothers experience chronic depression. These figures are even higher for the postpartum period. Up to 30% of all new mothers experience clinical depression and/or anxiety after childbirth. Most postnatal depressions do resolve spontaneously within six months, but a number of follow-up studies indicated that 25% of affected mothers were still depressed after one year and also after three years. These studies also revealed decreasing self-esteem and

confidence, and strain on marital and family relationships (Kumar & Robson, 1984).

However, postpartum depression is not solely due to the biological component. Childbirth has an impact on a woman's role and status. The mother changes from a 'childless woman' to a 'mother' which influences her relationships with her family members, partner and society. There may also be an experience of loss after childbirth as attention is diverted to the new child from the recently pregnant mother. Thus, this period requires psychological adjustment. The mother is vulnerable at this time and her self-esteem may be threatened. Furthermore, most of the responsibility of caring for the new child rests on the mother and, without adequate support, this responsibility may be perceived as overwhelming (Rapmund, 1995).

Thus biological factors alone do not account for the greater prevalence of depression in women than men. Psychological and societal factors also contribute. Typical feminine characteristics often correspond with characteristics of a depressed person, such as passivity, greater emotionality, low self-esteem and so on. Despite many changes in attitudes towards women, they are still socialised to some extent to be passive, submissive, nurturing, caring and dependent on their partner (Rapmund, 1995). Women's traditional reliance on and identification with their social relationships thus often predisposes them to depression. For

example, it has been suggested in some research that women most often become depressed because of disruption or conflict in close relationships. Relationships are important to women's self-esteem in that it allows them to feel important and effective (Rapmund, 1995). Other research indicates that women's cognitive and coping styles increase their vulnerability to depression. Researchers at the University of Michigan supported the idea that women were more vulnerable to depression because they were more likely to experience long-term strain in their lives, to feel like they had less control over their lives and to rely on coping strategies that involved repetitive thoughts about the causes, meanings and consequences of their stress in the absence of active efforts to do anything about it (Rapmund, 1995).

2.1.4 UNDETECTED DEPRESSION

It is estimated that depression affects between five and 15% of the adult population at a given time, with a lifetime incidence rate between 20% and 55% (Rajendral, Pillay & Bhana, 1999).

Depression may begin at any age and its course is variable. It can develop over days, weeks or months and can last from weeks to years. In the majority of cases, there is complete remission of symptoms and a return to the previous level of functioning (APA, 1994). On the other hand, in a significant proportion (20% to 30%) of cases, some symptoms that are insufficient to meet the full diagnostic criteria for clinical depression

may persist for months or years and may continue to impair functioning and cause distress. Follow-up naturalistic studies have suggested that one year after diagnosis, 40% of individuals still had sufficient symptoms to meet the diagnostic criteria; 20% continued to have symptoms that did not meet the criteria, and 40% had no disorder. Thus, it appeared that a large proportion of depressed individuals, even after diagnosis and treatment, continued living with symptoms that caused disruption to and impairment of their lives (APA, 1994).

Based on their estimated lifetime risk of depression and the figure of 15% who do not completely recover from the illness, the US National Institute of Mental Health concluded that one out of three individuals will develop chronic depression. This “low grade chronic misery” (Akiskal, 1991, pg. 150) is believed to entail greater suffering and disability than most chronic physical conditions. Despite this, limited psychiatric attention is paid to it because it does not meet the full diagnostic criteria. Such patients are major utilisers of the general medical care system, which affects the economy (Akiskal, 1991).

However, these figures do not include the millions who remain undiagnosed and untreated. According to a community screening programme in the US, the scores of 70% (over 200 000) of individuals who were screened with the Zung depression inventory were consistent with depression, and 94% of those were receiving no current treatment

(Jacobs, 1999). Furthermore, 22% (almost 70 000 persons) scored in the severe range, and only 13% of those were receiving treatment. Other screening-type programmes yielded similar results. For example, a depression symptom checklist was published in an American magazine with a telephone number for a voluntary screening programme (Jacobs, 1999). In a two-week period, 106 467 calls were received. Of those screened, 60.2% were identified with mild-to-moderate depression; 20.9% with moderate-to-severe depression and only 18.9% with no depressive symptoms. Once again, only 13% of the depressed individuals who were identified were receiving treatment. The demographics of these individuals suggested nothing out of the ordinary, so the implication was that possibly more than 50% of the American population were living and working with an illness that impaired the ability to function optimally (Jacobs, 1999).

Research conducted in South Africa yielded similar findings. Since depressed patients often present to their General Practitioner with somatic symptoms, Rajendral, Pillay & Bhana (1999) conducted studies at general medical practices in the Durban area to assess whether any patients were experiencing undetected depression. The results of both studies indicated that, between 42% and 44% of patients had symptoms that would support a mood disorder based on their responses to a standardised depression inventory, the Beck Depression Inventory. This suggested that the incidence of depression appeared to be high in

general practice. In fact, depression was the second most frequently seen psychiatric disorder in general practice, but, according to the findings of the study, it was often undetected (Rajendral *et al*, 1999).

Depression is often a diagnostic problem because many of the typical somatic symptoms of depression such as tiredness, irritability, and changes in appetite are the same in many different medical disorders (Wilson, 1994). As a result, depression is often mistaken for other illnesses and many individuals are unaware that they could be suffering from it. The symptoms may be diagnosed as stress, which is a common mistake because of similarities between stress and depression. Consequently, because of the difficulties associated with diagnosis and the levels of undetected illness, depression is considered an “invisible illness” (Johnson & Indvik, 1997, p.361). However, because it is one of the most frequently diagnosed psychiatric illnesses, it is also considered the “common cold” of mental health (Johnson & Indvik, 1997, p.360).

The problem with this illness, however, is that unlike the “common cold”, it does not go away in a few days and has greater ramifications on individuals’ functioning. These extend into the workplace.

2.1.5 DEPRESSION IN THE WORKPLACE

The symptoms of depression are pervasive. They follow individuals to the workplace and impair their ability to fulfil their work role optimally, in terms

of quantity and quality of work. This can manifest in many ways, and decreased productivity is often most obvious (Johnson & Indvik, 1997). Depression negatively affects workers' productivity, judgement, ability to work with others, and overall job performance. It can lead to costly mistakes or accidents, as well as health problems (Johnson & Indvik, 1997).

Due to these health problems and the fatigue that is experienced by depressed people, there is often excessive absenteeism, and research confirms this (Sumner, 1998). National studies in the US revealed that the average number of days absent from work due to illness is the highest in cases of depression. Employees with depression took an average of 40 days, which was higher than that for heart disease (37 days), other mental health problems (37), back pain (33), high blood pressure (28) and diabetes (28) (Sumner, 1998).

Depressed individuals work slower than normal and lack interest and involvement in their work. As a result of their diminished ability to concentrate or make decisions, depressed individuals often experience difficulty in following instructions, meeting deadlines and contributing in meetings. They may make frequent mistakes or bad decisions, which may lead to safety problems and accidents at work. They may withdraw from work colleagues because of the problems in social functioning, compounded by lack of co-operation and low morale. Some depressed

individuals attempt to medicate themselves with alcohol and drugs and are more likely to abuse these substances, which has an impact at the workplace and at home (Johnson & Indvik, 1997).

Due to the economic costs of depression and the impact it has on workers' productivity, the problem of depression is relevant to organisations and their management. Johnson & Indvik (1997) maintain that management need to recognise that their single highest mental (and medical) health and disability cost is probably depression. Depression needs to be given the same attention as chemical dependency, heart disease and so on. It is recommended that employee assistance programmes include education and support for depression, and many US companies, such as Xerox, Ford Motor and Pacific Bell have implemented anti-depression programmes. Eli Lilly, the manufacturer of Prozac, the well known medication for depression, is aware of the economic impact of depression on companies and markets Prozac as a cure for "depressed corporate productivity" (Johnson & Indvik, 1997, p.361).

2.2 STRESS

2.2.1 UNDERSTANDINGS OF STRESS

Stress has become a well-known concept. There are frequent articles on stress in the popular press and very many people use the term, at least occasionally, to describe their situation or feelings.

By 1995, over 300 definitions of stress had been proposed, numerous papers written and studies carried out on the sources, symptoms and consequences of stress (Broome, 1995).

Stress can be defined as the physiological, psychological and behavioural responses of an individual seeking to adapt and adjust to both internal and external pressures, demands or constraints (Michal, 1991). Thus, stress is actually the effect of such pressures. These pressures are the sources of stress and are called stressors. Thus, a stressor is an event, situation, person or object that is perceived as a stressful and/or threatening element, and induces a stress reaction as a result (Michal, 1991). An imbalance between the demand and the individual's perceived ability to cope gives rise to the experience of stress and the stress response (Grobler & Hiemstra, 1998).

Stressors can vary widely in nature and can originate from a variety of situations, experiences or emotions, including psychosocial, behavioural and physical sources (Michal, 1991). Examples of broad stressors would fall into categories such as loss, change, conflict, frustration and pressure. Specific stressors include the loss of a loved one or a job, an abusive spousal relationship, having cancer, the inability to buy the things one wants, changing homes, jobs, or cities, completing a diploma or degree, and becoming a parent (Michal, 1991).

McGill's (1999) classification of stressors is very useful. According to McGill (1999), stressors can be divided into three classes: cataclysmic events or extreme stressors, personal stressors or negative life events, and daily hassles. Extreme stressors are those that are characterised as unable to be avoided, where opportunities to escape are extremely limited, where minimal control can be exercised over the event and where there are no predictors of the end of the stressor. Personal stressors or negative life events include divorce, death of a loved one, loss of a job, a disabling injury, poverty and marital problems. The third class refers to daily hassles or problems that amount to minor annoyances such as traffic jams, mild family conflict, and work-related stressors of smaller, less acute and/or chronic magnitude.

With the experience of any kind of stressor comes the necessity of having to adapt to it. There are physical and psychological reactions to stressors. The physical stress reaction is that of the 'fight or flight' response, and involves the brain and all the bodily functions. With the 'fight or flight' response, various chemicals are sent to different parts of the body to prepare it for action, and this action then uses up those stress chemicals. This reaction originates in the nervous system, and thus intimately affects the perceptual senses, hormonal balance and the immune system. Other systems that are influenced include the cardiovascular, digestive and respiratory systems; as well as the skin and the urogenital tract (Michal, 1991).

The psychological reactions include conscious and subconscious cognitive and behavioural attempts to respond or adapt to the stressor. These are referred to as coping strategies. They include a variety of behaviours, thoughts and emotions and can be constructive and effective or destructive and ineffective (Carson & Butcher, 1992). These will be discussed in more depth later in this report.

Although the stress response always includes a physiological response, it is mediated to a large extent by the perception and interpretation of the individual. The experience of stress is subjective and personal. It begins with the perception and interpretation of an event, and individuals perceive, and interpret events differently because of genetics, the environment and personality variables. Thus, what is interpreted as stressful or threatening varies from one individual to the next. The same event may be perceived as stressful and threatening by one individual, but another individual may be unperturbed by it. The same event may be interpreted differently by the same individual at different times in life because of mood, physical state, resources, context, coping skills and so on (Michal, 1991).

Furthermore, an individual's perception of their ability to cope with an event is crucial. If an individual perceives a situation to be overwhelming, and feels unable to cope, this has a greater negative impact, regardless of

the source of the stress, than if the individual felt challenged and able to respond appropriately and effectively (Michal, 1991). Thus, personality variables have a large impact on the experience of and adaptation to stress. Some of the personality variables that research has shown to be critical in the stress response include locus of control, self-esteem, a 'hardy' personality, attitude towards change and stress (Csosz, 1996).

2.2.2 SYMPTOMS AND CONSEQUENCES OF STRESS

Regardless of the cause, when individuals feel stressed, there are physiological and psychological symptoms and consequences. It is undesirable and impossible to eliminate stress altogether; in fact, organisms require a certain amount of stress to function optimally and to develop. Both health and performance improve with a certain increase in stress, but not indefinitely. There is a point where the continued increase in stress begins to have a negative effect on health and performance. Thus, there is both positive ('eustress') and negative ('distress') stress (Csosz, 1996). The initial positive stress reaction can lead to feelings of vitality, enthusiasm and optimism. It can increase physical stamina and resistance to illness, as well as enhance mental alertness, productivity, creativity and the quality of personal relationships. However, if the stress continues and is inescapable and uncontrollable, the negative phase may result, which leads to feelings of fatigue, irritability, depression and pessimism. There is decreased concentration, efficiency, productivity and creativity. People's adaptive resources become depleted. Illness and

accidents often result, as well as communication and relationship problems (Michal, 1991).

When stress is long-standing, it may induce profound negative effects on the mental and physical well-being of the individual (Chrousos, McCarty, Pacak, Cizza, Sternberg, Gold & Kvetnansky, 1995). This long-term negative effect is partly because of the physiological reaction to stress when the stress chemicals are released to prepare the body for action and are ready to be utilised. This was easier for primitive humankind because people dealt most often with physical, tangible stressors, such as a threat from a dangerous animal. For civilised humankind, it became more complicated. Most of the stressors encountered, such as frustration, conflict, and anxiety, are more psychological or psychosocial in nature, and the mind does not differentiate between a physical or psychological stressor. A threat is a threat, whether real or imagined, and the result is the stress response (Michal, 1991). The problem occurs because it is more difficult to defend the self with the 'fight or flight' response from psychological stressors, and as a result the stress chemicals are not used up. They remain in the body and, over the long term, begin to wear down the body. This is further complicated by the fact that individuals face such psychological stressors or threats numerous times on a daily basis and the same primitive physiological reaction is set in motion each time, which ultimately has a destructive effect on physical and mental well-being.

Research consistently indicates that stress is related to many physical and psychological problems. It has been estimated that up to 75% of all visits to physicians are stress-related (Charlesworth & Nathan, 1986). Stress may be a major contributing and perpetuating factor in many medical problems, including hypertension, coronary heart disease, migraine and tension headaches, ulcers, asthmatic conditions, skin conditions, gastrointestinal disorders, back pain, hyperthyroidism, vertigo and lowered immunity (Charlesworth & Nathan, 1986). Severe prolonged stress may compromise physiological functions, particularly the immune system which results in a decrease in the body's ability to fight diseases, bacteria and viruses (Schlebusch, 1999). Even commonplace stressful events such as academic examinations have been shown to be associated with reduced natural killer cell activity and other changes in cellular immune responses. These changes support the belief that even the stresses of daily living may be associated with immuno-suppression and susceptibility to disease (Robertson, 1998).

Psychologically, stress often contributes to general feelings of dissatisfaction, irritability and temper outbursts, and an increase in unhealthy habits such as substance abuse and overeating. Mental distress in the form of anxiety and depression can also occur, as well as cognitive problems such as diminished attention and concentration, and memory loss (Charlesworth & Nathan, 1986).

Although most individuals are not aware of these subtle internal processes that occur in response to stress, they feel subjectively 'stressed'. Research has suggested that, typically, individuals can experience a whole range of symptoms due to stress, and that individuals report these symptoms. These symptoms can be physical, behavioural and psychological (Csosz, 1996). Some physical symptoms include chest pain, asthma attacks, racing heart and palpitations. Headaches and neck, back and shoulder pain are common. Gastrointestinal disturbances such as constipation, diarrhoea and indigestion may also occur, including intestinal ulcers. Many skin disorders are stress-related, as well as the common complaints of fatigue and contracting influenza (Csosz, 1996). Behavioural symptoms include fidgeting and restlessness, as well as teeth grinding or clenching. There may be appetite and sleep disturbances, which can be exacerbated by an increased intake of sweets, caffeine or other substances. Irritability is also common (Csosz, 1996). The psychological symptoms include thought disturbances, such as racing thoughts or thoughts of suicide, and feelings of helplessness, hopelessness and powerlessness (Csosz, 1996).

2.2.3 STRESS IN THE WORKPLACE

Stress has just as high an impact in the workplace as depression does. Research indicates that both high stress and depression have the greatest economic impact on worker healthcare costs. Costs are 50%

higher for workers who reported being under a lot of stress (Goetzel, 1998; Grimsley, 1999; WHO, 1999b).

Stress has a similar negative effect on job performance as does depression. It can lead to concentration difficulties, which result in decreased productivity and may lead to an increase in accidents and errors. The experience of fatigue and other related health problems increases absenteeism rates. Conflict with co-workers may be a problem because of irritability and lack of commitment. Stress can also lead to dissatisfaction. In fact, job dissatisfaction is considered the “simplest and most obvious psychological effect” of stress (Robbins, 1998, p. 661).

From a management perspective, management may not be overly concerned when employees experience low to moderate stress levels, as a certain amount of stress leads to higher performance. However, high stress levels or chronic lower levels of stress can lead to reduced performance, and thus require some form of action by management (Robbins, 1998). In the last decade or two of the twentieth century, the emphasis on stress and stress management and its implications for the workplace rendered organisations more aware of the need to confront this issue. As a result, many organisations analysed and revised their organisational contexts to decrease stress. For example, the redesigning of jobs to give employees more responsibility, autonomy, meaningful work and increased feedback to reduce stress, as this gave the employee

greater control. Increasing employee involvement in decision-making and formal organisational communication also to reduce stress as this improved role clarity. Organisations also started to implement stress management programmes as part of employee assistance or wellness programmes. These organisational design and development initiatives had an underlying assumption regarding the well-being of the people of an organisation as a goal. This stemmed from their initiatives to improve motivation, communication, satisfaction, processes, systems and so on to alleviate stress and thus improve employee health and well-being. (Robbins, 1998).

2.3 RELATIONSHIP BETWEEN STRESS AND DEPRESSION

Although there are similarities, stress and depression are considered two distinct entities. The concepts are not used interchangeably. The similarities include symptoms such as changes in sleeping and eating patterns, fatigue, irritability, difficulties with attention span, concentration and memory, and disrupted relationships. There are also similar causes for both conditions, such as work problems, relationship difficulties, financial concerns, and physical health worries. Regardless of these similarities, both health professionals and non-professionals view them differently. For the lay person, 'stress' is more socially acceptable. It has become a well-known concept, and a common problem that is generally considered to be external to the individual, whereas depression is

considered to be a mental or psychological problem that carries a stigma (Carson & Butcher, 1992).

The connections between stress and depression are both biological and psychological. Stress has been indisputably linked to the development, exacerbation and maintenance of a myriad of health problems, including psychological and psychiatric health problems (Robertson, 1998). Research has implicated many neurotransmitter systems where the hypothalamus–pituitary–adrenaline axis becomes overactive in patients with high stress levels (Schlebusch, 1999). It is believed that prolonged or excessive stress, or stress in vulnerable individuals accounts for the maladaptive response which results in dysfunction or disease. According to Robertson (1998), the neurotransmitters: adrenaline, noradrenaline and serotonin are important and neurotransmitters are critical to mental health and mental illness. Serotonin, specifically, is an essential neurotransmitter in the physiology and etiology of depression.

Psychological factors are also important, such as coping styles and psychosocial resources. Blalock & Joiner (2000) found that higher levels of stress predicted more anxiety and depression among women who used more cognitive avoidance coping styles than among women who relied more on other forms of coping. However, this effect was not found among men. In addition, researchers from the University of Texas and Stanford University (Holahan, Moos, Holahan & Cronkite, 1999) investigated the

connection between stressors and depressive symptoms in individuals and found that the role of psychosocial resources was significant in the experience of depressive symptoms. The results demonstrated that the experience of depressive symptoms following stressors was dependent on the level of people's psychosocial resources. Psychosocial resources refer to personal and social influences on people's ability to cope with stressors. Personal characteristics that enhanced coping involved their being calm, easygoing, and having a sense of control. Emotional support, guidance and assistance from family and friends were examples of social factors that assisted people to cope with stressors (Holahan *et al.*, 1999). There can also be a reciprocal relationship between stress and depression, in that chronic, poorly managed stress can lead to depression, and where depression undermines an individual's ability to cope effectively with stress (Michal, 1991).

According to Rapmund (1995), depression is one outcome of an equation between stress and supports. Stressors render a woman more vulnerable to depression, while supports protect her in the face of stress. For an episode of depression to occur, there needs to be a recent or current provoking agent. Significant and severe events such as loss, disappointment or an ongoing difficulty can be such an agent. She maintains further that if there are also vulnerability factors present, the likelihood of depression occurring is even greater. Vulnerability factors include lack of an intimate relationship with a husband, having three or

more children under the age of 14 living at home, loss of a mother before age 11 and lack of employment outside the home (Rapmund, 1995). Women tend to develop depression after a severe event (a stressor) but not all women go on to develop depression and it is the biological, psychological and social variables that either predispose vulnerability or enhance coping (Rapmund, 1995).

2.4 OCCUPATIONAL AND FAMILY DEMANDS

These two areas of individuals' lives, occupational and family involvement, place enormous demands and constraints on them, to which they must constantly adapt and respond.

2.4.1 OCCUPATIONAL STRESSORS

Job stress can be viewed as an imbalance between ability and demand arising from the interaction between the person and the work environment (Grobler & Hiemstra, 1998). Occupational stressors are tensions and pressures experienced by individuals at their places of work, that involve meeting deadlines, attending meetings, dealing with colleagues and customers, and explaining mistakes to supervisors (Charlesworth & Nathan, 1986). Occupational stress, however, is not exclusive to the workplace or to work hours; it is carried into the personal life of the individual.

It was estimated in the year 1997 that the global labour force numbered approximately 2 600 million and was growing annually. Furthermore, more than 50% of that labour force in industrialised countries complained about stress in the workplace (WHO, 1997). According to a WHO report, about half of the entire working population were unhappy in their jobs and about 75% of individuals who consulted a psychiatrist were experiencing work-related problems, such as job dissatisfaction and the inability to relax (Grobler & Hiemstra, 1998). The National Institute for Occupational Safety and Health, in the US, maintained that the modern worker suffered more from overwhelming workloads, uncertain job expectations and less security than previous generations because of rapidly changing technology, the pressures of globalisation and the changing nature of the world of work (Goetzel, 1998; Grimsley, 1999). The stressful nature of these pressures was already recognised by authors Charlesworth & Nathan in 1986 and these pressures have increased since then.

It is suggested that some occupations generally involve more work stressors than others (Charlesworth & Nathan, 1986). However, regardless of occupation, there are certain job variables that have an impact on physical and psychological well-being, and this has become well established in organisational psychology (Morrison & Clements, 1997; De Rijk, Le Blanc, Shaufeli & De Jonge, 1998). Examples follow.

- Work-induced stress may lead to physical health problems such as heart disease, migraine, ulcers and hypertension. However, people

who are satisfied with their work tend to have fewer of these problems (Lauer, 1989).

- Overwork and long hours have been associated with sleep disturbance, depression and stress (Imray, 1998; WHO, 1999b).
- It has been shown that the experience of high levels of job role ambiguity (lack of clarity about various aspects of his/her job), role conflict (the degree of conflicting demands in a job) and quantitative workload, resulted in lowered levels of psychological well-being (Morrison & Clements, 1997).
- Role ambiguity, role conflict and workload are three major components of job stress (Iverson & Erwin, 1997).
- The combination of high job demands along with low job control precipitated psychological and physical strain (De Rijk *et al.*, 1998). Researchers from the Helsinki Heart Study found that higher job demands and less decision latitude (low job control) were related to the experience of symptoms of sleep disorders. People who had demanding jobs but with little input tended to have the most problems falling asleep at night and remaining alert during working hours (Kalimo, Tenkonen, Harma, Poppins & Heinsalmi, 2000).
- Role conflict and role ambiguity were two of the most frequently examined sources of work stress (Rydstedt, Johansson & Evans, 1998).
- The link between high workload conditions and stress reactions have been shown in many occupations (Rydstedt *et al.*, 1998).

- The relationship between the demands of work and home is an important source of occupational stress (Swanson, Power & Simpson, 1998).
- Grobler & Hiemstra (1998) included the following job variables as potential causes of stress, as well as physical and mental illnesses: poor physical working conditions, shift work, job overload, physical danger, chemical exposure and heavy responsibility. These authors also mentioned factors associated with a person's work role, including role ambiguity and conflict, career development, relationships at work (including the quality and degree of support), the structure and climate of the organisation, and 'being different' as important sources of work stress.

2.4.2 FAMILY STRESSORS

The term 'family' refers to the concept in the broadest sense. It is defined as that group of persons with whom a bond or connection is shared due to blood, relationship, marriage, adoption or long-term commitment (Els & Van Vuuren, 1998). The family unit is meant to provide both structure and support to its individual members, but it also reflects the stresses of life. Stressors in the family context refer to any events that change a family. This refers to any change in structure, status, functioning or dynamics in the family. Family life events and crises can be classified according to any combination of dismemberment (loss), accession (addition) and demoralisation (Els & Van Vuuren, 1998).

Dismemberment refers to events where there is a loss in the family structure or functioning of a member or the family as a whole, either through death, desertion, divorce, children leaving home, parents stopping work, and so on. Accession refers to additions to the family, such as births, relatives moving in, the formation of step families and similar events (Els & Van Vuuren, 1998).

Demoralisation refers to events that are more 'psychological' in nature, such as lack of support, conflict, or infidelity. It also includes situations involving alcohol or drug abuse, crime or violence committed by members, and discipline problems, all of which can demoralise the family (Els & Van Vuuren, 1998). Basically, any form of change can be perceived as a stressor, whether it is a normative, predictive event, such as children growing up and leaving home, or non-normative, such as the death of a child (Els & Van Vuuren, 1998). Interactions with family members are also demanding and can be perceived as stressful, such as demands of a partner and children, living together, and domestic responsibilities (Charlesworth & Nathan, 1986).

There are also unique stresses being experienced by South African families. South Africa has one of the highest rates of crime, violence, partner and child abuse, divorce, poverty, unemployment, alcoholism and drug abuse. These have a negative impact on the functioning and

structure of the family and its individual members (PSYSSA, 1997). Furthermore, apartheid has left the population with many infrastructural, economic and social problems, which has led to a breakdown of family units. As a result, many families experience difficulty providing protection, counsel and support to family members (Els & Van Vuuren, 1998).

2.5 WORK/HOME ROLE CONFLICT

When researchers analyse stress, they often define and explore stress experienced in the workplace ('work stress') separately from stress experienced in the personal sphere of the individual ('psychosocial stress' which is most often connected to family life) (Csosz, 1996). However, it should not be forgotten that individuals function in both environments, and the experiences of either of these environments pervades the other. For example, the home is intended to be a refuge and sanctuary from the stressors of daily work life – a place to unwind and relax. However, if work stress is overwhelming, feelings of frustration, anger, fatigue and so on, are carried back to the home environment, thus creating additional stress (Csosz, 1996). Furthermore, if there are long work hours or work that needs to be taken home, this imposes additional strain on an individual's ability to fulfil demands at home. There is evidence that effects of work stress carry over to the home situation in such a way that the wellbeing of a cohabiting partner can be adversely affected (Swanson *et al.*, 1998). The reverse also occurs. Problems at home, with partners or children, or merely the demands of running a home, can also

negatively impact on individuals' ability to perform optimally at work (Csosz, 1996).

The literature suggests that the experience of 'role conflict' is stressful and this is true of the work/home role conflict. Research confirmed that the lack of fit between work and family roles is a potent stressor that can influence health and health-related behaviour. Work/family conflict has been linked to psychological distress, life dissatisfaction, poor physical health and heavy alcohol use (Frone, Russell & Cooper, 1997). Changes in workload have been strongly associated with increased perceived efforts to carry out work, as well as with fatigue 'spillover' from work into leisure time and home life. Increased workload was associated with increased exhaustion after work, problems in coping with demands at home, recreational use of free time and psychosomatic symptoms (Rydstedt *et al.*, 1998). This was a bi-directional relationship, in that satisfactions and stressors experienced at work have an impact on satisfactions and stress in home life and *vice versa* (Swanson *et al.*, 1998).

However, research is not consistent as to the direction of this work/home role conflict. Research by Schwartzberg & Dytell (1996) suggested that the stress of working mothers and fathers was caused more by the separate experiences of pressures of their job and family roles, rather than the experience of conflict between the demands of having both job

and home responsibilities, although some work/home interference was experienced. These authors found that both self-esteem and depression were affected by work and family stress and work/home interference. It was noted in their study that both parents derived self-esteem from accomplishments at work rather than from home, but that their subjective experience of 'happiness' or depression was obtained from family relationships (Schwartzberg & Dytell, 1996).

Many factors determine whether the occupation of multiple roles will result in the experience of stress. These factors include personality, mental and physical health status, level of occupation, socio-economic status, degree of family and work responsibility, family variables such as number and age of children, and degree of support from spouse (Swanson *et al.*, 1998). Marriage and parenthood have been linked with increased role conflict and overload (especially for women), with the role of parent perceived as the most stressful (Swanson *et al.*, 1998). The change in role complexity from single status to married or cohabiting status, through to parenthood, may be increasingly stressful in terms of the home/work boundary (Swanson *et al.*, 1998). It seems that pressure increases as caring responsibilities increase. Parents of very young children have been shown to experience greater work/home stress than non-parents, and parenthood may also affect career progress. Spousal or partner's contribution to housework or childcare becomes a more important issue when domestic demands increase due to the care needs of young

children. Lewis & Cooper (in Swanson *et al.*, 1998) suggest that the perceived equity of domestic roles may be a more important factor in home/work conflict than the actual workload of each partner.

The theories, however, are contradictory. One approach maintains that the multiple role demands of work and home are cumulative, with combined overload leading to increased stress, strain and illness (Field & Bramwell, 1998). Although employment is associated with reported feelings of subjective well-being and low psychological distress, the compounding effects of 'multiple role conflict' can erode such feelings of well-being (Field & Bramwell, 1998). A more positive approach suggests that the multiple roles complement each other, thereby enhancing overall well-being, while a third approach proposes that the relationship can be seen as 'compensatory', whereby problems and deficiencies in one domain are compensated for in the other (Field & Bramwell, 1998). Evidence suggests that employment offers opportunities for self-growth and fulfilment and is associated with greater mental well-being, and this may compensate for dissatisfaction experienced at home (Swanson *et al.*, 1998).

Greenhaus & Parasuraman (in Swanson *et al.*, 1998) suggested that work and home conflicts are interactive, with the greatest stress arising in situations of simultaneous role pressures from both home and work. What is clear is the idea of 'spillover' whereby attitudes, feelings or

behaviour (positive or negative) that are employed in one domain are carried over to influence the other. In general, it seems that both positive and negative outcomes are linked to multiple roles (Swanson *et al.*, 1998).

An important issue that may compensate for or exacerbate the experience of this conflict is the individual's reason for working. For many, it is a financial necessity; for others, it provides stimulation and an opportunity for self-development. For some, it can provide a refuge from other problems; for others, it may be a source of constant stress (Grobler & Hiemstra, 1998).

2.5.1 GENDER DIFFERENCES IN WORK/HOME ROLE CONFLICT

There are contradictory views on whether men and women experience similar work/home role conflict. Some writers believe that the stress of the work/home role conflict is greater for women because of greater total overload, since women frequently have greater domestic demands than men (Rystedt *et al.*, 1998). Others, however, believe that because the work role is generally considered more important to men than women because of its importance to the self-esteem of men, work conditions and work stress have a greater impact on health and well-being for men (Rystedt *et al.*, 1998).

Researchers from the Cornell Retirement and Well-being Study found that women's well-being and morale were not strongly linked to work status

but to the quality of their marriages. Women's well-being tended to be higher when the relationship was harmonious. For men, they found the opposite. Although men did report lower psychological well-being if the relationship was full of conflict, their well-being was not necessarily affected if marital satisfaction was high. The researchers believed that this was because men's employment status was more predictive of their well-being (Lang, 1999).

Traditionally, males have been expected to let work take precedence over family, but for women the opposite pertains (Field & Bramwell, 1998). Traditional role expectations were that women showed the family greater priority; caring for their families was considered to be their central role, regardless of their employment status. It was believed that working wives carried a greater burden than their spouses because they were disproportionately responsible for domestic tasks. They were also more likely to perform the role of principal carer for children even though both parents may be working (Field & Bramwell, 1998). Rapmund (1995, p.23) stated that women often try "to be everything everyone wants them to be." They have multiple demands, such as economic pressures combined with family problems; an overload of roles and responsibilities; and the help they need is often not forthcoming from those around them (for example, men have not taken on more of the workload at home).

This investment of the self into the caregiver role was also confirmed by Greenburger & O'Neil (Rapmund, 1995). They found that women were more committed to parenting, which was associated with more depressive symptoms, while men were more committed to work which was related to fewer symptoms of depression. They also found that women were more involved in family role demands and men more involved in work role demands. Younger women who spent fewer hours working and doing work-related activities were more depressed and this was similar for younger women who were more involved in the care of younger children. Women appeared to devote more time to childcare and household chores and despite demanding jobs, continue to view their 'spouse' and 'parent' roles as their care roles (Rapmund, 1995).

Other research, however, appears to indicate that actually having a career may improve a women's mental health, parenting skills and mood (Rincover, 1997). An important study by sociologist Catherine Ross on the mental health of working mothers disputed the idea that working and having children was not good for women's mental health. She found that depression was very high in mothers who did not work, but not for employed mothers. For employed mothers, a critical component was finding supportive childcare (Rincover, 1997). Depression was high only in working mothers who were dissatisfied with their childcare arrangements, but this was mediated if they had a supportive husband who was involved in the childcare. The least depressed of all the groups

studied were working mothers satisfied with their childcare arrangements and working wives without children. The most depressed were 'stay-at-home moms' and working mothers dissatisfied with the childcare, and who had unhelpful husbands at home (Rincover, 1997).

However, there are contradictory findings. For example, the findings of Schwartzberg & Dytell (1996) did not support the idea that men's sense of well-being was defined by work experiences, while women's was defined by family experiences. In their study, the opposite seemed to be true. It seemed that work stress was more important in determining the self-esteem of mothers than fathers, while family stress was more important in determining depression for fathers than mothers. The family stressors resulting in depression were also different for mothers and fathers. The fathers reported depression due to lack of spousal support or family role insignificance, while mothers were affected more by a lack of task-sharing. This finding, however, was consistent with previous studies indicating that working fathers were more attuned to the emotional relationship with their spouses, while working mothers seemed to be more attuned to the amount of actual assistance they received around the house (Schwartzberg & Dytell, 1996).

There may be a gender difference in both the degree and direction of permeability of domestic and work roles (for example, 'work to family' for males and 'family to work' for females), but there are no conclusive

research findings. However, in the social and work climate of the late 1990s, the gender division of occupational and domestic roles has become less polarised. It was suggested that females tended to protect their spouse/family from home-related stressors and might find it difficult to ask for assistance and support. When both partners are working, there could have been 'contagion' or accumulative stress between partners, but also the opportunity to offer mutual support (Swanson *et al.*, 1998).

However, it is generally acknowledged that many women in paid employment have two jobs: one in the workplace and another at home, and that they face a duality of roles which could result in conflict as they attempt to manage both situations (Field & Bramwell, 1998). The dual role of worker and carer can lead to significant levels of anxiety and stress because of task and time pressures (Field & Bramwell, 1998). The stress of combining work and a family has often been linked to what is called the 'second shift' – after work, mothers feel responsible for childcare and household tasks (Rincover, 1997). Research suggested that women with families spend an average of 90 hours per week on paid and unpaid work while men spend only 60 hours. When a mother drives home from work, she starts thinking about homework, dental appointments and dinner, while a man starts thinking about Monday night football, playing with the children and watching TV (Rincover, 1997).

This has implications for management. The proportion of female workers is expected to rise above the current 42% of the estimated global working population. The experience of work/home role conflict can be stressful and may result in mental and physical health problems. In addition to this, working women also tend to experience certain work-related stressors such as job discrimination and sexual harassment more frequently than men. They also have to deal with the unique stressor of pregnancy. Considering the possible negative implications these stressors may have, this indicates that the mental health of working women is of relevance to management (WHO, 1999a).

2.6 SOCIAL SUPPORT AND COPING STRATEGIES

2.6.1 SOCIAL SUPPORT

Cobb defined social support as “information leading the subject to believe that he/she is first, cared for and loved; second, is esteemed and valued, and third, belongs to a network of communication and mutual obligation” (Cobb, 1976, p. 300). Most writers suggest that there are various types of support which are considered important socially.

Kahn & Antonucci (in Howse, 1989) maintained that social support is an interpersonal transaction that must include at least one of the key elements of affect, affirmation or aid. They defined ‘affect’ as expressions of liking, admiration or love; ‘affirmation’ as expressions of agreement or

acknowledgement of the appropriateness or rightness of some act or statement of another person; and 'aid' as transactions in which direct help or assistance is given, such as things, money, information or time.

House (1981) suggested a similar typology and classified social support into emotional, informational and instrumental support. Emotional support refers to the provision of trust, empathy and love. Informational support includes the giving of advice or information which will help another individual, while instrumental support refers to behaviours or interactions in which direct aid or assistance is given (House, 1981). Basically, "social support has to do with everyday things – sharing tasks and feelings, exchanging information and affection as well as dramatic but common human experiences – the joy of love, the pain of isolation, family ties and bonds of friendship" (Grundlingh, 1995, p. 5).

Regardless of the definition or categorisation, it appears that the crucial element is the perception that there are a number of individuals who can be relied on in times of need. This network of support varies in number between individuals, depending on a number of factors, but research has suggested that individuals need a minimum social network of seven people for psychological growth and health (Procidano & Heller, 1983). Paradoxically, although women tend to have larger support networks than men, they often experience them as more draining than supportive because they tend to invest more of themselves into them (Rapmund,

1995). However, research still suggests that social support can enhance health and well-being directly because it meets important human needs for security, social contact, approval and belonging (House, 1981).

The sources of social support can include family members, friends, peers, co-workers, supervisors, strangers, helping professionals, self-help groups and religious affiliates. Lieberman (1986) found that the spouse was the most effective source of help for psychological problems, and friends were the second most effective helpers, followed by professionals and self-help groups. Relatives seemed the least effective. This was confirmed by Procidano & Heller (1983) who found that spouses and close friends provided an alternative source of self-esteem for the individual. A study by Bowling Green University indicated that familiarity of the person providing support is important. They found that for social support to be a source of stress relief, the people providing the support needed to be people who were familiar to the person experiencing stress and not strangers, as support from strangers was found to be ineffective (Anthony & O' Brien, 1999).

Timing of support was also seen as significant. Support given at the time of a severe event or crisis was critical and could reduce the effect of vulnerability stemming from low self-esteem (Rapmund, 1995). Supportive interactions and the presence of supportive relationships in people's lives was shown to be important in physical health, emotional

well-being and work performance (Grundlingh, 1995). Some social support theorists maintain that social support serves to enhance adjustment directly by increasing individuals' positive affect, sense of mastery, and self-confidence or sense of self-satisfaction. It enables people to manage the uncertainty associated with stress and to increase a sense of personal control over their environment (Grundlingh, 1995).

Thus, social support appears to contribute to positive adjustment and personal development, as well as providing a crucial buffer against the negative effects of stress. It could reduce or eliminate the adverse consequences of stressful events upon health or well-being. Empirical findings revealed that social support may reduce strain, improve health and buffer the impact of stress on physical and mental health (Howse, 1989). The following are examples:

- Dean & Lin (1977) suggested that social support 'buffered' the effects of stress on illness, pre-natal complications, the presentation of complaints to general practitioners, and death among geriatric patients.
- In a follow-up study using mortality as the dependent variable, Syme (in Howse, 1989) found that those individuals who lacked social support were more than twice as likely to die than those with an extensive support network.
- Gore (1978) showed that amongst individuals facing the stressor of unemployment, those with lesser or lower levels of social support

experienced significantly higher stress levels and greater changes in serum cholesterol measures, symptoms of illness, and affective responses.

- Others, such as Lowenthal & Haven (1968) and Brown & Harris (1978) found that 38% of individuals not having a partner to confide in during and after difficult life events developed depression, compared to only 4% of individuals who did have a partner.
- Many studies identified a link between depression and the lack of social support (Xiaolanyane & Ensel, 1999).
- Support from others has been shown to moderate the effects of daily inconveniences and disappointments that, if unattended, could grow into major stressors (Grundlingh, 1995).
- There is accumulating evidence that social support protects against decreased immune function, raised cortisol and depleted serotonin which are important in the physiology of depression (Robertson, 1998).

2.6.2 COPING STRATEGIES

Coping involves individuals' strategies and resources which are aimed at dealing with a stressor, either by accepting, altering or avoiding stressors (De Rijk *et al.*, 1997). It can involve either altering the environment to suit the individual or the individual adapting to suit the environment or situation. Coping begins with an almost unconscious appraisal of the situation. The individual appraises the amount of threat a specific

stressor imposes upon himself/herself such that the perception of the threat is appraised as being less, matching or exceeding the individual's perceived ability to cope (McGill, 1999). Coping strategies then refer to the behavioural, cognitive or emotional attempts to manage a situation that taxes or exceeds a person's perceived ability to cope.

Behavioural or active coping strategies can include avoidance, withdrawal or the use of substances. Cognitive strategies refer to problem-solving, confrontative coping and planning, while emotional or defensive coping may comprise defences such as denial, acceptance, blaming and/or distancing. Coping strategies either enhance or disturb further functioning (McGill, 1999).

Coping resources are those attributes or characteristics that people draw on when dealing with stressors, and include physical, personal and environmental resources or vulnerabilities (McGill, 1999). Personal resources include locus of control, self-esteem, optimism, hope, attitudes, beliefs and values, interpersonal and communication skills, assertiveness, goals and so on. Environmental factors include social support as in practical, emotional and organisational support, as well as situational factors like age, gender, SES and education level (McGill, 1999). Coping includes physical, emotional, social, spiritual, cognitive and psychological components. These are discussed below.

Physical:

Maintaining good physical health through regular exercise, balanced diet, and the intake of essential vitamins and minerals is crucial. Regular physical exercise has been shown to be inversely related to the incidence of heart disease and it has beneficial effects in conditions such as diabetes, osteoporosis and depression (Robertson, 1998).

Emotional:

The acknowledgement, expression and control of feelings is important in coping and stress management.

Social:

Having a social support network that provides emotional, informational and instrumental support enhances both physical and mental well-being and buffers the negative effects of stress.

Spiritual:

Belonging to a spiritual support network can be beneficial, as well as having a sense of purpose and meaning in one's life. Prayer and meditation to calm and relax the self are often recommended as effective stress management techniques. The beneficial effects of religion are believed to derive from several of its functions, such as the promotion of healthy behaviour, provision of social support and the psychobiological effects of faith, prayer and ritual (Robertson, 1998).

Cognitive and psychological:

Maintaining a realistic, yet positive attitude is important. Having an internal locus of control and positive self-esteem also buffer against the negative effects of stress. The application of problem solving techniques, reality checking, re-defining the situation, exploring options, implementing action, proper time management and so on are important to retain control of feelings and behaviours.

All of the above appear to be protective factors that 'buffer' the potential negative effects of stress.

3 RESEARCH PROPOSITIONS

The above literature review indicated that women are at greater risk for depression than men. Research also suggested both a correlation between stress and depression, and that women experience stress from work/home role conflict. Following from this, the research question was: Is there a high rate of stress and depression in working mothers experiencing work/home role conflict, and if so, what are the occupational and familial variables that influence the experience of this?

The following research propositions were thus originally put forward, but amended.

1. In the specific sample used, stress and depression have a significant positive relationship.
2. The greater the perceived work/home role conflict, the higher the level of experienced stress and the presence of depression.
3. Perceived work/home role conflict will be associated with a number of variables, such as the number and ages of children; relationship status; the presence of perceived support and the occupational variables of workload, job responsibility, work clarity and satisfaction.

4. The level of support and application of coping techniques will mediate the effects of role conflict and levels of stress and depression.

Based on the analysis of the data, which is discussed in more detail in Chapter Four, it was not viable to test some of these propositions. The reason for this was that only a small number of respondents experienced work/home role conflict, which led to the correlations being insignificant. A large proportion of respondents were experiencing stress and depression, however, and thus research propositions Two, Three and Four were revised:

2. There is a relationship between the ages and numbers of children and the experience of stress, but not with the experience of depression.
3. There is a negative relationship between the use of coping techniques and provision of support and the experience of both stress and depression.
4. There is a relationship between occupational variables and the experience of stress and depression.

In terms of management perspectives and implications, the following research question was also proposed:

What do managers understand about the impact that stress, depression and work/home role conflict have on individuals in the workplace, and how do they manage this?

No propositions were included here, as this question was merely an area of general exploration within the larger study.

4 METHODOLOGY

In this chapter, the methodology that was followed for the research is discussed. As mentioned previously, the research comprised two parts, for which the survey method was used, as it was the most appropriate method in the situation. For the first part of the study, which concerned the main objective, questionnaires were distributed because of the larger sample size. For the second, smaller part of the study, interviews were conducted.

4.1 POPULATION

The population for this study was working mothers with a child or children at any of the nursery schools or day-care centres in the Roodepoort District.

4.2 SAMPLE

The sample was selected in multistages. Firstly, eight nursery schools or day-care centres in the Roodepoort area were selected to form part of the sample. The schools chosen were selected for reasons of convenience, and so the sample was not statistically random. The schools chosen were from the Witpoortjie, Horison, Florida, Discovery, Kloofendal and Constantia Kloof areas.

4.3 DATA COLLECTION

Once these eight schools were identified, the principals of each school were allocated 10 questionnaires (Appendix A) and asked to hand them out to 10 working mothers. The questionnaires were accompanied by a covering letter (Appendix B) requesting the respondents to complete the questionnaire and return it to the principal as soon as possible. Confidentiality of responses was assured. The researcher then collected all the returned questionnaires. There was a 50% response rate. As this did not fulfil the proposed sample size, a further 20 questionnaires were then handed out to additional working mothers in the Roodepoort area whose child or children attended day care centres or nursery schools. This comprised the data for the first part of the study.

For the second part of the study, 10% of the sample were selected for interviewing. The two conditions for selection were as follows:

- (i) the respondent had to be in a managerial position, and
- (ii) the respondent had to be willing to be interviewed, which they indicated by providing their name and contact details on the questionnaire.

Not all respondents who held a position of management provided contact details. From the 12 respondents who fulfilled the two conditions, 10% (six subjects) of the overall sample were selected to be interviewed. These respondents were then contacted and interviewed telephonically.

4.4 INSTRUMENT DESIGN

4.4.1 QUESTIONNAIRE DESIGN

The questionnaire design was based on the concepts identified in the literature as relevant. Demographic variables such as age, preferred home language, relationship status, number and ages of children, education level and occupation of mother, and financial status of family were included in the questionnaire (see Appendix A).

The reason for these demographics was their relevance to the concepts being researched. According to the literature, depression affects individuals more commonly in the age bracket of 24 to 44 years. The subjects of the study were most likely to fall into this age category. Preferred home language can be an indication of cultural group and cultural groups may differ in their expression of depression. Relationship status is important as it is assumed that being a single parent creates greater stressors than having a partner. According to the literature, parenthood is perceived to be one of the most stressful roles and this stress does vary with number and ages of children (Swanson *et al.*, 1998). Education and occupation can be indicators of occupational variables that are factors in the work/home role conflict. They are also associated with financial status, which was important because financial status can either alleviate or exacerbate stress and/or depression.

The questionnaire also included questions designed to elicit subjects' responses to their experiences of stress, depression, support and coping, as well as occupational variables such as workload, work role clarity, work responsibility and control, work satisfaction and work/home role conflict. These questions were adapted from the literature, an occupational stress questionnaire and a depression inventory.

The support questions were based on the literature and involved subjective responses. The type of support received, as well as the type of support preferred was elicited. *Information and advice*, as well as *practical, financial, emotional* and *other* support were offered as options. Participants could respond to as many as were applicable. *Practical* and *emotional* support was also elicited on a 4-point Likert scale in Questions 12 and 15.

Respondents were also asked to identify the source of their support – their *partner, family, friends, work colleagues, manager/supervisor* or *other*.

Respondents were asked what activities or techniques they applied or employed when faced with problems, stress or depression. *Exercise, meditation, relaxation, alcohol, medication, eating, socialising and talking to either partner, family member, friend or other* were provided as options. Space was also provided for respondents to add their own details.

Cognitive coping strategies were also elicited on a 4-point Likert scale in Question 15.

The occupational variables of workload, work role clarity, work responsibility and control, and work satisfaction were also assessed through subjective responses on a 4-point Likert scale. The subjects' perceived levels of work/home role conflict were asked separately, but also on a 4-point Likert scale. The 4-point Likert scale for all of the above included the following options :

1. Almost always true
2. Often true
3. Sometimes true
4. Hardly ever true

Stress symptoms were assessed using Czosz's (1996) adapted list, whereby respondents were asked to report the frequency of their experience of 27 highly common possible stress symptoms on a 5-point Likert scale. The 27 possible symptoms included :

- Getting sick with colds and flu
- Racing heart or erratic heartbeat
- Chest pain
- Headaches
- Asthma attacks
- Constipation or diarrhoea

- Indigestion or abdominal cramps
- Back, neck or shoulder pain
- Grinding or clenching teeth
- Ulcers
- Skin rashes
- Fever blisters
- Increased craving and/or use of sweets, caffeine, tobacco
- Increased use of alcohol
- Fidgeting or restlessness
- Racing thoughts
- Temper outbursts or irritability
- Feeling trapped, helpless, hopeless, powerless, desperate
- Feeling tired or weak
- Feeling anxiety or panic
- Generally unwell or sick
- Difficulty concentrating
- Poor memory
- Feeling 'blue'
- Indecisiveness
- Preoccupation
- Poor motivation

The 5-point Likert scale comprised :

1. Never
2. Every few months
3. Every few weeks
4. At least once a week
5. Daily

The scores on the stress question were calculated by summing the frequency of symptoms experienced, where *never* equalled one and *daily* equalled five points. The minimum possible score of a respondent was 27 points if they never experienced any of the 27 symptoms, and the maximum score was 135 if they experienced all of the symptoms on a daily basis. These extreme scores were not expected; many of the symptoms could be a result of other factors, such as illnesses, viruses and so on. Furthermore, the variable of stress represents a continuum rather than a 'stress' versus 'no stress' situation.

Scores were then categorised according to frequency. A low total stress score would range between the minimum of 27 up to 54, which would represent symptoms experienced *never* or only *every few months*. A medium stress score would range between 55 to 81, which would represent symptoms being experienced *every few weeks*. A high stress score would range from 82 to the maximum of 135, which would then start

to represent *weekly* and *daily* experiences of symptoms, which is indicative of high stress.

Depression was assessed using the Zung Self Rating Depression Scale (Zung, 1989). The Zung Self Rating Depression Scale is a quantitative measurement of depression as an emotional disorder and was first published in 1965. Since then, it was widely validated internationally (Zung, 1989). It is composed of a list of 20 items, and each item relates to a specific characteristic of depression. The 20 items together comprehensively delineate the disorder of depression as it is widely recognised. A subject is asked to respond to each item according to how they have felt in the past week (Zung, 1989). The raw score is then converted to a standard score, referred to as an SDS Index. This SDS Index is scored out of 100, which is a total indication of how depressed the respondent is. The SDS Index score may fall in one of four categories, which are as follows :

- in the normal range (SDS score below 50);
 - presence of minimal to mild depression (score of 50 – 59);
 - presence of moderate to marked depression (score of 60 – 69);
 - presence of severe to extreme depression (score of 70 and above)
- (Zung, 1989).

The test is worded in the daily language of the subject; subjects are unable to discern a trend in answers, as half of the statements are worded

symptomatically positive and half symptomatically negative; and it can uncover masked depression. Furthermore, it has distinguished between depressed and non-depressed patients, as well as between depressed and non-depressed subjects in the 20 to 64 year old range. Although high scores are not diagnostic in themselves, they indicate the presence of symptoms that may be of clinical significance and warrant medical attention (Zung, 1989).

4.4.2 INTERVIEW DESIGN

The Interview was designed with the simple objective of gauging the levels of understanding of stress, depression and work/home role conflict that managers have of these concepts. It also aimed to assess their understanding of the impact stress, depression and work/home role conflict have on individuals in the workplace, as well as how they manage these issues. Thus, the following questions formed the core of the interview:

1. What do you understand about stress and its impact on individuals in the workplace?
2. What do you understand about depression and its impact on individuals in the workplace?
3. From your experience, do you think that many working mothers have a problem with the balance between work and home demands? What impact does this have on them and what helps them?

4. Has any subordinate of yours experienced stress, depression and/or role conflict, and if so how did you manage this? If they have not, how would you manage this if it did occur?

4.5 SAMPLE SIZE

A total of 59 completed questionnaires were collected. The questionnaires were correctly completed by the respondents and this formed the sample. Ten percent of the sample was selected for the interviews and therefore six interviews were conducted.

4.6 DATA ANALYSIS

4.6.1 ANALYSIS OF THE QUESTIONNAIRE RESPONSES

Once all the questionnaires were collected, they were coded and scored and a database was constructed in Windows Excel to capture the scores. Statistical analyses was then applied to analyse the data. It was initially applied to formulate an overall impression of the data and demographics and then to test the propositions.

As mentioned in Chapter Three, the propositions were amended. The reason for this was due to the small number of respondents (10) who expressed experiencing work/home role conflict. Initial correlation analysis indicated that the relationships between work/home role conflict and stress and depression were insignificant. The levels of stress and

depression in the overall sample, however, were not insignificant, and it appeared that work/home role conflict alone could not account for these alone as more than half of the sample were experiencing significant levels of stress and depression, while only 16% experienced work/home role conflict. Thus, although the data appeared to indicate that work/home role conflict was not a significant factor in this sample, stress and depression were, and it was decided to explore stress and depression alone. The same occupational and familial variables were included.

As stress and depression are two separate concepts, they were correlated separately with the individual variables. Spearman's correlation analysis was applied to responses pertaining to Propositions One, Three and Four and tested for significance at the 0,05 level of significance based on the critical value of 0,20 for a sample size of 59. For Proposition Two, where correlation analysis was not possible, the Chi Square test for independence was applied at the 0,05 level of significance.

The Chi Square test for independence was applied to test for a correlation between stress and the ages and number of children per respondent. Proposition Two proposed that there was a relationship between the ages and number of children and the experience of stress, but not with the experience of depression. The Chi Square test involves hypothesis testing, and the following null and alternative hypotheses were formulated

to test the relationship between ages and number of children and stress. Depression was not tested as it was not proposed to be significantly related to ages and number of children.

Ho : There is no relationship between the ages and number of children and the experience of stress.

Ha : There is a relationship between the ages and number of children and the experience of stress.

4.6.2 ANALYSIS OF THE INTERVIEW RESPONSES

The interviews were content-analysed. Content analysis refers to a “research technique for the objective, systematic and quantitative description of the manifest content of a communication” (Cooper & Schindler, 1998, p. 417). Since the interview comprised open-ended questions, the categories selected for analysis were key words, and referential and thematic units.

4.7 LIMITATIONS

The survey methodology itself has both advantages and disadvantages. One important limitation of the survey method is that it sometimes lacks depth in terms of information gained (Kerlinger, 1986).

The convenience sampling method has certain limitations. Although it is recommended for its efficiency, it results in a less accurate and representative sample (Babbie, 1986).

As the study included working mothers, it was not possible to make any assumptions or extrapolations regarding the experience of work/home role conflict by working fathers and their level of stress and/or depression. Exclusion of working fathers from the study did not intend to imply that they do not experience any such conflict or stress or depression.

The sampling did not include all possible working mothers because it did not include those mothers who made other arrangements for childcare than day-care centres, such as grandparents, facilities offered in the work environment, domestic helpers and so on.

Possible extraneous variables were not accounted for in the study that might impact on the experienced levels of conflict, stress and depression, and no attempt was made to identify these confounding variables. Related to this is the fact that the study only included working mothers in the Roodepoort district, which may have different or additional stressors compared with other areas in South Africa.

The number of respondents interviewed was very small and thus could not be assumed to be representative of managers generally.

Furthermore, these were all female managers and their views may be different from male managers.

5 RESULTS OF DATA ANALYSIS

The results obtained from the data analysis are described in the following chapter which comprises three sections. The first section shows the descriptive statistics, which was applied to all the data. These results will be discussed according to various subheadings, such as demographics, support and coping, occupational variables, work/home role conflict and stress and depression scores. Inferential statistics were then applied to test the propositions and these are discussed in the second section of the chapter. The final section presents the results of the interviews.

5.1 DESCRIPTIVE ANALYSIS

5.1.1 DEMOGRAPHICS

- **Age, Language, Relationship Status and Number of Children**

The sample comprised 59 working mothers. Their ages ranged from 20 to 49 years of age, of which the majority (63%) were in the 30 to 39 year old range. Thirty two percent were in the 20 to 29 year old range, while the remaining five percent were in the oldest age range of 40 to 49 years. The sample comprised mainly Afrikaans or English speaking subjects (98%), of whom 47% were Afrikaans speaking and 51% English speaking. One subject spoke Southern Sotho.

Individuals comprising 92% of the sample were in some form of relationship with a partner. They were either married, cohabitating, or in a subsequent relationship after a divorce. Only 8% were single parents. Table 1 indicates the results in more detail.

Table 1 : Numbers and Percentages of Relationship Status

RELATIONSHIP STATUS	Single Parent	Living with partner	Married	Divorced/ Separated
NO. OF RESPONDENTS	5	6	41	7
PERCENTAGE	8%	10%	69%	12%

The total number of children in the sample was 114, the average number of children per respondent being 1,9. Almost half of the total number of children were in the age range of 2 to 6 years. Table 2 details the results.

Table 2 : Number and Ages of Children

AGE GROUP	0-2 years	2-6 years	6-12 years	12 and older	Total
NO.OF CHILDREN	14	54	34	12	114
PERCENTAGE	12%	47%	30%	11%	

- **Education, Occupation and Income Demographics**

More than half of the sample comprising 31 respondents (53%) had experienced post-matric education. Forty seven percent (28 respondents) had secondary education up to and including Standard 10 (Grade 12), 37% (22 respondents) had obtained a degree or diploma and 7% were postgraduates. The remaining 8% had some other type of educational training.

The job titles and descriptions of the sample were categorised into business sectors. The two most common were secretarial and financial, and most of those respondents were bookkeepers and clerks. Figure 1 depicts the sectors and percentages in more detail. Of the sample, eighteen respondents (31%) held managerial positions.

The working hours of those in the sample ranged from 25 hours per week to 84 hours. This indicated a range of 59, which was high due to a few outliers. However, the mode, median and mean were close. Both the mode and median were 40 hours and the mean for those in the sample was 41,8 hours per week.

The average household income was in the R51 000 to R150 000 income range per annum. Figure 2 indicates the ranges and frequencies.

Figure 1 : Occupation Sectors

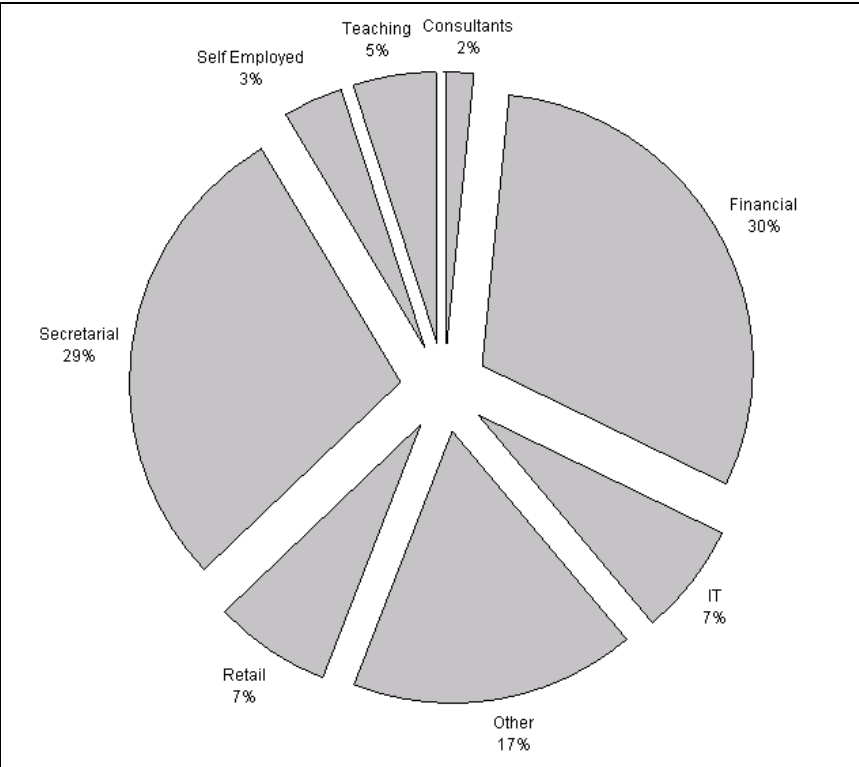
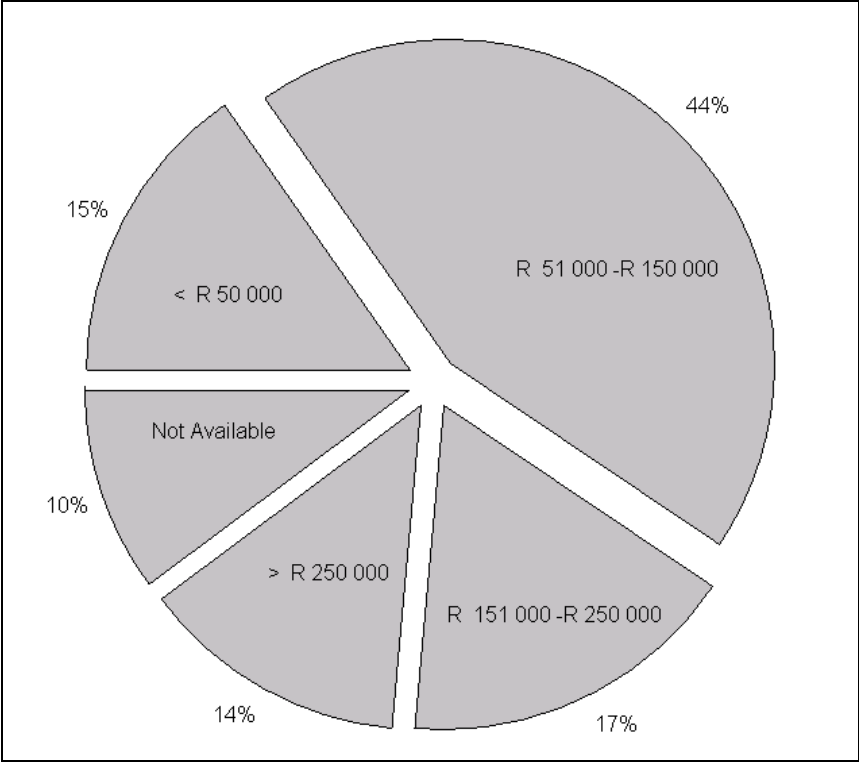


Figure 2 : Household Income



5.1.2 SUPPORT AND COPING

Half of the sample (51%) noted that they received support for their work roles from their partners most of the time. Table 3 shows the results according to Question 9 of the questionnaire.

Table 3 : Work role support from partner

WORK ROLE SUPPORTED BY PARTNER	PERCENTAGE
Hardly at all	7%
Sometimes	27%
Mostly	51%
Question not answered/applicable	15%

Table 4 is illustrative of the level of support received from partners, family members, friends, work colleagues and managers.

Table 4 : Level of support from sources

SUPPORT FROM:	Partner	Family	Friend	Work coll.	Manager
High	42%	49%	41%	27%	29%
Medium	29%	22%	29%	32%	22%
Low	12%	19%	22%	24%	25%
None	8%	10%	7%	12%	19%
Not applicable	8%	0%	2%	5%	5%

Medium to high support received from partners, family and friends appeared to be relatively similar, with slightly more support coming from family. The family members who were specifically mentioned as providing the greatest support were mothers (27%) and sisters (13,5%). Less support was received from colleagues and managers, with managers presenting the highest percentage of those from whom no support was received.

The types of support received were categorised as *emotional*, *practical*, *financial* and *informational*. Table 5 depicts the frequencies of the types and sources of support.

Table 5 : Frequency of types and sources of support reported

TYPE / SOURCE:	Information & advice	Emotional	Practical	Financial	Other
Partner	20	28	14	14	0
Family members	19	18	11	10	0
Friends	10	14	2	2	2
Work colleagues	7	1	1	0	1
Managers	7	1	1	1	0
Other	0	1	2	2	0
Not applicable	20	16	34	34	57
TOTAL (excluding NA)	63	63	31	29	3

As can be seen, the totals for each column are not equal and do not represent the sample size. This is because not all respondents received the same type of support from the same sources, and therefore various response permutations resulted. Table 5, however, shows that *Information and Advice* and *Emotional* support were the highest occurring types of support. Similarly, *partners* and *family members* were the most frequent sources of support, with *work colleagues* and *managers* the least frequent sources.

Table 6 indicates the results of the analysis of the preferred types of support from partners, family, friends, work colleagues and managers.

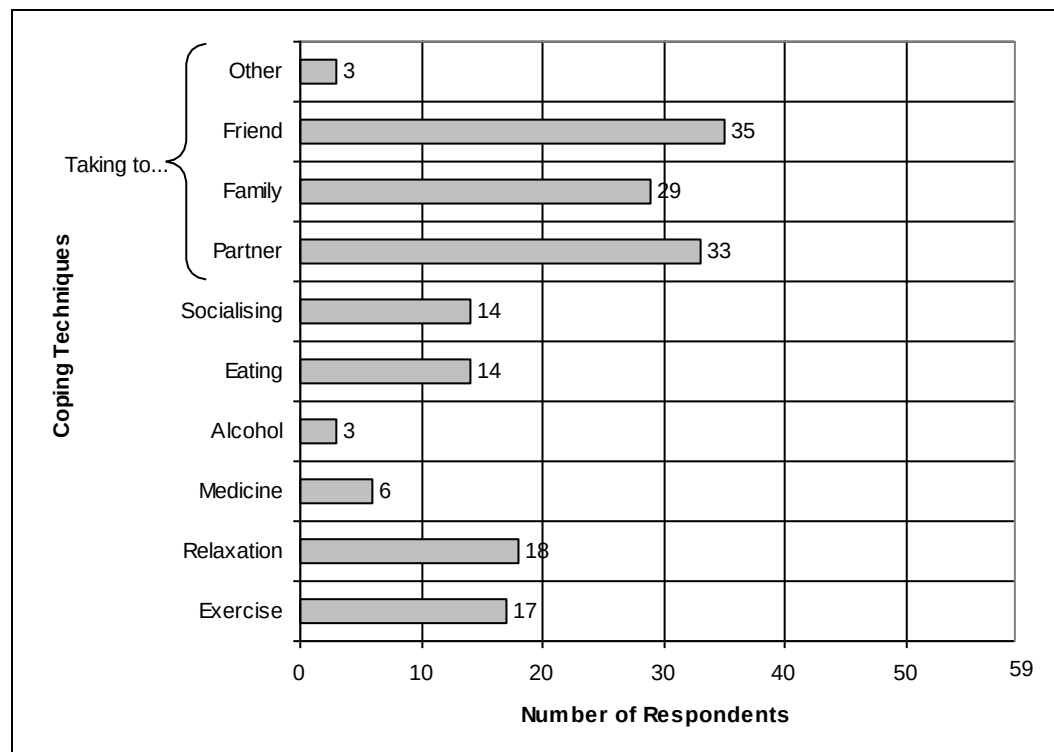
Table 6 : Preferences for support type and source

PREFERRED SUPPORT SOURCE & TYPE	Partner	Family Member	Friends	Work Coll.	Managrs	Other
Emotional	40	39	31	13	12	13
Practical	19	12	3	20	15	2
Financial	9	3	1	1	6	0
Info & Advice	8	7	3	13	16	4
Other	76	61	38	47	49	19

Once again, the categories have different totals due to the various response permutations. *Emotional support* was the most preferred type of support from *partners, family and friends*, while *practical assistance and information and advice* were most preferred from *managers and work colleagues*.

With regard to the application of coping techniques, such as exercise, relaxation, use of substances and talking, according to Question 11 all of the respondents applied some form of coping mechanism. Figure 3 reveals the results in more detail. Regarding the application of constructive cognitive and emotional strategies, elicited from Question 15, 41 subjects (65%) indicated they applied these strategies most of the time.

Figure 3 : Application of Coping Techniques Graph



5.1.3 OCCUPATIONAL VARIABLES

The occupational variables researched were workload, work clarity, work control and general work satisfaction. Each individual's scores were compared to a cut-off score for each variable. The number of individuals who scored equal to or greater than the cut-off score were counted and these then represented the number of respondents who were experiencing high workload, work role clarity, work control and work satisfaction. This is illustrated in Table 7.

Table 7 :Numbers and percentages of respondents experiencing occupational variables studied

OCCUPATIONAL VARIABLES	Workload	Work role Clarity	Work control	Work Satisfaction
NO.OF RESPONDENTS	26	43	34	54
PERCENTAGE	44%	73%	58%	91%

As can be noted from the table, less than half the sample experienced a high workload, while more than half experienced high role clarity and work control. Most of the sample expressed general work satisfaction.

5.1.4 WORK/HOME ROLE CONFLICT

Only 10 respondents (17%) admitted to substantial work/home role conflict. Of the remaining respondents, 24 (41%) expressed experiencing

conflict sometimes, while 25 (42%) expressed experiencing hardly any conflict at all.

5.1.5 STRESS AND DEPRESSION

Table 8 indicates the results of the analysis of the respondents' stress scores. It shows that almost two thirds of the sample had medium to high stress scores.

Table 8 : Table depicting distribution of stress scores

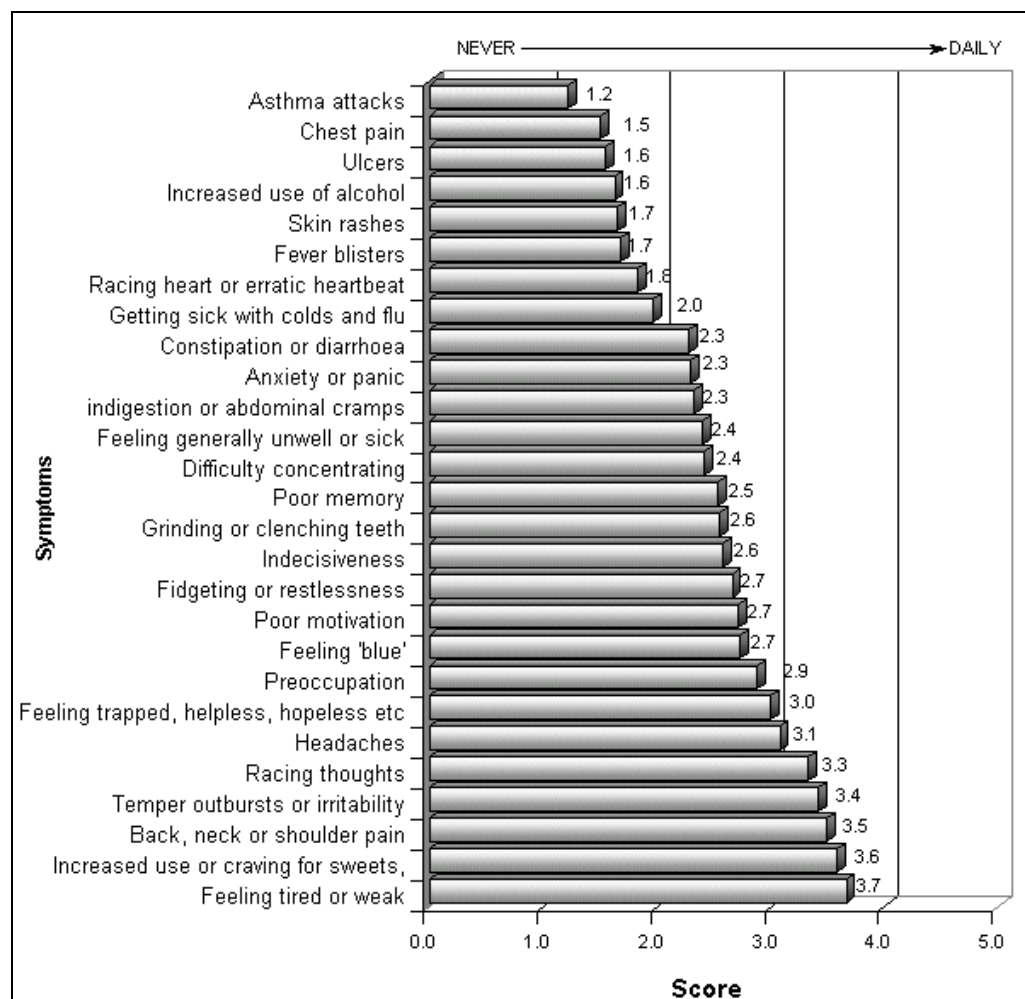
STRESS RANGE	NO. OF RESPONDENTS	PERCENTAGES
Low stress score	22	37%
Medium stress score	29	49%
High stress score	8	14%

In terms of the most frequently occurring symptoms, the most prominent were back, neck or shoulder pain, feeling tired or weak, and increased craving and/or use of sweets, caffeine and tobacco. Figure 4 shows the results in more detail.

The analysis of the depression scores revealed an average score of 50,54, which is the borderline score for mild depression. According to the scores, 51% of the sample indicated the presence of depression. Of those, 53% had scores in the minimal to mild range, 33% in the moderate to marked range and 13% in the severe range. Thus, half of the sample

appeared to be clinically depressed, yet only three respondents were actually receiving treatment. It was also clear that most of the respondents were not aware of their possible clinical depression, as only 8% indicated feeling depressed most of the time at work and 5% most of the time at home.

Figure 4 : Distribution and frequency of stress symptoms

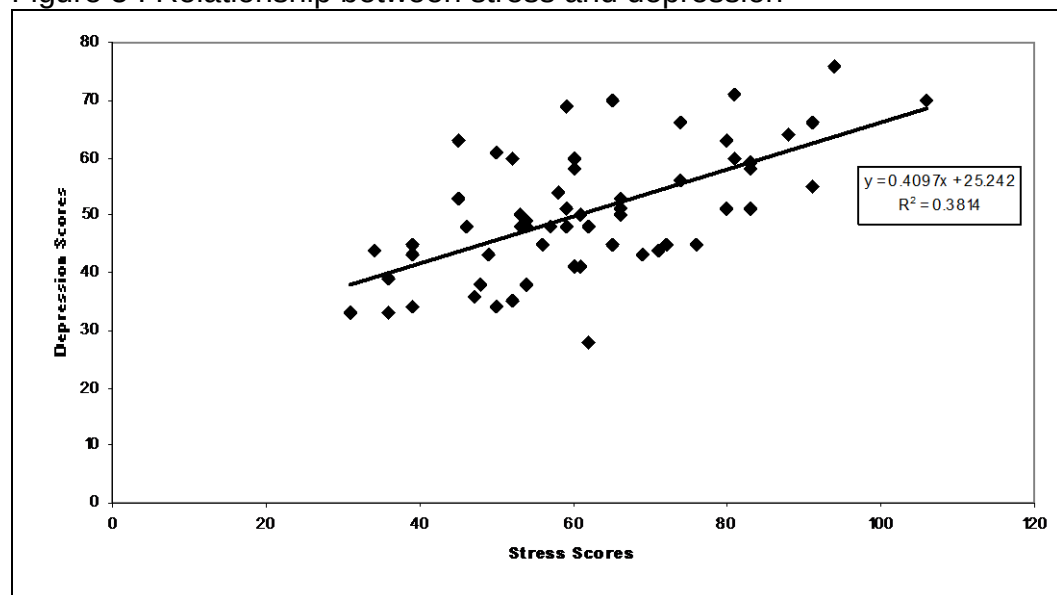


5.2 ANALYSIS OF THE PROPOSITIONS

5.2.1 THE RELATIONSHIP BETWEEN STRESS AND DEPRESSION

According to Proposition One, Spearman's correlation yielded a correlation of $r = 0,61$. Figure 5 comprises the scatter plot. At the 0,05 level of significance, this value was greater than the critical value of 0,20 for a sample size of 59 and thus, Proposition One was confirmed. There was a significant positive relationship between stress and depression in the sample investigated.

Figure 5 : Relationship between stress and depression



5.2.2 STRESS, DEPRESSION AND AGES AND NUMBER OF CHILDREN

The value of Chi Square was calculated by applying the following equation: $\chi^2 = \sum (f_o - f_e)^2 / f_e$, where f_o refers to the observed frequencies

and the expected frequencies. Table 9 depicts the observed frequencies and Table 10 depicts the expected frequencies.

The calculation of this equation yielded $\chi^2 = 16$.

Table 9 : Observed frequencies of stress

		Stress						
		LOW		MED			HIGH	
		Number of Children						
Ages of Children	1	2	1	2	3	1	2	Total
0 - 2	1		10			3		14
2 - 6	8	5	24	2	1	3	1	44
6 - 12	7	6	11			4		28
> 12	4	1	4			2		11
Total	20	12	49	2	1	12	1	97

The above table depicts the two variables, *stress* and *children*, in a three dimensional table, where the variable *children* has two dimensions, that of ages and number of children.

Table 10 : Expected frequencies of stress

	Stress						
	LOW		MED			HIGH	
Ages of Children	Number of Children						
	1	2	1	2	3	1	2
0 - 2	2.89	1.73	7.07	0.29	0.14	1.73	0.14
2 - 6	9.07	5.44	22.2	0.91	0.45	5.44	0.45
6 - 12	5.77	3.46	14.1	0.58	0.29	3.46	0.29
> 12	2.27	1.36	5.56	0.23	0.11	1.36	0.11

Based on an alpha level of 0,05 and 18 degrees of freedom, the critical value was 28,87. The calculated test statistic was not greater than the critical value and therefore was not significant. The null hypothesis was accepted: there was no relationship between the ages and number of children and the experience of stress in this sample.

5.2.3 STRESS, DEPRESSION, SUPPORT AND COPING

Spearman's correlational analysis yielded the following results :

- **Stress, support and coping**

Table 11 : Correlations between stress, support and coping

CORRELATED VARIABLES	VALUE
Correlation between level of support and stress	$r = -0,26^*$
Correlation between practical support and stress	$r = -0,20^*$
Correlation between emotional support and stress	$r = -0,40^*$
Correlation between cognitive coping and stress	$r = -0,51^*$
Correlation between coping techniques and stress	$r = 0,01$

* Denotes statistical significance at the 0,05 level.

Tables 11 and 12 indicate mainly negative correlations which would be expected in that, as support and coping increase, so the levels of stress and depression decrease.

- **Depression, support and coping**

Table 12 : Correlations between depression, support and coping

CORRELATED VARIABLES	VALUE
Correlation between level of support and depression	$r = -0,28^*$
Correlation between practical support and depression	$r = -0,23^*$
Correlation between emotional support and depression	$r = -0,34^*$
Correlation between cognitive coping and depression	$r = -0,53^*$
Correlation between coping techniques and depression	$r = 0,009$

* Denotes statistical significance at the 0,05 level.

5.2.4 STRESS AND DEPRESSION AND OCCUPATIONAL VARIABLES

Spearman's correlation analysis revealed the following :

- **Occupational variables and stress**

Table 13 : Correlations between occupational variables and stress

CORRELATED VARIABLES	VALUE
Correlation between workload and stress	$r = 0,28^*$
Correlation between work clarity and stress	$r = -0,23^*$
Correlation between work control and stress	$r = 0,09$
Correlation between work satisfaction and stress	$r = -0,24^*$

* Denotes statistical significance at the 0,05 level.

- **Occupational variables and depression**

Table 14 : Correlations between occupational variables and depression

CORRELATED VARIABLES	VALUE
Correlation between workload and depression	$r = 0,27^*$
Correlation between work clarity and depression	$r = -0,42^*$
Correlation between work control and depression	$r = 0,03$
Correlation between work satisfaction and depression	$r = -0,43^*$

* Denotes statistical significance at the 0,05 level.

The results indicated both positive and negative correlations where expected. For example, workload was expected to have a positive relationship with stress and depression, but work clarity and work satisfaction a negative relationship. As these variables increased, stress and depression would be expected to decrease. The significance levels were the same as in the previous tables, and all the variables were significant, except for work control which did not have a significant correlation.

5.2.5 RELATIONSHIP STATUS AND STRESS AND DEPRESSION

It was not possible to do correlation analysis between these variables as the variable *relationship status* is a nominal variable. Furthermore, the majority of members of the sample were married or in a relationship, and too small a number of respondents were single parents for a significant analysis to be practical. However, of the five (8%) who were single parents, four had medium stress scores, as well as being depressed according to the depression inventory.

5.3 CONTENT ANALYSIS OF THE INTERVIEWS

The results of the content analysis indicated a good understanding by managers of stress and its impact in the workplace, as well as some understanding of depression, but not of work/home role conflict. The results are provided in more detail according to the questions.

5.3.1 QUESTION 1: UNDERSTANDING OF STRESS

All of the subjects interviewed agreed that stress had a negative impact in the workplace, but that it was an inevitable part of life. There was acknowledgement that it could be both personal and work-related. A high workload was identified as a potent stressor.

In terms of the impact of stress in the workplace, the following consequences were mentioned:

- stress has a physical and mental effect;
- the individual feels 'down';
- work performance decreases in terms of workload, quality and completion of work;
- the individual makes more mistakes;
- there is decreased concentration and ability to perform multiple tasks;
- there is increased absenteeism due to frequent illness;
- there is a decrease in confidence; and
- there is increased irritability, tension and aggression.

5.3.2 QUESTION 2: UNDERSTANDING OF DEPRESSION

Fewer respondents had a good understanding of depression compared to stress. Although they all understood that stress and depression were two different entities, only four of the respondents had an adequate understanding of the impact of depression on energy, mood, perception

and relationships. One subject stated that she believed that high stress levels led to depression and had observed it in her experience. Five of the interviewees felt that depressed individuals needed support and that the presence of a problem such as depression had an impact on management in terms of how such individuals could and/or should be managed.

Respondents who had a good understanding of depression could describe the symptomatology and effects well. The following were mentioned :

- the individual feels 'down';
- there is decreased energy and intensity;
- there is decreased concentration;
- work quantity and standard deteriorates;
- interpersonal interactions are affected as the individual participates less;
- the individual is noticeably sad and tends to be tearful;
- there is a lack of motivation;
- there are feelings of hopelessness, helplessness and worthlessness;
- the individual feels that no one cares about them or likes them; and
- there are physical complaints and symptoms which leads to absenteeism.

5.3.3 QUESTION 3: UNDERSTANDING OF WORK/HOME ROLE CONFLICT

In terms of work/home role conflict, conflicting opinions emerged. Two respondents disagreed that work/home role conflict was a problem for working mothers. These subjects felt that working was a part of life and a necessity for many and that mothers simply adapt, although they may wish to stay at home. One subject claimed that she had experienced that single mothers actually work harder than married mothers and manage the balance better.

Two other respondents agreed that work/home role conflict was a problem for mothers and that they had observed this in many working mothers. They mentioned the following as issues related to this work/home role conflict:

- guilt feelings, especially when a child is sick or when leaving them very young to return to work;
- fatigue and build up of feelings of stress, as a result of 'juggling' so many responsibilities and having no time or place to 'recharge';
- financial necessity;
- lack of support from the work or home environment increases the conflict;
- the support employers provide influences the experience of conflict;

- conflict with colleagues over leave may be an issue if working parents always take holiday seasons as leave because of schools closing or that they take time off because their children are sick;
- inner conflict if there is a need to work overtime or take work home; and
- decreased communication and interaction with children due to fatigue and responsibilities.

One subject stated that the percentage of working mothers who were the main breadwinners was high in her industry, and this resulted in a great deal of stress, and role conflict, and in a high staff turnover.

The remaining two subjects both expressed experiencing work/home role conflict personally, but said that they could not generalise their feelings to other women.

5.3.4 QUESTION 4: MANAGEMENT OF THESE ISSUES

Although the perspectives and understanding of the subjects were not all the same, all of the subjects did acknowledge that the issues of stress, depression and work/home role conflict were issues in the workplace that needed to be faced by management. Five of the respondents had a supportive attitude, exemplified by the words of one of them: "We must support people in the work environment, it's essential". Two of these subjects worked for companies that provided much support in terms of

employee assistance programmes, referrals to professionals for counselling and other solutions.

The subject who did not have such a supportive attitude herself came from an industry that was not so supportive. She stated, "I can sympathise to a certain extent but the work still has to be done. The person must take leave to sort it [the problem] out or leave their depression at the door". This subject worked in the finance industry, which she claimed was typically male-oriented, and her view was that there was little sympathy for working mothers there. According to her, the attitude appeared to be that motherhood was "a choice women make, and they have to live with the consequences".

Another of the subjects was working for a company in a changing environment, which was typical of many organisations, and as a result, she and her subordinates were experiencing a high level of stress. Productivity, profits and motivation were all decreasing and there was a high staff turnover and high levels of frustration. Attempts were being made by management to build relationships and provide support, but employees were highly stressed. This particular subject, however, was very understanding of both stress and depression as she was receiving treatment for depression herself.

Many of the subjects noted that it was a difficult situation, and none of them had clear, defined policies or practices regarding the management of such problems. However, half of the subjects felt that it was very important to listen, give advice, if possible, and acknowledge that workers were people with feelings and problems.

In conclusion, it appeared that although stress was well understood and acknowledged, there was not a consistent attitude towards it or management of it. Depression was less well understood but there was some awareness. The experience of work/home role conflict brought contradictory opinions which did lend some support to the results of the questionnaire which indicated that not all women in this sample found this a difficulty or a stressor in their lives.

6 DISCUSSION OF RESULTS

The previous chapter presented the results of the data analysis. This chapter focuses on the interpretation and discussion of these results. The chapter will follow the order of the previous chapter in that it comprises three sections: discussion of the descriptive analysis, inferential analysis and content analysis.

6.1 DESCRIPTIVE ANALYSIS

6.1.1 DEMOGRAPHICS

The age range of the sample is considered to be individuals' prime years (Johnson & Indvik, 1997), when they are supposed to gain experience and skill in their occupational fields, and to develop their families and social networks. Illness during this stage can be devastating (Carson & Butcher, 1992), including mental illness. The fact that half of this sample of people in their prime years achieved depression scores was of importance. It was questionable whether these individuals could be functioning optimally in their work and family lives if they were depressed. According to the literature, functioning in all spheres deteriorates with depression, and thus it was highly probable that these subjects were not performing at their peak.

Unfortunately, no cultural extrapolations could be made as there was only one African language speaking subject. The rest were Afrikaans or English. Based on their responses on the depression inventory, it was clear that the subjects had no difficulty in understanding the questions and thus it appeared that their experiences concurred with western standards.

Most of the sample subjects were married or in some form of intimate relationship. Only 8% were single parents. According to Smith & Weissman (1991), the ECA study revealed that married individuals have the lowest prevalence of depression, compared to divorced, cohabitating and single people and this concurred with many previous studies. However, in this sample, 69% of the subjects were married, yet the prevalence of depression was high (51%). Thus, it could not be assumed that relationship status accounted for the number of depression scores, despite what the literature suggested. It was interesting to note, however, that four out of the five single parents (equating to 80%) were depressed. Thus, if there had been a greater percentage of single parents, it may have lent support to the finding that married individuals are generally happier than singles (Carson & Butcher, 1992).

The average number of children per respondent in the sample was 1,9, indicating that most of the subjects did not have large families. Just less than half of the total number of children fell in the two to six year age range. Statistical analysis did not reveal a significant relationship

between ages and number of children and stress, and this was in contrast to the literature that suggests that having young and/or many children increases the stress load (Rapmund, 1995; Lewis & Cooper in Swanson *et al.*, 1998). This is discussed in more detail where the results of the analysis of the propositions are discussed (Section 6.2.2).

In general, the sample subjects were well educated. According to Rapmund (1995), higher education has a protective function against depression as it is assumed to lead to better coping skills. However, in this sample education level was not a differentiating factor between depressed and non-depressed scores.

A third of the sample were working at managerial levels. Of these, 44% were depressed, which has implications for managerial performance. It also supports the understanding that managerial positions can be demanding and stressful and may impact negatively on mental health (Grobler & Hiemstra, 1998). However, proportionately more of the non-managerial subjects had depression scores, which supports research findings, suggesting that high demand plus high control is less stressful than high demand and low control (De Rijk *et al.*, 1998).

With regard to household income, there did not appear to be a strong relationship between stress, depression and annual household income. The distribution of the depression scores was similar to the distribution of

household income, which indicated that no particular household income accounted for more of the depression scores. The same was true for the distribution of stress scores. Research found that depression occurs in all socioeconomic stratas, and this was true for this sample (Smith & Weissman, 1991).

Working hours generally indicate both the levels of workload and responsibility. Although there were some extreme scores in the sample as indicated by the range (for example, three subjects only worked 25 hours a week and one subject worked 84 hours a week), the average working hours per week was 41,85. Thus, the workload of the sample overall was not different from the norm laid down by the labour law and did not account for the differences in the stress and depression scores. Subjects who worked long hours (from 45 hours per week and up) varied in their stress and depression scores with some scoring low and some high. The respondent who worked 84 hours a week did not score in the depression range.

6.1.2 SUPPORT AND COPING

Research consistently indicates that social support enhances both health and well-being (House, 1981), as well as providing a crucial buffer against stress (Howse, 1989). Social support has also been found to be a protective factor in the face of depression (Rapmund, 1995). Coping resources and techniques also provide a protective function (McGill,

1999). From the sample it appeared that most had an adequate support network. Partners, family members, friends, work colleagues and managers were all available to some extent for support. Furthermore, approximately two-thirds of the sample were receiving medium to high support from partners, family, friends and work colleagues; but partners and family members were the most frequent providers of support. Considering this amount of support received by the sample in general, the high number of depression scores was surprising. This seems to suggest that although support may comprise a buffer against stress and depression, it does not prevent the experience of it entirely.

The type of support generally received was information and advice and emotional support, which are included in both Kahn & Antonucci (Howse, 1989) and House's (1981) typologies. Emotional support elicited from Question 15 referred to social and emotional support from significant others, as well as indicators of positive self-esteem. Sixty nine percent of the sample (41 respondents) indicated positive support and esteem most of the time. This was higher than that indicated in Tables 4 and 5 and some of these were not congruent with the high depression scores; thus it is not clear how reliable this is.

Support preference was congruent with support received in terms of the sources of support, that is, from partners, family members and friends. The greatest expressed desire or need for the type of support received

was for emotional support from these sources, with practical support and information and advice being preferred from work colleagues and managers. The support preferences for partners, family and friends confirmed Anthony & O' Brien's (1999) finding that familiarity is important for support to be meaningful and effective. In general, the partner was the source preferred, regardless of type of support, and this confirms Lieberman's (1986) finding that the spouse is considered to be the most effective source of help for problems.

The type of support preferred was generally *emotional support*, which is characteristic of female interactions and relationships (Rapmund, 1995). Furthermore, comparing Tables 5 and 6 in Chapter 5, greater *emotional* and *practical support* from all sources was desired than what was perceived as being received. More *financial support* and *information and advice* was being received compared to what was preferred, except in the case of *work colleagues* and *managers*. Stated need for *practical support* was considerably higher than actual support received from *work colleagues* and *managers*. This was expected in an environment such as work, which is more task-oriented than relationship-oriented.

There was also a considerable discrepancy between received and preferred practical help from partners. This tended to concur with findings that suggest that women are generally highly attuned to the amount of practical assistance their partner provides at home, and this often forms

the basis of relationship satisfaction (Schwartzberg & Dytell, 1996). In terms of *practical support* elicited on the Likert Scale in Question 15, 69% of the sample indicated that they had practical assistance with work around the house and with important things to be done, half or more than half of the time. However, it was not elicited where this practical assistance came from. As this is much higher than that calculated from responses to Question 13, it could be from domestics, children and other sources and not necessarily from partners, which may account for the discrepancy.

All of the subjects applied one or more of the coping techniques included in the questionnaire. Forty one (65%) of the sample applied constructive cognitive and emotional coping strategies most of the time. These strategies referred to consideration of important issues, controlling emotions when faced with a problem, and making decisions based on the consequences. This did not seem congruent with some of the other subjective reports of support and coping in the questionnaire or with the depression scores, and it was not clear what accounted for this discrepancy. The statistical significance of support and coping, and their relationship to stress and depression will be discussed in more detail in the next section.

6.1.3 OCCUPATIONAL VARIABLES

The significance of the occupational variables of workload, work role clarity, work control and work satisfaction, and their relationship to stress and depression will be discussed under the section where the results of Proposition Four are discussed (Section 6.2.4).

One of the original objectives of the study was to determine the level of work/home role conflict amongst working mothers and its relationship to the experience of stress and depression. The literature suggested that the experience of work/home role conflict may have a negative impact on an individual's work and family life (Swanson *et al.*, 1998; Frone *et al.*, 1997; Rydstedt *et al.*, 1998), and that because of the nature of the domestic roles, women may be more prone to experience this (Rydstedt *et al.*, 1998). The expectation was that the study would reveal a significant number of working mothers experiencing this problem. However, the result was unexpected.

The majority of the sample did not feel that work or home demands were overwhelming. Less than a third of the sample expressed experiencing a substantial conflict between their work and home demands. Of the 59 subjects, only 10 (17%) admitted to this work/home role conflict. The rest of the sample admitted to experiencing it sometimes or hardly at all.

Of these 10 subjects experiencing this conflict, there did not seem to be any significant relationship to occupational level, relationship status, number of children or support. Less than half were in a managerial position and had more than two children. Only one of these subjects was a single parent; the rest had partners. Most of the subjects were receiving medium to high support, if not from partners, then from other sources. Four subjects lacked support from partners. Out of these 10 subjects who admitted to work/home role conflict, seven had medium to high stress scores and six had scores in the depression range, and more than half of these were in the moderate to severe range.

The literature also revealed contradictory theories regarding work/home role conflict in terms of whether it is a problem and which gender it has greater impact upon. The finding of the study did not dispute that work/home role conflict may be an issue for some individuals or that it may have negative effects. It may be that the finding merely confirms that the literature and research are not conclusive and does not apply to every working individual. The finding that more than half of those experiencing the conflict also had relatively high stress scores and were depressed does suggest that the experience of work/home role conflict may have quite serious negative repercussions regarding mental and physical health.

6.1.4 STRESS AND DEPRESSION

The findings on the stress question were not remarkable. It was expected that every individual would experience some level of stress at any particular moment in time and that this level may decrease or increase depending on circumstances (Michal, 1991). Considering the pressures and problems of daily living, especially in South Africa with its many social problems, medium stress scores would not be unexpected and not necessarily debilitating, although the stress may lead to unpleasant physical and mental effects. Approximately half of the sample scored in this range. High stress scores, on the other hand, can be debilitating and have major repercussions on an individual's mental and physical health and their daily functioning. Such scores are serious and warrant some kind of medical attention.

However, it is expected that a certain proportion of the population will experience severe stress at any given time due to life circumstances, such as loss, trauma, heavy responsibilities or pressures, severe relationship and/or financial problems. Eight subjects (14%) were experiencing high stress scores and there appeared to be various possible reasons, but these did not apply to each case. These possible reasons were having more than two children, low household income, high work demand with low control, low support and relationship status. Three subjects were also divorced, which is considered a severe stressor. The one common denominator in these eight subjects, however, was their

depression scores. All eight subjects were depressed and it may be that, because of their depression, they were experiencing many psychosomatic complaints which resulted in their high stress scores. It is well known that depressed individuals have more physical complaints than non-depressed individuals as the illness affects the entire physiology of the body, including the immune system (APA, 1994).

As mentioned at the beginning of this section, one of the most significant findings of this study is that 51% of the sample scored in the depression range. As discussed, the Zung Depression Inventory that was used in this study is a valid inventory for distinguishing between depressed and non-depressed individuals. This high percentage of depression scores has two implications. Firstly, it lends support to the fact that women are definitely vulnerable to depression, regardless of age, class, education, occupation, and circumstances (APA, 1994). There did not seem to any obvious factors that differentiated the depressed from the non-depressed subjects and this may indicate that the biological etiology of depression is relevant. Secondly, it confirms that one of the dangers of depression is that it can remain undetected for a long time. Of the 30 subjects who scored in the depressed range, only three were aware of their illness and receiving treatment. Thus, 90% could be considered undetected. This is congruent with the figures cited by Jacobs (1999) and higher than those found by Rajendral *et al.* (1999).

The statistical relationship between stress and depression and the other variables will now be discussed.

6.2 ANALYSIS OF THE PROPOSITIONS

6.2.1 THE RELATIONSHIP BETWEEN STRESS AND DEPRESSION

A significant positive relationship between stress and depression was found, indicating that as the level of stress increased, so did the level of depression. This implies that high stress levels increased vulnerability to depression. A correlation of 0,61 was found, which is considered relevant in the social sciences (Cooper & Schindler, 1998). This finding therefore confirmed what was found in the literature: that there is a direct relationship between inordinate degrees of stress and psychological disorders, such as depression (Csosz, 1996).

Taking into consideration the physiological and psychological effects of both stress and depression, this relationship was not surprising. The physiological changes in both are similar in terms of the suppression of the immune system and neurotransmitters, such as serotonin, which is important in depression (Robertson, 1998). They also share similar physical symptoms, such as sleep, appetite and energy changes and somatic complaints, such as neck, back and shoulder pain, headaches, gastrointestinal disturbances and so on (Carson & Butcher, 1992). Psychological implications are also similar in both, in that there are

feelings of being out of control, and feelings of uncertainty, worthlessness, helplessness, powerlessness, irritability and so on (Csosz, 1996).

Thus, this finding is not profound in its revelation as it does not dispute or add any further insight into what previous research or literature reveals. The one disadvantage of this finding, however, is that this correlation cannot indicate the direction of this relationship. As mentioned in the literature, the relationship between stress and depression can be reciprocal. Stress can lead to depression, but depression also undermines an individual's ability to cope with stress (Michal, 1991), and correlation analysis is unable to depict this complex, reciprocal relationship.

6.2.2 STRESS, DEPRESSION AND AGES AND NUMBER OF CHILDREN

Research suggests that as role status changes from singlehood to marriage to parenthood, the roles become more complex and demanding, and increasingly stressful (Swanson *et al*, 1998), and that having many and/or young children is even more demanding (Swanson *et al*, 1998). The greater demands created by parenthood can lead to work/home role conflict and consequent stress. However, the findings of this study did not reveal this. Firstly, work/home role conflict did not appear to be particularly relevant among this sample. Secondly, all the subjects had one or more children, and of the total number of children in the sample,

half were in a young age range (two to six years). Furthermore, statistical analysis did not confirm the hypothesis that ages and number of children had a significant relationship to the experience of stress. Those subjects who had extremely high stress scores did not have a greater number of children or very young children compared to the rest of the sample. This finding, however, was not contrary to the literature that states that parenthood is a demanding and possible stressful role and, furthermore, that many mothers are vulnerable to post partum depression that can linger for years. It simply indicated that for this sample, having children did not account for the stress and depression scores and it may be because these subjects found their parent role more fulfilling than stressful.

6.2.3 STRESS, DEPRESSION AND SUPPORT AND COPING

The separate correlations between stress, depression, support and coping were mainly significant, except for that of stress, depression and coping techniques. It is not clear why this relationship was not significant as literature suggests that the use of coping techniques as included in the questionnaire are critical in stress management and depression.

The significant correlations were all negative, which was to be expected, in that as support and coping increase, the experience of stress and depression decreases. The highest correlations were between stress and emotional support, and stress and cognitive coping, as well as between

depression and emotional support and depression and cognitive coping. This supports the literature and previous research.

The use of constructive cognitive coping elicited on Quesiton 15 and its significant relationship with stress and depression, concurs with the research done at the University of Michigan where it was found that women's cognitive and coping styles increased their vulnerability to depression (Rapmund, 1995). The availability of emotional support and its buffering role in stress and depression was also supported by these correlations (Howse, 1989).

According to Xiaolanyane & Ensel (1999), many studies have identified a link between depression and lack of social support. Thus, a question was raised concerning a discrepancy in the sample: most of the subjects indicated that they had adequate support, yet 51% of them appeared clinically depressed. There were three possible explanations for this discrepancy.

The first was the possibility of 'false positives' and that not so many of the sample were depressed. This is not likely considering the validity of the depression inventory that was administered, and the esteem in which it is held in medical and research circles. Secondly, it could be that the subjects were not completely honest about the support they received, and inflated the support so as not to present a bad impression of partners,

family and so on. Unfortunately, complete honesty in such questionnaires is always difficult to ensure and in this questionnaire, there were no questions to check whether subjects were lying, 'faking' or exaggerating. The discrepancies between responses to Questions 12 and 15 on support were interesting. It is hoped that even if the subjects were not completely honest or could not be entirely objective, they did not resort to blatant lies, and that the possible inflation of support was minimal enough to provide an approximate idea. Related to this is the possibility that the kind of support the subjects were receiving was not the kind of support they required to provide a 'buffering' effect. The last possibility is that the support acted as a buffer to a large extent by protecting those depressed subjects in the mild range from becoming moderate to severe. Those in the moderate to severe range had the least amount of support, and this would indicate clearly that the lack of support was critical. However, most of the depressed scores were in the mild range and it might be that these scores would have been higher if the support had been less.

Once again, it is important to mention that although the research clearly indicates that social support plays a buffering and protective role in the experience of stress and depression, there has been no indication in the research or literature to suggest that it plays a preventive role. Social support does not prevent an individual from experiencing stress or depression, but can minimise the severity, impact and implications.

6.2.4 STRESS, DEPRESSION AND OCCUPATIONAL VARIABLES

These correlations revealed both positive and negative, as well as significant and non-significant findings. The positive significant correlations were between workload and stress and depression, meaning that as workload increased, it increased the experience of stress and risk of depression. The negative significant correlations were between work clarity and stress and depression, and between work satisfaction and stress and depression. No relationship was found between work control and stress and depression. This contradicted the literature that suggests that having a high work control mediates the effects of stress. However, these findings are normally in conjunction with work demand, and it may be this that accounts for the contradictory findings. The other significant findings are congruent with the literature such as by Imray (1998); Morrison & Clements (1997); Iverson & Erwin (1997); Rydstedt *et al.* (1998) and Lauer (1989).

It is important to state that these correlations did not indicate any causal relationship whatsoever. These findings did not imply that high workload causes stress or depression, or that low work clarity and low satisfaction cause stress or depression. It merely indicated a significant relationship to suggest that such factors may increase the vulnerability to, or exacerbate, experiences of stress and depression.

6.3 INTERVIEW FINDINGS

As mentioned in the previous chapter, the results of the content analysis indicated a good understanding of stress and its impact in the workplace by management and some understanding of depression.

In terms of understanding stress and its impact, the consequences mentioned by the subjects concurred with the literature (Robbins, 1998). Stress and its effects received much media exposure in the last few decades of the 20th century and this could account for the general awareness and understanding that people have of it. Depression is not as well understood amongst the community and this was evidenced by the subjects. Fewer respondents had a good understanding of this problem compared to that of stress. However, they were all aware that they are distinct entities. The knowledge displayed by the subjects was in keeping with the information discussed in the literature in terms of physical and psychological effects.

The contradictory opinions by the subjects regarding work/home role conflict was interesting and lent some support to the contradictory findings of the study. Although there is obviously evidence in the literature of work/home role conflict and its possible negative effects, the literature itself is contradictory and, combined with the findings of the study, suggests that work/home role conflict is not an issue for every working mother. Of those subjects interviewed who did regard it as an issue, they

displayed a good understanding of the different underlying dynamics, such as guilt, fatigue, financial necessity, lack of support and so on.

With regard to how the subjects managed these issues, their varying stances would probably be characteristic of the South African work environment. Some had supportive attitudes and understood the importance of supporting the workforce to achieve better work performance and results. Others were less supportive, maintaining that the ultimate aim was to 'get the work done' (a 'bottom line' emphasis), regardless of how the workforce may feel and the problems they may be experiencing. South Africa is characterised by this continuum of both supportive and unsupportive working environments. There are increasing global trends to support and nurture the workforce to achieve desired goals, as evidenced by an emphasis on human resources and employee assistance programmes; but in South Africa these trends are not the norm as yet. There are still many breaches and abuses of basic employment rights, and under such circumstances, support for the mental well-being of employees is mainly insufficient. These breaches and abuses actually perpetuate levels of stress and psychological distress.

The implication of all these findings will be discussed in the concluding chapter.

7 CONCLUSION

7.1 SUMMARY OF FINDINGS

The most pertinent findings of the study were as follows.

Two-thirds of the sample elicited medium to high stress scores. However, this was not a profound finding as individuals are expected to experience a certain degree of stress at any given time and this degree may change depending on circumstances.

Fifty one percent of the sample had scores in the depression range, indicating that they may be clinically depressed. This supports previous research and literature that suggests that one of the main problems with depression is that it can remain undetected for a long time, which has a negative impact on individuals' functioning. It also suggests that women are vulnerable to depression regardless of circumstances.

Spearman's correlation revealed a significant, positive correlation between stress and depression in the current sample, which was in keeping with previous research. The reciprocity of this relationship could not be revealed by this analysis, however.

The relationships between support, stress and depression were found to be significant and, as expected, in a negative direction. Although this supported the literature that states that support has a buffering and protective function against the experience of stress and depression, it was

clear that it was not a preventive function. It cannot prevent the experience of stress or depression, but can minimise the severity and impact and enhance the coping with it. The relationships between coping, stress and depression were also significant in a negative direction for cognitive/emotional coping and stress and depression.

The relationships between the occupational variables investigated and stress and depression were also mainly significant. A significant positive correlation between workload and stress and depression was found, while significant negative correlations were found between work role clarity, work satisfaction and stress and depression.

In terms of the content analysis of the interviews, the following was noted. There was an adequate understanding of both stress and depression. In terms of work/home role conflict, the responses were contradictory and this concurs with the literature that is contradictory, as well as the sample, as most of the sample did not find work/home role conflict a problem. The most relevant finding, however, was the distinct lack of policies or procedures in managing stress, depression and work/home role conflict and the effects thereof, and this has implications for the world of work and management. These will now be discussed for all the relevant findings of the study.

7.2 IMPLICATIONS FOR MANAGEMENT

The implications of the results of this study for the world of work and management are serious. Research, including this study, consistently shows that there are relatively high levels of undetected depression amongst the normal population, and this has repercussions for work performance and management of people. Depression has a negative impact on concentration, memory, energy, relationships, judgement and physical well-being. All these aspects can seriously impair an individual's ability to work at his/her best and interact effectively with colleagues. Feedback from supervisors and managers is far more demoralising for such individuals. The irritability, listlessness and pessimism displayed by depressed individuals can be perceived as an attitude or personality problem by colleagues and managers, leading to lack of or withdrawal of support by them and obstacles to their career development. This may create a vicious cycle of the individual feeling bad, misinterpretation by others of the problem, withdrawal of support, negative feedback and interaction, exacerbation of symptoms and so on.

The findings regarding support have two implications. Firstly, in this sample, support from work colleagues and managers was lacking to a degree and there was a desire for more support from them, especially for practical support and information and advice. This may suggest that the communication and function of managers was not congruent with what

subordinates needed from them, and this may be due to lack of knowledge, training, communication, time or a combination of all of these.

Secondly, research, including this study and literature, clearly indicates the positive effects of support on general health and well-being, as well as of support during times of stress, and during the experience of depression. Although the encouragement by management of a supportive work environment and harmonious relationships between colleagues may be costly, time-consuming and, at times, difficult, it is worthwhile, since the benefits would ultimately be profitable. When individuals are happy and healthy, they perform better, and are more strongly motivated and committed, which will enhance the bottom line. It also needs to be remembered that not creating a harmonious and supportive work environment is also costly and time-consuming, as it leads to increased levels of stress, health problems, interpersonal conflict, absenteeism, and time away from work to handle disputes.

The world of work at the turn of the 21st century was characterised by change, innovation, technology, increasing demands and expectations, pressures of time, to mention but a few. All of these are stressors. Furthermore, these often led to increases in workload and a lack of work clarity, control and satisfaction, which have all been found to be related to stress and psychological problems. This was supported in this study. The demands and problems in the home environment, as well as the

external social problems which impact on people, especially in SA with its high rates of crime, violence, poverty, illness, and abuse, increase the stress load on people. Whether acute or chronic, poorly managed stress has repercussions for mental health, as supported by the study's finding of the significant positive relationship between stress and depression. Thus, it becomes incumbent on organisations and managers to be aware of all these issues and formulate clear, defined policies and practices regarding their management.

However, there seems to be a lack of such policies and practices and this was reflected by the interviewees. The problem of stress, depression and work/home role conflict have been found to be highly relevant to the world of work as they impair performance and inadequate management of these issues compounds the problem. There has been greater media exposure on these issues, as well as human resource consultants selling programmes on issues related to them. However, the psychological, physical and economic costs of stress and depression do not appear to be emphasised enough in the world of work and this may be due to a number of reasons, such as lack of adequate understanding or knowledge. These reasons need to be explored to overcome them and this requires more active intervention on the part of management, both to understand these problems and deal with them adequately and effectively.

There appears to be no indication that the stresses of daily living will decrease. In addition, according to WHO, the incidence of depression is increasing and will be one of the foremost debilitating illnesses of the future. Thus, the economic threat posed by these issues should be taken seriously by organisations and individuals as they are costly.

7.3 RECOMMENDATIONS FOR FURTHER RESEARCH

The findings of this study were significant enough to encourage further research. Firstly, there could be a concerted effort to explore the severity of the problem of undetected depression in the population. Considering the many social problems in SA, there could be an appreciable percentage of high stress and depression levels. Revealing this could lead to education and treatment programmes which could improve the mental health of the nation, which does have a bearing on the economic future of the nation.

Secondly, it was not possible to assess the cultural backgrounds of the subjects adequately and thus it was difficult to make extrapolations regarding culture. Culture is important in that it impacts on the experiences of stress and depression, as well as on coping styles and support. African culture differs from Caucasian culture in these areas. Furthermore, Africans, particularly rural dwellers, generally have fewer resources as a result of the history of apartheid. Thus, the levels of stress and depression and work/home role conflict may be different amongst Africans

and, as they represent the greater proportion of the SA population, their mental well-being is of great relevance.

Thirdly, as this study included only working mothers, the impact of these issues on working fathers would be of interest. Lastly, the number of managers interviewed was small and they were all female. A larger sample of managers needs to be interviewed to gain a more widely representative view. Furthermore, there may be differences between male and female perspectives on these matters as suggested by the one interviewee who mentioned male-dominated work environments.

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APPENDIX A

QUESTIONNAIRE

If you have no objection to being contacted for a possible interview, kindly provide your name and contact details : _____ Tel No. : _____

Date : _____

Please answer in the following questions or tick where appropriate.

Gender : Male ☐ Female ☐

1. Age :
Under 20 ☐
20 – 29 ☐
30 – 39 ☐
40 – 49 ☐
50 + ☐

2. Preferred Home Language : _____

3. Relationship Status :
Single Parent ☐
Living with Partner ☐
Married ☐
Divorced/Separated/Widowed ☐

4. Children :	Ages	No. of Children
	Between 0 – 2 Years	☐
	Between 2 – 6 Years	☐
	Between 6 – 12 Years	☐
	Older than 12 Years	☐

5. Highest Level of Education :
Up to Std 10 ☐
Diploma/Degree ☐
Postgraduate ☐
Other ☐

6.a Job Title & Brief Description :

b. Could this be described as a managerial position : Yes ☐ No ☐

7. Household Income :
No Income ☐
Up to R 50 000 ☐
R 51 000 – R150 000 p.a. ☐
R151 000 – R250 000 p.a. ☐
R251 000 plus ☐

8. On average, how many hours a week do you work?

9. Do you feel that your work role is supported by your partner :

Hardly at all

Sometimes

Mostly

☐
☐
☐

10. On a scale of 1 – 4 rate how true the following statements are for you

1. Almost always true

2. Often true

3. Sometimes true

4. Hardly ever true

I feel stressed at work	1	2	3	4
I feel stressed at home	1	2	3	4
I feel depressed at work	1	2	3	4
I feel depressed at home	1	2	3	4
I feel I have too many demands at work to cope with	1	2	3	4
I feel I have too many demands at home to cope with	1	2	3	4
I feel that my work and home demands clash	1	2	3	4
Explain :				

11. If you have a problem at work or home, do you use any of the following to help you cope?

Exercise

Relaxation

Medicine

Alcohol

Eating

Socialising

Talking to partner

Talking to family member

Talking to a friend

Talking to other

☐
☐
☐
☐
☐
☐
☐
☐
☐
☐

Specify : _____

Specify : _____

Any other ways

12. On a scale of 1 – 4 rate how true the following statements are for you

1. Almost always true

2. Often true

3. Sometimes true

4. Hardly ever true

My partner is supportive	1	2	3	4
My family (parents, siblings, children) are supportive	1	2	3	4
My friends are supportive	1	2	3	4
My work colleagues are supportive	1	2	3	4
My manager/supervisor is supportive	1	2	3	4
Other :				

13. What type of support do you receive?

Information and advice
Financial
Practical help
Emotional support
Other _____

☐
☐
☐
☐
☐

From whom : _____
From whom : _____
From whom : _____
From whom : _____
From whom : _____

14. What is the type of support that you would most like from your :

Partner
Family
Friends
Work colleagues
Manager/Supervisor
Other (eg. Church group etc.)

15. Please circle the number that indicates how much the following statements are true for you:

1. Almost always true
2. Often true
3. Sometimes true
4. Hardly ever true

More True Less True

I work long hours in my job.	1	2	3	4
I have to take work home with me.	1	2	3	4
At work I am expected to do too many different tasks in too little time.	1	2	3	4
I work under tight time deadlines.	1	2	3	4
I wish that I had more help to deal with the demands placed upon me at work.	1	2	3	4
I am expected to do more work than is reasonable.	1	2	3	4
My supervisor/manager provides me with useful feedback about my performance.	1	2	3	4
The priorities of my job are clear to me.	1	2	3	4
When faced with several tasks I know which should be done first.	1	2	3	4
I am certain about what I am supposed to accomplish in my work.	1	2	3	4
I know the basis on which I am evaluated at work.	1	2	3	4
I feel conflict between what my employer expects me to do and what I think is right or proper.	1	2	3	4
My supervisor/manager asks for one thing, but really wants another.	1	2	3	4
My supervisors/managers have conflicting ideas about what I should be doing.	1	2	3	4
I have on the job responsibility for the activities of others.	1	2	3	4
I feel good about the work I do.	1	2	3	4
I like the people I work with.	1	2	3	4
I am basically happy in my job.	1	2	3	4
I am able to do what I want to do in my free time outside working hours.	1	2	3	4
I am able to put my job out of my mind when I go home.	1	2	3	4
I am able to spend some time doing the things I really enjoy.	1	2	3	4
I have help with tasks around the house.	1	2	3	4
I have help with the important things that have to be done.	1	2	3	4
There is at least one sympathetic person with whom I can discuss my problems.	1	2	3	4
I feel I have at least one good friend I can count on.	1	2	3	4
I feel loved.	1	2	3	4
There is a person with whom I feel really close.	1	2	3	4
I have at least one person close to me who values me.	1	2	3	4
When faced with a problem, I think about all the important issues.	1	2	3	4
When faced with a problem, I can generally control all my emotions.	1	2	3	4
I can generally make decisions based on the consequences of the choices I make.	1	2	3	4

16. The following is a list of some possible symptoms of stress.
Please indicate by circling the appropriate number to show how frequently you experience these symptoms, if ever.

- 1 – Never
- 2 – Every few months
- 3 – Every few weeks
- 4 – At least once a week
- 5 – Daily

Never ----- Daily

Getting sick with colds or flu	1	2	3	4	5
Racing heart or erratic heartbeat	1	2	3	4	5
Chest pain	1	2	3	4	5
Headaches	1	2	3	4	5
Asthma attacks	1	2	3	4	5
Constipation or diarrhoea	1	2	3	4	5
Indigestion or abdominal cramps	1	2	3	4	5
Back, neck or shoulder pain	1	2	3	4	5
Grinding or clenching teeth	1	2	3	4	5
Ulcers	1	2	3	4	5
Skin rashes	1	2	3	4	5
Fever blisters	1	2	3	4	5
Increased craving and/or use of sweets, caffeine, tobacco	1	2	3	4	5
Increased use of alcohol	1	2	3	4	5
Fidgeting or restlessness	1	2	3	4	5
Racing thoughts	1	2	3	4	5
Temper outbursts or irritability	1	2	3	4	5
Feeling trapped, helpless, hopeless, powerless, desperate	1	2	3	4	5
Feeling tired or weak	1	2	3	4	5
Feeling generally unwell or sick	1	2	3	4	5
Anxiety or panic	1	2	3	4	5
Difficulty concentrating	1	2	3	4	5
Poor memory	1	2	3	4	5
Feeling 'blue'	1	2	3	4	5
Indecisiveness	1	2	3	4	5
Preoccupation	1	2	3	4	5
Poor motivation	1	2	3	4	5

Please specify any other symptoms you experience when feeling stressed :

17. Please read each statement and then choose the answer for each statement that best describes how you have been feeling the past week, including today.

		None or a little of the time	Some of the time	A good part of the time	Most or all of the time
1	I feel downhearted, blue and sad.				
2	Morning is when I feel the best.				
3	I have crying spells or feel like it.				
4	I have trouble sleeping through the night.				
5	I eat as much as I used to. (If this is not true because you are on a diet, please state this.)				
6	I enjoy looking at, talking to, and being with attractive women/men.				

7	I notice that I am losing weight. (If this is because of a diet, please state.)				
8	I have trouble with constipation.				
9	My heart beats faster than usual.				
10	I get tired for no reason.				
11	My mind is as clear as it used to be.				
12	I find it easy to do the things I used to do.				
13	I am restless and cannot keep still.				
14	I feel hopeful about the future.				
15	I am more irritable than usual.				
16	I find it easy to make decisions.				
17	I feel that I am useful and needed.				
18	My life is pretty full.				
19	I feel that others would be better off if I were dead.				
20	I still enjoy the things I used to do.				

Any other comments you would like to add:

THANK YOU FOR THE TIME AND EFFORT YOU HAVE PUT INTO ASSISTING ME BY ANSWERING THIS QUESTIONNAIRE.

APPENDIX B